

SMITHSONIAN MISCELLANEOUS COLLECTIONS

PART OF VOLUME XLVI

A CATALOGUE OF  
NORTH AMERICAN DIPTERA

(OR TWO-WINGED FLIES)

BY

J. M. ALDRICH



No. 1444

CITY OF WASHINGTON

PUBLISHED BY THE SMITHSONIAN INSTITUTION

1905

PRESS OF  
THE NEW ERA PRINTING COMPANY,  
LANCASTER, PA.



# A CATALOGUE OF NORTH AMERICAN DIPTERA

By J. M. ALDRICH.

## INTRODUCTION.

The present work is based upon Osten Sacken's Catalogue of North America Diptera, second edition, published in 1878.\* All the references of that work are embodied in this, with only such changes as later studies seem to require.

Still, the great amount of work which has been done on North American Diptera within the quarter of a century has largely changed the face of the subject. Hence the reader will probably observe, especially at first, more of contrast than resemblance. The number of species has doubled; the number of references to previously known species has almost doubled; several families have been monographed or revised, with more or less change of nomenclature; along with this has gone the publication of a multitude of smaller papers, touching every family but one, and the larger part of the genera. Under these conditions it is inevitable that great changes should appear in the new catalogue. It is the more necessary that I should acknowledge my obligation, which is far greater than appears on the surface.

*Faunal limits.*—These, as in the former catalogue, include all of North America, in the widest sense, taking in Panama on the South and Greenland and the Aleutian Islands on the North. The West Indies are included, even down to Trinidad, adjoining Venezuela. There is no place to draw a line between the islands. The Bermudas and the Hawaiian Islands are not included.

*Scope.*—To give the most information consistent with the limits of space has been the object. All references to a species, if in any way descriptive or useful, have been inserted if found. The only known exceptions are in those species like the Hessian fly and house-fly, where the references are so numerous that a selection of the more important articles is necessary. Another exception is uniformly made of articles in non-scientific journals; these are only mentioned when of importance in tracing the history of a species.

\* Smithsonian Miscellaneous Collections, Vol. xvi.

Professor J. H. Comstock extended courtesies when I was visiting Cornell. In his department I examined a considerable collection of Diptera determined by Osten Sacken and Williston, also some interesting literature. In the Cornell University library I found "Silliman's Journal."

Mr. Samuel Henshaw assisted me very kindly when I examined some families in the Loew-Osten Sacken collection at Harvard University.

Dr. Garry de N. Hough gave me some unpublished notes, and a large number of Diptera.

Mr. O. A. Johannsen, of Cornell University, revised the classification of the Chironomidæ for me, greatly improving my work on that family.

Mr. Hugo Kahl gave me unpublished notes of his own; he also gave me minute directions about some points to look up in the Loew-Osten Sacken collection, the outcome of which gave me a very high opinion of Mr. Kahl's acuteness in systematic work, and revealed some peculiar errors of Loew in describing two or three species.

To W. D. Hunter, C. W. Johnson, C. T. Brues, and Professors V. L. Kellogg and C. V. Piper, I am indebted for references to literature.

Mr. A. L. Melander gave me great assistance in the Empididæ. I have followed his advice quite uniformly in regard to nomenclature and synonymy in that family.

I have availed myself of Dr. Coloman Kertész's great work, "Catalogus Dipteriorum," of which two volumes have reached me, only to the extent of adopting the generic distribution of the Cecidomyidæ, and of picking up one species—*Culex penafeli* Will.—which I had not found before. My work was almost completed when the first volume of Kertész came out.

To all the gentlemen named, I extend my sincere thanks.

The catalogue closes January 1, 1904.

J. M. ALDRICH.

UNIVERSITY OF IDAHO,  
January 27, 1904.

## SYSTEM OF CLASSIFICATION ADOPTED.

### Suborder PROBOSCIDEA.

#### Section ORTHORHAPHA.

##### Division *Nemocera*.

Superfamily 1.—*Nemocera Vera*:—Tipulidæ, Dixidæ, Psychodidæ, Chironomidæ, Culicidæ, Mycetophilidæ, Cecidomyidæ.

Superfamily 2.—*Nemocera Anomala*:—Bibionidæ, Simuliidæ, Blepharoceridæ, Rhyphidæ, Orphnephilidæ.

##### Division *Brachycera*.

Superfamily 3.—*Eremochæta*:—Stratiomyidæ, Tabanidæ, Acanthomeridæ, Leptidæ (inclusive of Xylophagidæ and Coenomyidæ).

Superfamily 4.—*Tromoptera*:—Nemestrinidæ, Cyrtidæ, Bombyliidæ, Therevidæ, Scenopinidæ.

Superfamily 5.—*Mydaidæ*:—Mydaidæ.

Superfamily 6.—*Energopoda*:—Apioceridæ, Asilidæ, Dolichopodidæ, Empididæ, Lonchopteridæ, Phoridæ.

#### Section CYCLORHAPHA.

Division *Athericera*.—Platyppezidæ, Pipunculidæ, Syrphidæ, Conopidæ.

Division *Calyptrata*.—Estridæ, Tachinidæ, Dexiidæ, Sarcophagidæ, Muscidæ, Anthomyidæ.

Division *Acalyptrata*.—Scatophagidæ, Heteroneuridæ, Helomyzidæ, Borboridæ, Phycodromidæ, Sciomyzidæ, Sapromyzidæ, Lonchæidæ, Ortalidæ, Rhopalomeridæ, Trypetidæ, Micropezidæ, Sepsidæ, Psilidæ, Diopsidæ, Ephydridæ, Oscinidæ, Drosophilidæ, Geomyzidæ, Agromyzidæ.

### Suborder EPROBOSCIDEA.

Hippoboscidæ, Nycteribiidæ.



## BIBLIOGRAPHY.

### Adams, C. F.

Dipterological Contributions. Kans. Univ. Sci. Bull., II, 21-47; June, 1903.

Contains 37 new species from North America, and 7 from S. Africa; also some tables of genera.

Six new species of Diptera from Kansas, appended to Snow's List. Kans. Univ. Sci. Bull., II, 221-223; Nov., 1903.

### Aldrich, J. M.

A New Genus and Species of Tabanidæ. Psyche, VI, 236, figs.; March, 1892.

*Goniops hippoboscoides*, n. gen. and sp. (syn. of *chrysocoma* O. S.).

New Species of Phora. Canadian Entomologist, XXIV, 142-146, figs.; June, 1892.

*Phora cimbicis*, *luggeri*, *minuta*, and *setacca*; table of species.

Revision of the Genera Dolichopus and Hygroceleuthus. Kansas Univ. Quart., II, 1-26, 1 pl.; July, 1893.

Twenty-two new species; table of species, etc.

New Genera and Species of Psilopinæ. Kansas Univ. Quart., II, 47-50; July, 1893.

Three genera and four species; *Leptorhethum* is the only genus of Psilopinæ which I now retain as given in this article.

The Dolichopodid Genus Liancalus Loew. Psyche, VI, 569-571; Dec., 1893.

*L. hydrophilus* and *similis*; table of species.

Courtship Among the Flies. American Naturalist, XXVIII, 35-37; Jan., 1894.

Habits of some species of *Dolichopus*.

New Genera and Species of Dolichopodidæ. Kansas Univ. Quart., II, 151-157; Jan., 1894.

Two new genera and five new species; notes on other described western species.

The Tipulid Genera Bittacomorpha and Pedicia. Psyche, VII, 200-202, fig.; Feb., 1895.

*Bittacomorpha occidentalis*, n. sp.

The Dipterous Genera Tachytrechus and Macellocerus. Trans. Amer. Ent. Soc., XXIII, 81-84; March, 1896.

*Tachytrechus floridensis*; *Macellocerus olympica* and *auratus*.

On the Diptera of St. Vincent: Dolichopodidæ and Phoridae. Trans. Ent. Soc. London, 1896, pt. 3, pp. 309-345 and 435-439.

Many new species, tables in several genera, and notes on described species.

A Collection of Diptera from Indiana Caves. 21st Annual Report of the Department of Geology and Natural Resources of Indiana, 186-190; published May 6, 1897.

*Odontopoda*, n. gen.; *Mycetophilus umbraticus*, *Odontopoda sayi*, *Blepharoptera latens* and *specus*, *Limosina tenebrarum*; notes on other species.

Goniops and other Synonyms. Entom. News, XI, 531; Sept., 1900.

No new species.

Biologia Centrali-Americana: Diptera, I, Suppl., 333-366, 1 pl.; Dec., 1901.

Dolichopodidæ: 47 new species; *Sarcionus* and *Phylarchus*, n. gen.

Dolichopodidæ of Grenada, W. I. Kans. Univ. Sci. Bull., I, 75-94, 1 pl., March, 1902.

Fourteen new species; *Xanthina*, new genus.

**Aldrich, J. M., and Turley, L. A.**

A Balloon-making Fly. American Naturalist, xxxiii, 809-812, figs.; 1899.

The species here discussed was afterwards described as *Empis arobatiscus* by Mr. Melander.

**Austen, E. E.**

Descriptions of New Species of Dipterous Insects of the Family Syrphidæ in the Collection of the British Museum, with Notes on Species Described by the late Francis Walker. Part I. Bacchini and Brachyopini. Proc. Zool. Society of London, Jan. 17, 1893, pp. 132-164, 2 col. pl.

*Ocyptamus iris* and *Baccha sagittifera*, from Jamaica; many important notes on Walker's types and other species.

On the Specimens of the Genus *Cutiterebra* and Its Allies in the Collection of the British Museum, with descriptions of a new Genus and Three new Species. Annals and Magazine of Natural History, Ser. 6. Vol. xv, 377-396, 1 pl.; May, 1895.

*Cutiterebra funebris* (Trinidad), *approximata* Walk. (Vancouver); *Bogeria princeps*, n. gen. and sp., Mexico; other important notes.

Further Notes on *Cutiterebra*: On the Identity of Certain Species Described by the late Bracy Clark. Annals and Magazine of Natural History, Ser. 6, Vol. xvi, 147-155; August, 1895.

*C. atrox*, *detrudator* and *fontinella* of Clark.

Notes on Hippoboscidæ in the Collection of the British Museum. Annals and Magazine of Natural History. Ser. vii, Vol. xii, 255-266; Aug., 1903.

Important notes on species of Wulp and Walker; no new species.

**Babb, Geo. F.**

Notes on *Rhagoletis suavis*, with desc. of larva and puparium. Ent. News, xiii, 242, 1 pl.; Oct., 1902.

**Baker, C. F.**

Biological Notes on some Colorado Diptera. Ent. News, vi, 173, 174; June, 1895.

Records rearing of twelve species.

**Banks, Nathan.**

Some Psychodidæ from Long Island. Canadian Entomologist, xxvi, 329-333; Dec., 1894.

*Psychoda nigra*, *minuta*, *superba*, *bicolor*; table of species.

Notes on Psychoda. Canadian Entomologist, xxvii, 324; November, 1895.

*P. albitarsis*, Ithaca, N. Y.

Syrphidæ of Long Island, N. Y. Journal of the N. Y. Ent. Society, v, 40, 41; 1897.

A list of species collected at Sea Cliff, L. I.

The Eastern Species of Psychoda. Canadian Entomologist, xxxiii, 273-275; Oct., 1901.

*P. signata*, *opposita*, *nitida*.

Concerning *Gastrophilus epilepsalis* French. Canadian Entomologist, xxxv, 333, 1903.

**Becker, Theodor.**

Dipterologische Studien. In Berliner Entomologische Zeitschrift.

- I. Scatomyzidæ. Vol. xxxix, pp. 77-196, 1 plate; 1894.  
 II. Sapromyzidæ. " XL, pp. 171-264, 1 pl.; 1895.  
 III. Lonchæidæ. " XL, pp. 313-344; 1895.  
 IV. Ephydridæ. " xli, pp. 91-276, 4 plates; 1896.  
 V. Pipunculidæ. " xlii, pp. 23-100, 1 plate; 1897. Supplement,  
 xlv, 215-252; 1900.

Die Leptiden Formen im Gebiete der Europäisch-Asiatischen und Mittelmeer-Fauna. Entomologische Nachrichten, xxvi, 97-112 and 113-116; 1900.

Die Phoriden. Abhandlungen der K. K. Zool.-Botan. Gesellschaft in Wien. I, Heft. 1, pp. 1-100, 5 plates; 1901.

*Note.*—These recent monographs of European Diptera are admirably executed, and are especially useful to the American student for genera. A considerable number of the species are common to Europe and North America.

**Bellardi, Luigi.**

Saggio di Ditterologia Messicana. Two parts and supplement, with five plates. Mem. della Reale Accad. delle Scienze di Torino. Ser. 2, Vol. xix, 201-277, 2 plates, 1859; xxi, 103-199, and Appendix, 200-225, with 3 plates, 1861-62. Also published separately with a different pagination.

*Apelleia*, n. g.; many new species. Osten Sacken gives the pages as they occur in the separate edition, which I follow.

**Bergroth, Evald.**

Note on some South African Tipulidæ. Entom. Tidskrift, ix, 1888.

Contains a note on *Holorusia rubiginosa*. I am indebted to Professor V. L. Kellogg for this reference.

Ueber einige Nordamerikanische Tipuliden. Wiener Entom. Zeitung, vii, 193-201; June, 1888.

Eight new species, with notes on several others.

The same, Part II. Pp. 239, 240; Sept., 1888.

*Pachyrhina excelsior*, n. sp., and several notes.

Zwei neue Dipteren. Wiener Entomol. Zeitung, viii, 295-298; Nov., 1889.

One is from New Zealand, the other is *Dialysis disparilis*, from British Columbia; there is an additional note on the latter, Vol. xi, 162.

**Buetenmüller, Wm.**

Essay on the Destruction of the Mosquito and the House-fly. 180 pp., 2 plates; 1890.

*Cecidomyia clavula*, n. sp. Bull. American Museum of Natural History, iv, 1892, 269, pl. xv, f. 5.

Gall only.

**Bigot, Jacques.**

Diptera of Cuba. In "Historia física, política y natural de la Isla de Cuba," by Ramon de la Sagra, Paris, 1857, Vol. vii, with one plate. "Published in French and in Spanish; the French edition is quoted in the catalogue, the Spanish has a different pagination"—O. S. Not seen.

Twenty-five new species.

Dipterorum aliquot nova genera. Revue et Magazin de Zoologie, 1859. 305-315, pl. xi.

*Hystrisiphona nigra*, *Cryptincura hieroglyphica*.



Leptidi. Bulletin de la Société Zoologique de France, XII, 1-22, 1887.

21 N. A. species.

Muscidi. Bulletin de la Société Zoologique de France, XII, 581-617, 1887.

16 N. A. species.

Tabanidi. Mémoires de la Société Zoologique de France, v, 602-690, 1892.

26 N. A. species.

Diptères nouveaux ou peu connus. Annales de la Société entomologique de France, as follows (the asterisk indicates that there are no new N. A. species):

Number.	Part.	Year.	Pages.	Subject.
I		1874	107-115	Diopsis.*
II		1874	116	Echinomyia.*
III	2	1874	235-242	Diptères nouveaux (miscellaneous).*
IV	3	1874	451-468 (1	col. pl.) Rutilia and Formosia.*
V	4	1875	237-248	Asilidæ. 4 N. A. sp.
VI	5	1875	469-482	Sphixea and Volucella. 10 N. A. sp.
VII		1875	483-488	Cyphomyia. 1 N. A. sp.
VIII	6	1876	389-400	Phasidæ, etc. 1 N. A. sp.
IX	7	1877	35-48	Somomyia. 3 N. A. sp.
X	8	1877	243-259	Somomyia, continued. 9 N. A. sp.
XI	8	1877	260-262	Miscellaneous notes.*
XII	9	1878	31-40	Phumosia, Pyrellia, etc. 3 N. A. sp.
XIII		1878	40-47	Ocyptera. 5 N. A. sp.
XIV		1878	48	Miscellaneous notes, partly N. A.
XV	10	1878	213-240	Asilidæ. 9 N. A. sp.
XV	10	suite 1878	401-446	Asilidæ. 14 N. A. sp.
XVI	11	1879	183-234	Xylophagidæ and Stratiomyidæ. 18 N. A.
XVII		1879	235, 236	Notes. Laphystia.
XVIII	12	1880	85-89	Plagiocera, etc.*
XIX		1880	90-94	Diopsidæ.*
XX	13	1880	139-154	Dipt. of Persia and the Caucasus.*
XXI	14	1880	213-230	Eristalis. 7 N. A. sp.
XXII	15	1880	369-376	Notes on Tabanidæ; a few N. A. genera.
XXIII	16	1881	13-21	Nemistrinidæ. 1 N. A. gen.—Parasymmictus
XXIV		1881	22, 23	Bombylidæ.*
XXV		1881	24	Atopognathus, n. g.*
XXVI	17	1881	363-371	Miscellaneous new species.*
XXVII		1881	372-374	Notes. Eristalis zonatus.
XXVIII	18	1882	453-460	Acanthomeridæ. 2 N. A.
XXIX	19	1882	5-21	Anthomyidæ.*
XXX		1882	21, 22	Ctenostylum.*
XXXI	20	1883	61-88	Volucella. 4 N. A.
XXXII	21	1883	221-258	Syrphidæ, 1st pt.*
XXXII	22	1883	315-356	Syrphidæ, 2d pt. No. 1. 34 N. A.
XXXII	23	1884	535-560	Syrphidæ, 2d pt. No. 2. 20 N. A.
XXXII	24	1884	73-115	Syrphidæ, 2d pt. No. 3. 34 N. A.
XXXIII	25	1885	263-304	Anthomyidæ. 21 N. A.
XXXIV	26	1885	121-124	Glossina.*
XXXV	27	1885	225-246	Anomalocerati. 5 N. A.
XXXVI	28	1885	241-252	Syrphidi, addenda. 2 N. A.
XXXVII	29	1886	287-302	Tanypezidæ.*
XXXVII	29	1886	369-392.	Tanypezidi. 19 N. A.



Number.	Part.	Year.	Pages.	Subject.
XXXVIII	30	1887	17-19	Loxocera.*
XXXIX	31	1887	20-46	Stratiomyidæ and Conopidæ. 18 N. A.
	XL	1887	203-208	Myopidi. 6 N. A.
	XLI	1888	77-104	Tachinidæ. 14 N. A.
	XLII	1888	253-270	Miscellaneous diagnoses. 83 N. A.
	XLIII	1889	111-134	Empidæ. 5 N. A.
	XLIV	1889	313-320	Cyrtidæ. 1 N. A.
	XLV	1889	321-328	Therevidæ.*
	XLVI	1890	261-296	Dolichopididæ. 8 N. A.
		1892	321-375	Bombyliidæ. 19 N. A.

Notes on North American Diptera, with new genera and species, published in Bulletin de la Société entomologique de France, as follows:

Year.	Pages.	Subject.
1875	clxxiv (196)	Thevenimyia californica.
1877	xxvi (38)	Carlottæmyia mœrens.
1877	lxxiii (101)	Macroceromys.
1879	l, li (64)	Merapioidus villosus.
1879	86	Parasymmictus.
1879	164, 165	Notes on Arthropeas and Glutops.
1879	231, 232	Corrections to article in Annales, 1879, 183-234.
1880	5	Megalemyia argyropasta, Acanthomera rubriventris.
1880	62, 63	Phyllomydas phyllocerus, Enoplemis mira, Megacittarus argenteus.
1882	4	Syrphidæ.
1882	19-21	Corrections; Lycastirhyncha, etc.
1882	78, 79	Eurhinomallota metallica.
1882	112	Myelaphus melas, Enoplemis cinerea.
1883	35	Proboscimyia siphonina.
1884	xxix (34, 35)	Mikimyia furcifera.
1884	42	Cholomyia inæquipes.
1884	95	Ancylogaster armatus.
1884	xcvii	Euceratomyia Will., note.
1884	cxxxvi	Merapioidus; reply to Williston, Wien. Ent. Zeit., 1884, 282.
1885	clxvi (sep. 1)	Stictomyia longicornis, Dimorphomyia calliphoroides.
1885	sep. 1-7	Rhamphinina dubia, Rhynchodexia tenuipes, Siphoniomyia melas.
1886	clxvii, clxviii	Notes on Osten Sacken's Acanthomeridæ in Biologia.
1886	sep. 1-4	Rhabdopselaphus mus.
1887	1x	On Eclimus, Epibates and Thevenimyia.
1887	cxxi-cxxiii	Notes on Williston's Synopsis N. A. Syrphidæ.
1887	clxxii-clxxiv	(180-182) Diagnoses of Muscidæ, several species.
1888	xxiv et seq.	Psilopodinus, Spatichira, etc.
1888	cvi, cvii	Corrections.
1888	clxxxiii	Notes on Archilestes; Pseudarchilestes.
1892	xxxvi-xxxviii	Notes on Williston's synonymy in Biologia.

Note.—Bigot's main work, as will be seen from the tables above, is in the form of a long series of articles in the Annales Soc. ent. France (quoted herein merely as "Annales"), interspersed chronologically with fragments in the Bulletin of the same society. Owing to Bigot's peculiar, complicated and inconsistent system of numbering his contributions, it has been almost impossible for

me to find them all, but I believe I have succeeded. I have seen no correct collation. Sometimes his Roman numerals stop and remain the same for several papers, then again the numbering in "parts" becomes stationary while the other goes on, and in two cases two papers have both the same (XXXVII, part 29, and XLII, part 34).

In the Bulletin the confusion is worse confounded. This publication appears to have been for some time regularly published in two forms, one numbered in Arabic, and the other differently paged in Roman. I am unable to decipher all the peculiarities of this, but am obliged to refer partly to one, partly to the other, and occasionally to separates, as my copies run, or as I find indications in the references of others. I possess all the papers of the Annales series, and all but two small ones of the Bulletin series; but the accumulation was the work of ten years.

The work of Bigot should not be underestimated. He had a fine collection, and his types are now the property of Mr. G. H. Verrall. It is only a question of time until they will be elucidated; in fact, this has already been done for the Calyprate (excl. of Anthomyidæ) by Brauer, and for the Pupipara by Speiser. As the descriptions stand, it is often impossible to determine the species from them alone. It is not unlikely that some of them have been assigned to synonymy too hastily.

#### Biologia Centrali-Americana.

For convenience of reference, I give a complete collation of the parts of this great work.

Volume I. Cecidomyidæ to Empidæ. Pp. 1-216, 3 col. pl., by C. R. Osten Sacken.

Dates—pp. 1-24, July, 1886; 25-48, Aug., 1886; 49-72, Oct., 1886; 73-104 Nov., 1886; 105-128, Dec., 1886; 129-160, Jan., 1887; 161-176, Feb., 1887; 177-208, Mar., 1887; 209-216, April, 1887.

Volume I, Supplement. Pp. 217-378, 3 col. pl.

Mycetophilidæ to Asilidæ, pp. 217-332, by S. W. Williston.

Dates—pp. 217-248, Dec., 1900; 249-264, April, 1901; 265-272, May, 1901; 273-296, June, 1901; 297-328, Sept., 1901; 329-332, Dec., 1901.

Dolichopodidæ, pp. 333 to 366, Dec., 1901, by J. M. Aldrich.

Empididæ, pp. 366-376, Dec., 1901, by W. M. Wheeler and A. L. Melander.

List of Species Recorded since 1887, not enumerated in Suppl., 377, 378; Dec., 1901.

Volume II. Oestridæ to Hippoboscidæ. Pp. 1-432, 12 col. pl., by F. M. Van der Wulp.

Dates—pp. 1-40, April, 1888; 41-56, Jan., 1890; 57-88, Feb., 1890; 89-112, Mar., 1890; 113-144, May, 1890; 145-176, June, 1890; 177-200, Aug., 1890; 201-208, Nov., 1890; 209-224, April, 1891; 225-248, May, 1891; 249-264, July, 1891; 265-272, Dec., 1895; 273-280, Jan., 1896; 281-288, March, 1896; 289-304, May, 1896; 305-312, June, 1896; 313-320, Oct., 1896; 321-344, Dec., 1896; 345-360, Sept., 1897; 361-368, Nov., 1897; 369-376, Dec., 1897; 377-384, Oct., 1898; 385-392, Feb., 1899; 393-408, Sept., 1899; 409-416, Dec., 1899; 417-428, Feb., 1900; 429-432, Apr., 1903.

Volume II, Supplement. Pp. 433-486, 1 col. pl. Oestridæ and Tachinidæ, by F. M. Van der Wulp.

Dates—pp. 433-436, April, 1903; 437-486, May, 1903.

List of Species described since 1888, not enumerated in Vol. II., pp. 486-489, May, 1903.

Volume III. Syrphidæ, Conopidæ, Pipunculidæ and Platypezidæ. Pp. 1-89, 2 col. pl. By S. W. Williston.

Dates—pp. 1-56, Dec., 1891; 57-72, Feb., 1892; 73-89, May, 1892.

List of Species described since completion of volume, pp. 89-91, Aug., 1903.

Index to vols, 1-III, pp. 93-127, Aug., 1903.

The last issue for each volume includes title-page, introduction, and explanation of plates, which do not interfere with the regular pagination of the text.

#### **Bilimek, Dominik.**

Fauna der Grotte Cacahuamilpa in Mexico. Verhandl. Zool.-Bot. Ges., 1867, p. 901.

*Pholcomyia leucozona*, n. g. and sp.

#### **Bosc D'Antic, Louis A. G.**

*Ceroplatus carbonarius*, from Carolina, described in Dictionnaire d'Histoire Naturelle, Paris, 1802-04, pub. by Détéville et Roret; the same is in Nouveau Dict. D'Hist. Nat., Paris, 1816-19.

#### **Brauer, Friedrich,**

Monographie der Oestriden. Wien, 1863, 292 pp., with 10 plates.

This classic monograph contains descriptions of all the Oestridæ at that time known from North America. Only one is new, *Cuterebra scutellaris*. Beschreibung neuer und ungenügend bekannter Phryganiden und Oestriden. Verhandlungen der Zool.-Bot. Ges. zu Wien, 1875, 75.

*Hypoderma bonassi*, on the American bison.

Die Zweiflügler des Kaiserlichen Museums zu Wien. In the Denkschriften der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften.

I. In Band XLII, 1880.

1. Die Kaiserliche, Winthem'sche, Wiedmann'sche und Egger'sche Sammlung. Pp. 105-107.
2. Bemerkungen zur Systematik der Dipteren. Pp. 108-118.
3. Die Europäischen Arten der Gattung *Tabanus* L. s. str., etc. Pp. 119-210, six plates.

II. In Band XLIV, 1882.

1. Versuch einer Charakteristik der Gattung der Notacanthen (Ltr.), mit Rücksicht auf die . . . von J. R. Schiner aufgestellten neuen Gattungen. Pp. 59-89.
2. Vergleichende Untersuchungen der Flügelgeäders der Dipteren-Familien nach Adolph's Theorie. Pp. 90-97, two plates.
3. Charakteristik der mit *Scenopinus* verwandten Dipteren-Familien und Gattungen. Pp. 98-110.

III. In Band XLVII, 1883.

1. Systematische Studien auf Grundlage der Dipteren-Larven nebst einer Zusammenstellung von Beispielen aus der Literatur über dieselben und Beschreibung neuer Formen. Pp. 1-100, five plates.

The number on Notacantha contains *Cynipimorpha bilimecki* n. g. et sp. and *Myxosargus fasciatus* n. sp., from Mexico. The last number, on the dipterous larvæ, is a great work. The numbers on classification represent extensive research, and the system of Brauer seems to be widely accepted in Europe at present; but I agree with Osten Sacken that classification is not the field in which Brauer has done his best work.

See continuation of the series by Brauer and von Bergenstam

Systematische-zoologische Studien. Sitzungsberichte d. Kaiserl. Akad. d. Wissenschaften, xci, 237-414, 1 plate; 1885.

*Asilus mydas* and *Calobata ichneumonca*, n. sp. from Mexico.

Beiträge zur Kenntniss der Muscaria schizometopa. Sitzungsbericht. d. Kaiserl. Akad. der Wiss., Math.-Naturwiss. Classe, in three parts:

I. Band cvi, 329-382; July, 1897.

II. Band cvii, 493-546; June, 1898.

III. Band cviii, 495-529; June, 1899.

These articles give a report on the types of Bigot's species in the families of the Calyptratae, except Anthomyiidae. Nearly all of Bigot's species in this group are elucidated. There are a few notes also on types of Macquart and Desvoidy.

**Brauer, Friedrich, and Bergenstam, J. Edlen von.**

Die Zweiflügler des Kaiserlichen Museums zu Wien. Denkschriften d. Kaiserl. Akademie der Wissenschaften, Math.-Naturwiss. Classe. There are seven numbers of this series, of which the first three are by Brauer alone, noticed above. The last four constitute the following series:

Vorarbeiten zu einer Monographie der Muscaria schizometopa (exclusiv Anthomyiidae).

IV. Band lvi, pp. 69-180, 11 plates; 1889.

V. Band lviii, pp. 305-446; 1891.

VI. Band lx, pp. 89-240; 1893.

VII. Band lxi, pp. 537-624; 1894.

Many new genera of Tachinidae, Muscidae, Dexiidae and Sarcophagidae. A few North American species. As I have indicated at the beginning of the catalogue of Tachinidae, this work is defective in its conception, in that the characters used for generic definition are often of less than specific value. Nevertheless it is indispensable to the student of these families. It is referred to as "Zweifl. d. Kaiserl. Mus."

**Brodie, Wm.**

Canadian Galls and their Occupants. Biological Review of Ontario, I, 1894:

I. Pp. 13-15. *Diplosis erigeroni*.

II. Pp. 44-46. *Diplosis helianthi*.

III. Pp. 73-75. *Diplosis thurstoni* and *helianthi-bulla* Walsh.

IV. Pp. 109-111. *Diplosis monardæ*.

**Brown, Barnum.**

Two new Species of Asilids from New Mexico. Kans. Univ. Quarterly, vi, 103, 1897.

*Nusa abdominalis* and *similis*.

**Brues, Chas. T.**

Peculiar Tracheal Dilatations in *Bittacomorpha clavipes* Fabr. Biological Bulletin, I, 155-160, fig., 1900.

A New Species of *Dolichopus*. Entomological News, xii, 44, 45, fig.; Feb., 1901.

*D. sphaeristes*, from Texas.

Two New Myrmecophilous genera of aberrant Phoridae from Texas. American Naturalist, xxxv, 337-356, figs. and bibliography; May, 1901.

*Commoptera solenopsisidis* and *Ecitomyia whecleri*; notes on related genera and species.

New and little known Guests of the Texan Legionary Ants. American Naturalist, xxxvi, 365-378, figs.; 1902.

*Acontistoptera melanderi* and *Xainonotum hystrix*.

Notes on the Larvæ of some Texas Diptera. Psyche, ix, 351-354, figs.; June, 1902.

*Phora epciræ* n. sp., and several species of larvæ.

A dexiid Parasite of the Sowbug. Ent. News, xiv, 291; Nov., 1903.

*Melanophora roralis* Linn.; reared from *Porcellio* sp.

See also Melander and Brues.

#### Burgess, Edward.

Description of *Oscinis trifolii* and *malvæ*, in Report Comr. of Agriculture for 1879, 201, 202.

These are referred to *Agromyza trifolii* and *jucunda* by Coquillett.

Two Interesting American Diptera. Proc. Boston Soc. Nat. Hist., xix, 320-324, 1 plate; Feb. 27, 1878.

*Glutops* (n. g.) *singularis* and *Epibates osten-sackenii*, n. sp.

#### Cannon, W. A.

The Gall of the Monterey Pine. American Naturalist, xxv, Oct., 1900, 801-810, figs.

A botanical study of the gall of *Cecidomyia pini-radiatæ*.

#### Chagnon, G.

Études Préliminaires sur les Syrphides de la Province de Quebec. Chicotini, Quebec, 1901, 75 pp. Originally published in parts in "Le Naturaliste Canadien," 1901; I quote the separate edition.

No new species.

List of Canadian Diptera. The Entomological Student, Philadelphia. Vol. II, 5-8 and 13-15.

Mostly from Montreal and vicinity; no new species.

#### Chittenden, F. H.

Some Insects Injurious to the Violet, Rose, and other Ornamental Plants. Bull. 27, n. ser., Division of Entomology, U. S. Department of Agriculture; 114 pp., figs.; 1901.

Life history of *Diplosis violicola* and *Sciara inconstans*.

Some Insects Injurious to Vegetable Crops. Bulletin 33, new series, Division of Entomology, Dept. of Agriculture, 1902. 117 pp., many figs.

Life history of *Psila rosæ*, *Scaptomyza (Drosophila) flavicola*, *adusta* and *graminum*, and *Phorbia fusciceps*.

A Brief Account of the Principal Insect enemies of the Sugar Beet. Bull. 43, Division of Entomology, 1903, 71 pp.

Contains life history of *Pegomyia vicina* and *Phorbia fusciceps*.

#### Clark, Bracy.

Observations on the Genus *Oestrus*. Transactions of the Linnæan Society, III, 1797.

*Oestrus cuniculi*, n. sp., from Ga.

An Essay on the Bots of Horses and other Animals. London, 1815, with two plates.

*Cuterebra horripilum* and *Cephenomyia phobifer* from N. A.

Addenda to Essay on Bots, 1848, with 1 plate.

*Cuterebra atrox*, from Mexico.

Of the Insect called Oistros by the Ancients, etc. Trans. Linn. Soc., xv, 402, 1826.

*Cuterebra fontinella*, from Ill.

Note.—Austen has published notes on some of Clark's species; see his papers.

**Cockerell, T. D. A.**

Notes on some Species of Gall-Gnats. The Entomologist, London, 1890, 278.

*Cecidomyia alticola* and *frater*.

*Trypeta bigeloviae* n. sp. Entomologist's Monthly Magazine, December, 1890, 224.

A Cecid bred from Coccidæ. The Entomologist, London, 1892, 280.

*Diplosis coccidarum*, from Jamaica.

*Cecidomyia atriplicis* n. sp. American Naturalist, 1895, 766.

New Species of Insects taken on a Trip from the Mesilla Valley to the Sacramento Mts., N. M. Jour. N. Y. Ent. Soc., vi, 201-207, 1898.

*Asphondylia neomexicana* n. sp.; occurrence of some Diptera, p. 205, footnote.

*Diplosis atriplicicola*; *Lasioptera willistonii*, *ephedrae*, and *tertia*; *Asphondylia prosopis*. Annals and Mag. Nat. Hist., 1898, 321-331.

*Diplosis partheniicola* n. sp. The Entomologist, London, July, 1900, 201.

*Asphondylia mentzeliae* n. sp. The Entomologist, London; Nov., 1900, 302.

A New Cecidomyiid on *Gutierrezia*. Canadian Entomologist, xxxiii, 23; Jan., 1901.

*Asphondylia gutierreziae*, New Mexico.

Some Gall-Insects. Canadian Entomologist, xxxiv, 183, 184, 1902.

*Lasioptera carbonitens* and *ephedricola*, from New Mexico.

Some Insects of the Hudsonian Zone in New Mexico. Psyche, 1902, 346, 347.

No new Diptera.

**Comstock, John H.**

Report upon Cotton Insects. Department of Agriculture for 1879.

*Phora aletiae* n. sp. (syn. of *nigriceps*), pp. 209-211. The same abridged in the Report of the Department of Agriculture for 1879, with the addition of *Tachina fraterna* n. sp. (syn. of *Frontina aletiae*), p. 303.

Report of the Department of Agriculture for 1879, pp. 245, 266, 271.

Contains note on *Diastata* sp. mining leaves of corn; *Diplosis catalpa* n. sp., "The Catalpa Pod Diplosis"; and a bibliography of parasitic Cecidomyiidae.

Report on Miscellaneous Insects, in the Report of the Comr. of Agriculture for 1881 and 1882 (pub. Jan., 1893), 135-154.

Life history of *Trypeta* (*Rhagoletis*) *pomonella*, *Drosophila ampelophila* and *amana*, and *Sciara* (*Cecidomyia*) *ocellaris* O. S.; the last doubtless an error in rearing, as the species can hardly be a *Sciara*.

**Comstock, John H. and Anna B.**

A Manual for the Study of Insects. Ithaca, 1895. 701 pp., with plates and many figures.

The Diptera are on pp. 413-489. A useful table of families, and brief descriptions of all the lower families, with numerous illustrations. No new species.



## Coquillett, D. W.

On the Early Stages of the Dipterous Fly, *Chrysophila fræda* Loew. Canadian Entomologist, xv, 112, 113; June, 1883.

Monograph of the Lomatina of North America. Canadian Entomologist, xviii, 81-87; May, 1886.

*Euccsia* n. g.; several new species.

The North American Genera of Anthracina. Canadian Entomologist, xviii, 157-159; 1886.

*Mancia nana* new genus and species.

The North American Species of Toxophora. Entomologica Americana, i, 221, 222; March, 1886.

*T. pellucida* and *maxima* n. sp.

Notes on the Genus *Exoprosopa*. Canadian Entomologist, xix, 12, 13; Jan., 1887.

*Exoptata divisa* new genus and species.

Monograph of the Genus Anthrax north of Mexico. Transactions of the American Entomological Society, xiv, 159-182; Oct., 1887.

Many new species.

Synopsis of the North American Species of *Lordotus*. Entomologica Americana, iii, 115, 116; 1888.

*L. miscellus*, *zona* and *apicula*.

The Corn Worm or Boll Worm in California. Insect Life, i, 331, 332; May, 1889.

*Tachina armigera* n. sp.

The Dipterous Parasite of *Diabrotica soror*. Insect Life, ii, 233-236, figs.; Feb., 1890.

*Celatoria diabroticæ* n. sp.

A new Rhapsiomidas from California. West American Scientist, viii, 84-86, 1891.

*Rhapsiomidas acton*.

New Bombyliidæ from California. West American Scientist, vii, 197-200, 1891.

*Lordotus juncus* and *diversus*; *Toxophora vasta*.

New Bombyliidæ of the Group *Paracosmus*. West American Scientist, vii, 219-222, 1891.

*Amphicosmus elegans*, *Metacosmus exilis*, *Paracosmus insolens*.

A Revision of the Bombylid Genus *Aphæbantus*. West American Scientist, vii, 254-264; 1891.

Thirteen new species.

Revision of the Bombylid Genus *Epacmus* (*Leptochilus*). Canadian Entomologist, xxiv, 9-11; Jan., 1892.

*Concinnus*, *pellucidus*, *fumosus* n. sp.

Notes and Descriptions of Bombyliidæ. Canadian Entomologist, xxiv, 123-126; May, 1892.

*Exoprosopa grata*; *Geron fasciola* and *capax*.

A New *Dalmannia* from California. Entomological News, iii, 150, 151; June, 1902.

*D. vitiosa*.

- Revision of the Species of Anthrax from America, north of Mexico. Transactions of the American Entomological Society, XIX, 168-187; July, 1892.  
Nineteen new species; notes on many others; table of species.
- The Dipterous Parasite of *Melanoplus devastator* in California. Insect Life, v, 22-24; Sept., 1892.  
*Sarcophaga opifera* n. sp.
- A New Genus of Diptera Allied to Rhaphiomidas. Canadian Entomologist, XXIV, 314, 315; Dec., 1892.  
*Apomidas trochilus* new genus and species.
- Synopsis of the Asilid Genus *Anisopogon*. Canadian Entomologist, XXV, 20-22; Jan., 1893.  
*A. ladius*, *rubidus* and *patruelis* n. sp.
- Synopsis of the Asilid Genus *Blacodes*. Canadian Entomologist, XXV, 33-34; Feb., 1893.  
*Bl. cristatus*, *truncus*, *clausus*.
- Synopsis of the Asilid Genus *Dioctria*. Canadian Entomologist, XXV, 80; March, 1893.  
*D. parvulus* and *rubidus*.
- Synopsis of the Asilid Genera *Mallophora* and *Nicocles*. Canadian Entomologist, XXV, 118-120; May, 1893.  
*Mallophora megachile* and *Nicocles argentatus*.
- An Anomalous Empid. Entomological News, IV, 208-210, fig.; June, 1893.  
*Mythicomyia rileyi*.
- A New Asilid Genus related to *Erax*. Canadian Entomologist, XXV, 175-177; July, 1893.  
*Efferia* n. gen.; *E. rava*, *candida*, *pernicis*.
- Synopsis of the Dipterous Genus *Thereva*. Canadian Entomologist, XXV, 197-201; Aug., 1893.  
Five new species.
- Synopsis of the Dipterous Genus *Psilocephala*. Canadian Entomologist, XXV, 222-229; Sept., 1893.  
Ten new species.
- New North American Trypetidae. Canadian Entomologist, XXVI, 71-75; March, 1894.  
Ten new species.
- Notes and Descriptions of North American Bombylidae. Transactions of the American Entomological Society, XXI, 89-112; March, 1894.  
Two new genera; many new species; tables of genera and species.
- Two Interesting new Diptera from Washington. Entomological News, v, 125, 126; April, 1894.  
*Criorhina johnsoni* and *Ceroplatus fasciola*.
- Brachycoma davidsoni* n. sp., in an article by Anstruther Davidson, "On the Parasites of Wild Bees in California"; Entomological News, v, 172; June, 1894.
- Synopsis of the Dipterous Genus *Symphoromyia*. Journal of the New York Entomological Society, II, 53-56; 1894.  
Several new species.
- Revision of the Dipterous Family Therevidae. Journal of the New York Entomological Society, II, 97-101; Sept., 1894.  
*Metaphragma* and *Nebritus*; six new species.



- A New Anthrax from California. *Journal of the New York Entomological Society*, II, 101, 102; Sept., 1894.  
*A. edwardsii*.
- A Synopsis of the Dipterous Genus *Phora*. *Canadian Entomologist*, XXVII, 103-107; April, 1895.  
Table and four new species.
- A New *Volucella* from Washington. *Entomological News*, VI, 131, 132; April, 1895.  
*V. kincaidii*.
- New Tachinidæ with a slender Proboscis. *Canadian Entomologist*, XXVII, 125-128; May, 1895.  
*Isoglossa* n. gen.; five new species.
- On the Occurrence of the Tachinid Genus *Heteropterina* Macq. in North America. *Entomological News*, VI, 207, 208; June, 1895.  
*H. nasoni*.
- Notes and Descriptions of Tachinidæ. *Journal of the New York Entomological Society*, III, 49-58; June, 1895.  
Three new genera and eighteen new species.
- On the Tachinid Genus *Acroglossa* Will. *Psyche*, VII, 261, 262; July, 1895.  
No new species.
- New North American Mycetophilidæ. *Canadian Entomologist*, XXVII, 199-201; Aug., 1895.  
Five new species.
- The Bombylid Genus *Acreotrichus* in America. *Psyche*, VII, 273, 274; Aug., 1895.  
*A. americana*.
- New Genera and Species of Tachinidæ. *Journal of the New York Entomological Society*, III, 97-107; Sept., 1895.  
Five new genera; sixteen new species.
- A Cecidomyiid that lives on Poison Oak. *Insect Life*, VII, 348, 1895.  
*Cecidomyia rhois* n. sp.
- Two Dipterous Leaf-Miners in Garden Vegetables. *Insect Life*, VII, 381-384, figs.; 1895.  
*Drosophila flaveola* MEIG. and *Trypeta fratria* LOEW; life histories.
- Two Dipterous Insects Injurious to Flowers. *Insect Life*, VII, 399-402, figs.; 1895.  
*Phytomyza chrysanthemi* KOWARZ and *Diplosis caulicola* n. sp.; life histories.
- A New Wheat Pest. *Insect Life*, VII, 406-408, fig.; 1895.  
*Sciara tritici*.
- Diptera of Florida. *Proceedings of the Academy of Natural Sciences of Philadelphia*; 1895, 303-340, in an article by C. W. Johnson.  
Coquillett described *Pseudochata* n. gen., and thirteen new species.
- Revision of the North American Empidæ. *Proceedings of the United States National Museum*, XVIII, 387-440. Cover shows date 1896, but separates were distributed late in 1895.  
Tables of genera and species; four new genera and many new species.
- New Culicidæ from North America. *Canadian Entomologist*, XXVIII, 43, 44; Feb., 1896.  
*Culex signifer* and *tarsalis*; *Megarhina rutila*.

A New Sub-Family of Ephyridiæ. Entomological News, vii, 220, 221; Sept., 1896.

*Lipochæta slossonæ* new genus and species.

A New Dipterous Genus Related to Gnoriste. Proceedings of the Entomological Society of Washington, iii, 321, 322, fig.; Oct. 6, 1896.

*Eugnoriste occidentalis* new genus and species.

Parasites of Spiders' Eggs. By Anstruther Davidson. Ent. News, vii, 320; Dec., 1896.

Description of *Gaurax araneæ* n. sp., by Coquillett.

List of the Mosquitoes of the United States. Bulletin 4 new series, Division of Entomology, Dept. of Agriculture; 1896, pp. 22-24.

Synonymical list, with localities; no new species.

Diptera from the Mammoth Cave. American Naturalist, xxxi, 384-387; May, 1897.

Three new species.

The Raspberry-Cane Maggot. Canadian Entomologist, xxix, 162, 163; July, 1897. In an article by M. V. Slingerland.

*Phorbia rubivora* n. sp.

Revision of The Tachinidæ of America, north of Mexico. Bull. No. 7, Technical Series, Division of Entomology; 1897, 154 pp.

Many new species; twelve new genera.

On *Cuterebra emasculator*, with descriptions of several allied Species. Canadian Entomologist, xxx, 9-11; January, 1898.

Five new species of *Cuterebra*.

Synopsis of the Asilid Genus *Ospriocerus*. Entomological News, ix, 37; Feb., 1898.

*O. ventralis*.

On the Dipterous Genus *Eusiphona*. Canadian Entomologist, xxx, 53, note; March, 1898.

No new species.

Notes and Descriptions of Oscinidæ. Journal of the New York Entomological Society, vi, 44-49; March, 1898.

Table of genera and many new species.

Additions to my Synopsis of the Tachinidæ. Canadian Entomologist, xxx, 233-237; Sept., 1898.

Nine new species.

On the Dipterous Family Scatophagidæ. Journal of the New York Entomological Society, vi, 160-165; Sept., 1898.

Three new genera and about a dozen species.

A new Dipterous Genus Belonging to the Therevidæ. Journal of the New York Entomological Society, vi, 187, 188; Sept., 1898.

*Henicomylia hubbardii*.

New Species of Sapromyzidæ. Canadian Entomologist, xxx, 277-280; Nov., 1898.

Fourteen new species.

The Buffalo Gnats or Black-Flies of the United States. Bulletin 10, new series, Division of Entomology, 66-69, figs.; 1898.

*Bracteatum* and *griseum* n. sp.

- On the Habits of the Oscinidæ and Agromyzidæ Reared at the U. S. Dept. of Agriculture. Bull. 10, new series, Division of Entomology, 70-79; 1898.  
Habits of many species; very valuable.
- A Cecidomyiid Injurious to Seeds of Sorghum. Bull. 18, new series, Div. of Entomology, Department of Agriculture; p. 81; 1898.  
*Diplosis sorghiola*.
- Description of a New Psilopa. Canadian Entomologist, xxxi, 8; Jan., 1899.  
*Psilopa petrolei*, from California.
- A New Dipterous Family Related to the Chironomidæ. Entomological News, x, 60, 61, fig.; March, 1899.  
*Stenoxenus johnsoni*, which I place in the Chironomidæ.
- New Genera and Species of Dexidæ. Journal of the New York Entomological Society, vii, 218-222; Sept., 1899.  
Eight new species; three new genera.
- New Genera and Species of Nycteribidæ and Hippoboscidæ. Canadian Entomologist, xxxi, 333-336; Nov., 1899.  
*Pterellepsis*, *Aspidoptera* and *Pseudolfersia* n. gen.; four new species.
- Notes and Descriptions of Trypetidæ. Journal of the New York Entomological Society, vii, 259-268; Dec., 1899.  
*Paracantha* n. gen., and 17 new species.
- Report on Diptera of the Commander Islands. Extracted from "The Fur Seals and Fur Seal Islands of the North Pacific Ocean," iv, 341-346, Washington, 1899.  
*Eutanypus* n. gen.; eight new species.
- New Genera and Species of Ephydridæ. Canadian Entomologist, xxxii, 33-35; Feb., 1900.  
*Nostima* and *Paratissa* n. gen.; five new species.
- Notes and Descriptions of Ortalidæ. Journal of the New York Entomological Society, viii, 21-25; March, 1900.  
*Paradoxa* new genus; ten new species.
- Two New Genera of Diptera. Entomological News, xi, 429, 430, figs.; April, 1900.  
*Hesperodes johnsoni* and *Traginops irrorata*, both from New Jersey.
- New Scenopinidæ of the United States. Entomological News, xi, 500, 501; June, 1900.  
*Metatrichia* new genus; *Pseudatrichia unicolor* and *griseola*, both from New Mexico.
- Report on a Collection of Dipterous Insects from Puerto Rico. Proceedings of the United States National Museum, xxii, 249-270; 1900.  
Three new genera and fifteen new species; many other species reported.
- Two New Cecidomyians Destructive to Buds of Roses. Bulletin 22, new series, Division of Entomology, Dept. of Agriculture; 1900, pp. 44-48, figs.  
*Diplosis rosivora* and *Neocerata* (n. gen.) *rhodophaga*; life histories.
- A New Violet Pest. Bulletin 22, new series, Division of Entomology, Dept. of Agriculture; 1900, pp. 48-51, figs.  
*Diplosis violicola* n. sp.; fuller life history in Bull. 27, 47-50; 1901.
- Synoptic Tables of North American Mosquitoes. Bulletin 25, new series, Division of Entomology, Dept. of Agriculture; 1900, pp. 19-22.

No new species; these tables are printed also in Circular No. 40, Division of Entomology, and with slight changes in a second edition of the same, and in Howard's book "Mosquitoes."

Diptera of the Harriman Alaska Expedition. Proceedings of the Washington Academy of Sciences, II, 389-464; Dec. 7, 1900.

One new genus, 63 new species; 276 species listed in all.

A New Genus of Ortalidæ. Entomological News, XII, 14; Jan., 1901.

*Zacompsia fulva*.

Three New Species of Diptera. Entomological News, XII, 16-18; Jan., 1901.

*Chironomus halteralis*, *Helicobia quadrisetosa*, *Drosophila buskii*.

Diptera of the Hudsonian Zone, New Mexico. Psyche, IX, 149, 150; Jan., 1901.

*Limnophila costata* and *Rhypholophus cockerellii* new; 21 other species.

The Ant-Decapitating Fly. Proceedings of the Entomological Society of Washington, IV, 501; July 2, 1901.

*Apocephalus pergandei* n. gen. and sp.; the biological part of the article is by Pergande.

A New Anthomyiid Injurious to Lupines. Entomological News, XII, 206, 207; Sept., 1901.

*Phorbia lupini*.

Three New Species of Culicidæ. Canadian Entomologist, XXXIII, 258-260; Sept., 1901.

*Psorophora howardii*, *Culex curvici*, *Aedes smithii*.

Types of Anthomyiid Genera. Journal of the New York Entomological Society, IX, 134-146; Sept., 1901.

No new species.

Original Descriptions of New Diptera. Bulletin 47, New York State Museum, 585, 586; Sept., 1901.

*Roederioides juncta* and *Zabrachia polita* new genera and species.

New Diptera in the United States National Museum. Proceedings of the United States National Museum, XXIII, 593-618; 1901.

*Pycnoglossa* and *Plethochata* n. gen.; many new species, especially of *Ceratopogon*.

A Systematic Arrangement of the Families of Diptera. Proceedings of the United States National Museum, XXIII, 653-658; 1901.

No new species.

Three New Species of Nematoceros Diptera. Entomological News, XIII, 84, 85; March, 1902.

*Ceratopogon varicolor*, *Tanypus dyari*, *Corethra brakeleyi*.

New Cyclorrhaphous Diptera from Mexico and New Mexico. Canadian Entomologist XXXIV, 195-202; Aug., 1902.

*Comatacta* and *Trixodes* n. gen.; 12 n. sp.; oc. of *Sicus* in N. A.

New Orthorrhaphous Diptera from Mexico and Texas. Journal of the New York Entomological Society, X, 136-141; Sept., 1902.

Eleven new species.

Three New Species of *Culex*. Canadian Entomologist, XXXIV, 292, 293; Nov., 1902.

*C. atropalpus*, *varipalpus* and *quadrivittatus*.

Diptera from Beulah, N. M. Transactions of the American Entomological Society, XXIX, 102-104; Nov., 1902.

*Trochilodes skinneri* n. gen. and sp.; *Pegomyia nitidula* n. sp.

New Acalyprate Diptera from North America. Journal of the New York Entomological Society, x, 177-191; Dec., 1902.

Several new genera; many species.

New Forms of Culicidæ from North America. Journal of the New York Entomological Society, x, 191-194; Dec., 1902.

*Corethrella* n. gen.; several species of *Culex* and *Anopheles*.

New Diptera from North America. Proceedings of the United States National Museum, xxv, 83-126; 1902.

*Meigeniella*, *Paradmontia* and *Pseudapinoψs* n. gen.; many new species.

The Occurrence of the Phorid Genus *Aenigmatias* in North America. Canadian Entomologist, xxxv, 20-22; Jan., 1903.

*Aenigmatias schwarzi* n. sp., from Ariz.

The Genera of the Dipterous Family Empididæ, with Notes and new Species. Proceedings of the Entomological Society of Washington, v, 245-272; May 7, 1903.

Sixteen new species; discussion of types of genera.

A New Culicid Genus Related to *Corethra*. Canadian Entomologist, xxxv, 189-190; July, 1903.

*Sayomyia* nom. nov.; *Corethra pictipes* n. sp.

Four New Species of *Culex*. Canadian Entomologist, xxxv, 255-257; Sept., 1903.

*C. cantator*, *aurifer*, *nanus*, *discolor*.

Notes on *Culex Kelloggii* Theobald. Canadian Entomologist, xxxv, 261; Sept., 1903.

Notes on synonymy.

Eucorethra, a Genus of Culicidæ. Canadian Entomologist, xxxv, 272; Oct., 1903.

"*E. underwoodi* UNDERWOOD."

A New *Anopheles* with Unspotted Wings. Canadian Entomologist, xxxv, 310; Nov., 1903.

*A. barberi*.

#### Curtis, John.

Description of the Insects brought Home by Commander J. Clark Ross. Appendix to Ross's Voyage to the Arctic Regions; 1831.

*Chironomus borealis*, *Tipula arctica*, *Helophilus bilineatus*, *Tachina hirta*, *Anthomyia dubia* and *Scatophaga apicalis* new.

#### Curtice, Cooper.

The Larvæ of *Hypoderma bovis* DeG. Insect Life, II, 207, 208; February, 1890.

The species now called *lineata* VILL. Curtice here advanced a new theory of the insect's habits.

#### Davidson, Anstruther.

The Nest and Parasites of *Xylocopa orpifex* Smith. Entomological News, IV, 151-153; May, 1893.

*Argyramaba simson* FAB., recorded as a parasite.

On the Parasites of Wild Bees in California. Entomological News, v, 170-172; June, 1894.

Habits of *Brachycoma davidsoni* COQ.

The Habits of Californian Bees and Wasps. Entomological News, vi, 252, 253; Oct., 1895.

*Physocephala affinis* reared from nest of *Anthidium emarginatum*.

Parasites of Spider's Eggs. Entomological News, vii, 319, 320; Dec., 1896.

Habits of *Gaurax araneæ* Coq.

**Day, Loren T.**

Notes on Sciomyzidæ, with Descriptions of New Species. Canadian Entomologist, xiii, 85-89; April, 1881.

Four new species.

The Species of Odontomyia Found in the United States. Proceedings of the Academy of Natural Sciences of Philadelphia, 1882, 74-88.

Nine new species.

**DeGeer, Charles.**

Mémoires pour servir à l'Histoire des Insectes. Stockholm, 1752-78. 7 vols.

Several American species are described in the 6th volume.

**Robineau-Desvoidy, J. B.**

Essai sur la Tribu des Culicides. Mémoires de la Société d'Histoire Naturelle de Paris, iii, 390-413, 1 pl. Paris, 1827.

Five new species from North America.

Essai sur les Myodaires. Mémoires des Savants étrangers de l'Académie des Sciences de Paris, vol. ii. Paris, 1830, 813 pp.

This massive work contains an original systematic arrangement of all the Calyptrate and part of the Acalyptrate Muscidæ. About eighty new North American species are described. Many of the genera, after being ignored for half a century, have of late been adopted and newly defined, especially in Tachinidæ. The work is intrinsically valuable, and for its time wonderful. The characters now used for separating the genera of Tachinidæ were mostly introduced in this volume. It is very rare and expensive.

Histoire Naturelle des Diptères des Environs de Paris. 2 vols. Paris, 1863. Vol. i, xvi and 1143 pp.; vol. ii, 920 pp.

This work was published after Desvoidy's death, and contains some defects due to imperfect editing of his materials. It is devoted almost wholly to European Tachinidæ, Dexidæ, Sarcophagidæ and Muscidæ. "Contains short descriptions of a few N. A. Diptera; no new ones."—O. S.

*Note.*—Osten Sacken, "Record of My Life Work in Entomology," 180-192, 1903, gives an interesting and lucid account of the two main works cited above.

**Dimmock, Geo.**

Anatomy of the Mouth-Parts and of the Sucking Apparatus of Some Diptera. Boston, 1881; 50 pp., 4 plates.

This is generally recognized as authoritative on the subject.

**Doane, R. W.**

A New Trypetid of Economic Importance. Entomological News, ix, 69-72, 1 pl.; March, 1898.

*Rhagoletis ribicola*.

Notes on Trypetidæ, with Descriptions of New Species. Journal of the New York Entomological Society, vii, 177-193, 2 plates; Sept., 1899.

Twenty new species; notes on many others.



Additional Notes on Trypetidæ. Journal of the New York Entomological Society, VIII, 47-48; March, 1900.

This is a defense of the preceding, Mr. Coquillett having erroneously relegated some of the species to synonymy.

New North American Tipulidæ. Journal of the New York Entomological Society, VIII, 182-198, 2 plates; Sept., 1900.

*Polyangæus* n. gen.; 44 new species of *brevipalpi*.

Descriptions of New Tipulidæ. Journal of the New York Entomological Society, IX, 97-127; Sept., 1901.

Fifty-four new species of *Tipula*.

#### Drury, Drew.

Illustrations of Natural History, wherein are exhibited upwards of two hundred and forty figures of Exotic Insects. London, 1770-82, 3 vols.

A new edition was published by Westwood in 1837, under the title, "Illustrations of Foreign Entomology."

"Eight N. American and West Indian species are figured."—O. S.

#### Dufour, Leon.

Révision et Monographie du Genre *Ceroplatus*. Annales des Sciences Naturelles, 2me ser., XI, 193 *et seq.*, figs.; 1839.

*Ceroplatus carbonarius*, from Carolina.

#### Dyar, Harrison G.

Illustrations of the Larvæ of North American Mosquitoes. Journal of the New York Entomological Society, (1) IX, 177-182, 1 plate; Dec., 1901. (2) X, 194-201, 4 plates; Dec., 1902. (3) XI, 23-27, 2 plates; March, 1903.

No new species; many species described and figured in the larval stage.

The Life-History of *Uranotenia sapphirina*. Journal of the New York Entomological Society, IX, 179-182, 1 plate; Dec., 1901.

Notes on the Mosquitoes on Long Island, N. Y. Proceedings of the Entomological Society of Washington, V, 45-51; Apr. 28, 1902.

No new species; mostly biological.

Notes on the Mosquitoes in New Hampshire. Proceedings of the Entomological Society of Washington, V, 140-148; Feb. 13, 1903.

No new species; mostly biological.

*Culex restuans* Theobald. Entomological News, XIV, 41, 42; Feb., 1903.

Larval structure, habits, etc.

*Culex atropalpus* Coquillett. Entomological News, XIV, 180; June, 1903.

Larval structure and habits.

#### Emerton, James H.

An Internal Dipterous Parasite of Spiders. Psyche, V, 404, 1890.

#### Eckel, Lida S.

The Resin-Gnat *Diplosis* and Three of Its Parasites. Entomological News, XIV, 279-284, 1 plate; November, 1903.

*Diplosis resinicola* O. S., biology.

#### Erichson, W. F.

Die Henopier. Eine Familie aus der Ordnung der Dipteren. Entomographien, Heft I, 135-174, 1 plate. Berlin, 1840.

*Ocnæa micans*, from Mexico.

#### Eschscholz, J. F.

Entomographien. Dorpat. Naturwiss. Abhandl., I, 1823.

*Empis laniventris* and *Musca obscura*, from Unalaska.

**Fabricius, J. C.**

Systema Entomologiæ. Flensburgi, 1775.

Mantissa Insectorum; 2 vols. Hafniæ, 1787.

Entomologia Systematica; 4 vols. Hafniæ, 1772-94; supplement; 1798.

Systema Antliatorum. Brunsvigæ, 1805.

Brief descriptions of a considerable number of North American Diptera, especially large species from the West Indies. Wiedemann has re-described most of them.

**Fabricius, Otto.**

Fauna Grœnlandica. Hafniæ et Lepsia, 1780.

Eighteen new species. Schiödte, "Tillæg til Rink: Grœnland," etc., has given the true interpretation of several species; Lundbeck, in "Diptera Grœnlandica," has unriddled a few more, leaving seven that cannot be recognized.

**Felt, Ephraim P.**

The Antennal Structure of Certain Diplosids. Psyche, VIII, 1-5, 1 plate; Jan., 1897.

Additional Notes on *Sciara*. 12th New York Report; 1897; 223-228, 1 plate.

*Sciara multiseta*, *paucisetata*, *agraria*, *prolifera* and *fulvicauda*. The preceding notes were published by Lintner, q. v.

*Phora albidihalteris* n. sp. 12th New York Report; 1897; 228, 229.

Reared from mushrooms in N. J.

*Trypeta canadensis* Loew. 14th Report New York State Entomologist; 1898; 160-163, biology.

Snakeworm (*Sciara* sp.). 16th Report New York State Entomologist, 922-994; March, 1901. Occurrence of snake-like masses of larvæ at Franklin, N. Y.

The Hessian Fly. 17th Report New York State Entomologist; 1902; 705-730, with figs. and extended bibliography.

*Rhabdophaga salicis* Schrank. 17th Report New York State Entomologist; 1902; 741-744, figs. Occurrence in N. A., and notes on biology.

*Psila rosæ* Fabr., the Carrot Rust Fly. 18th Report New York State Entomologist, 99-103, figs.; May, 1903.

Life history, remedies, etc.

**Fitch, Asa.**

An Essay upon the Wheat-fly and some Species Allied to it. Albany, 1845.

This is the first edition, which was published in the American Quarterly Journal of Agriculture and Science, vol. II, no. 2. It contains the descriptions of *Cecidomyia tritici* Kirby; *Cec. caliptera* n. sp.; *Cec. thoracica* n. sp.; *Cec. tergata* n. sp. A second edition appeared in 1846, in the Transactions of the N. Y. State Agricultural Society, vol. v. A new species, *Cec. cercalis*, is separated in this edition from *C. caliptera*, and full descriptions with figures of both are given.

The Hessian Fly. Albany, 1846 (second edition, 1847). With a plate.

Published originally in the American Journal of Agriculture and Science, vols. IV, V (1846). Reprinted with some additions in the Transactions of the N. Y. State Agricultural Society, vol. VI, pp. 316-376 (1846; in pamphlet form it bears the date of 1847).



*Cecidomyia salicis* n. sp., described in American Quarterly Journal of Agriculture and Science, vol. 1, p. 263.

Winter Insects of Eastern New York. In the American Journal of Agriculture and Science, vol. v, pp. 274-284. [Reprinted in Lintner's 2d N. Y. Rept., 235-244.]

N. sp.—*Culex hicalis*, *Chironomus, nivoriundus*, *Trichocera brumalis*.

Survey of Washington County, New York. In the 9th vol. of the Transactions of the N. Y. State Agricultural Society.

Several species occurring in that locality are mentioned in a popular way.

First and Second Report on the Noxious, Beneficial and other Insects of the State of New York. Made to the State Agricultural Society, pursuant to an appropriation for this purpose from the Legislature of the State. Albany; 1856. With 4 plates.

Before the publication of the Second Report, the first had been distributed under the title of First Report, etc.; 1855. This work contains 21 new American Diptera.

Third, fourth and fifth Reports on the Noxious, Beneficial and other Insects of the State of New York, made to the State Agricultural Society, pursuant to an annual appropriation for this purpose from the Legislature of the State. Albany; 1859. With four plates and many wood-cuts.

*Cuterebra emasculator* n. sp. and several *Cecidomyiæ*.

Sixth, seventh, eighth and ninth Reports, etc., etc. Albany, 1865. With four plates and several wood-cuts.

Contains a new edition of the papers on *Cccid. tritici* and *destructor*.

All these reports appeared successively in the Transactions of the N. Y. State Agricultural Society, and were collected and issued afterwards as separate volumes: Volume 1, containing Reports 1 and 2; Vol. II, Reports 3-5; Vol. III, Reports 6-9. Each volume has a title-page, as given above, and a complete index of the contents. In the first and third volumes the pagination runs through the whole volume; in the second volume, a new pagination begins with every report, but at the same time, the species successively discussed are numbered and these numbers run through the whole volume. For this reason, in quoting the second volume, I had to give the number of the species referred to, while in quoting the other two volumes, I give the page.—Dr. Fitch's following Reports, which I have seen up to the 12th (1867), do not contain any new species of N. A. Diptera.

*Note*.—The above account of Fitch's writings is quoted bodily from Osten Sacken's Catalogue. It remains to add that the Reports were continued to 1872. Lintner, in his First N. Y. Report, 1882, pp. 291-325, gives a fuller account of the writings of Fitch. As I have copied all of Osten Sacken's references, I necessarily quote his editions, although the others were often earlier.

*Trupanea apivora* (syn. *Promachus fitchii*) is inadvertently omitted above. It is described in the 9th Report.

#### Fletcher, James.

Reports of the Entomologist and Botanist, Central Experiment Farm, Canada Department of Agriculture.

A number of short references to the occurrence and habits of Diptera of economic importance are to be found in this series; the report for 1897 has a somewhat longer article on *Psila rosa*, "The Carrot Rust-Fly," 196-198, figs.

Recent Additions to the List of Injurious Insects of Canada. Transactions of the Royal Society of Canada, sec. series, 1899-1900; v, section IV, 209, 213, figs.

Occurrence and habits of *Oscinis carbonarius* LOEW and *Psila rosæ* FAB.

**Forster, J. R.**

Novæ Species Insectorum. Centuria I. London, 1771.

*Tabanus americanus*.

**French, G. H.**

A Parasite the Supposed Cause of Some Cases of Epilepsy. Canadian Entomologist, xxxii, 263, fig.; Sept., 1900.

*Gastrophilus epilepsalis* n. sp., described from small larvæ.

**Fyles, T. W.**

Description of a Dipterous Parasite of Phylloxera vastatrix. Canadian Entomologist, xiv, 237, fig., 1882; further note, xv, 83, 84, 1884.

*Cccidomyia grassator* n. sp.

Trypeta solidaginis Fitch, and Its Parasites. Canadian Entomologist, xxvi, 120-122; May, 1894.

No new Diptera.

Quebec Diptera. Canadian Entomologist, xxxv, 234; August, 1903.

45 species from the Province of Quebec; none new.

**Garman, H.**

The American Frit-Fly. Agricultural Science, v, 67-69, 1891.

*Oscinis variabilis?* LOEW (since referred to *O. carbonarius* LOEW); biology.

The Bot-Flies of the Horse. Annual Report Kentucky Experiment Station, 1894.

No new species.

The Hessian Fly. Dangerous Mosquitoes in Kentucky. Bulletin 96, Kentucky Experiment Station.

No new species; popular account.

**Gerstaecker, A.**

Beitrag zur Kenntniss der Henopier. Stett. Ent. Zeitung, 1856, 339-361.

*Eulonchus smaragdinus*.

Beitrag zur Kenntniss exotischer Stratiomyiden. Linnæa Entom., xi, 261-350, 1 plate; 1857.

Six new species.

Beschreibung einiger ausgezeichneten neuen Dipteren aus der Familie Muscarie. Stett. Ent. Zeitung, 1860, 163-208, 1 plate.

*Pyrgota vesperilio* and *ptrophorina*, *Toxotrypana curvicauda*, *Diacrita costalis*.

"Die Zweite deutsche Nordpohlfahrt in der Jahren 1869-70. Leipzig, 1874.

Hymenoptera and Diptera by Gerstaecker; the latter are represented by four species, collected in East Greenland, lat. 73-75 degrees; *Tipula truncorum* MEIG., *Echinomyia æuca* STAEG., *Cynomyia alpina* ZETT., and *Calliphora grænlandica* ZETT."—O. S.

**Giglio-Tos, Ermanno.**

Bolletini dei Musei di Zoologia ed Anatomia comparata della R. Università di Torino:

- Vol. V, No. 84, July 18, 1890, 4 pp., 1 pl.  
 VI, 102, May 28, 1891, 4 pp.  
 VI, 108, Sept. 20, 1891, 6 pp.  
 VII, 117, Mar. 18, 1892, 4 pp.  
 VII, 118, Mar. 22, 1892, 3 pp.  
 VII, 123, June 1, 1892, 7 pp.  
 VII, 132, Oct. 20, 1892, 10 pp. (two parts).  
 VIII, 147, May 20, 1893, 11 pp.  
 VIII, 158, July 1, 1893, 14 pp.  
 XI, 224, Jan. 27, 1896, 5 pp.  
 XII, 276, Feb. 18, 1897, 3 pp.

Contents of the preceding, by number (all Mexican and Central American) :

- No. 84, *Ditomyia zonata* and *mexicana*.  
 No. 102, Diagnoses of twelve Stratiomyidæ.  
 No. 108, *Berismyia*, *Rhopalosyrphus*, *Omegasyrphus*, *Megamctopon* n. gen.  
 No. 117, *Camerania* n. g. (see *Volucella macrocephala*).  
 No. 118, Notes on *Rhopalosyrphus* and *Omegasyrphus*.  
 No. 123, diagnoses of 31 species of Syrphidæ.  
 No. 132 (two numbers exactly alike in title, but with different contents), 30 diagnoses of Syrphidæ and Conopidæ.  
 No. 147, diagnoses of 47 species of Calyptatæ; 4 new genera.  
 No. 158, seven genera, many species, of *Cyclorhapha*.  
 No. 224, *Pityocera festæ*.  
 No. 276, syn. of *Pityocera festæ* with *Dicrania ceruus* WIED.

The preceding numbers, except the last two, are supposed to be superseded by the following:

Ditteri del Messico. Memoria della Reale Accademia delle Scienze di Torino, Serie II:

Parte I. Stratiomyidæ-Syrphidæ. Tom. XLIII, 72 pp., 1 plate; 1892.

Parte II. Syrphidæ-Conopidæ-Pipunculidæ. XLIII, 79 pp., 1 pl.; 1892.

Parte III. Muscidæ Calypteratæ. XLIV, 76 pp., 1 pl.; 1893.

Parte IV. Calypteratæ and Acalypteratæ. XLV, 73 pp., 1 pl.; 1895.

Many Mexican genera and species. I am unable to give the original pagination.

#### Giles, Geo. M.

A Handbook of Gnats or Mosquitoes. Second edition, London, 1902. 530 pp.; many plates and figures.

The systematic part of this is practically an abridgement of Theobald's Monograph, and contains descriptions of most of the North American species—all that were known at that time.

The first edition was a different book, with less systematic work. It contained one new North American species, *Culex willistonii*, which Coquillett has since referred to his *tarsalis*.

#### Gillette, C. P.

A New Cecidomyiid Infesting Box Elder. Psyche, 1890, 392, 393.

*Cecidomyia negundinis*.

#### Glover, Townend.

Manuscript Notes from My Journal: or Illustrations of Insects Native and Foreign. Diptera or Two-Winged Flies. Washington, 1874, 4to, pp. iii, pl. I-XII and pl. A, pp. 120. Forty-five copies printed.

No new species: notes on the habits of some species.

**Grænicher, S.**

The Syrphidæ of Milwaukee Co., Wis. Bulletin of the Wisconsin Natural History Society, n. ser., I, 3; July, 1900.

No new species (not seen).

**Gray, G. R.**

Diptera in E. Griffith's Animal Kingdom. London, 1824-33. 16 vols. Several N. A. species are figured in the 15th volume, 1832. "The descriptions by Gray are very incomplete."—O. S.

**Grote, August R.**

Description of Two New Species of North American Brachycerous Diptera. Proceedings of the Entomological Society of Philadelphia, VI, 445; 1866-67.

*Sparnopolius coloradensis* and *cumatilis*.

**Guérin-Méneville, F. E.**

"Note sur deux Insectes Parasites de la cochenille qui font un grand tort à cette culture en Amérique. (Read in the Academy of Sciences in Paris on the 13th of Nov., 1848. Conf. Guerin's Revue Zoologique, 1848, p. 350.)"—O. S.

Iconographie du Règne Animal de G. Cuvier, etc. Paris, 1829-44. The insects are in the seventh volume.

*Leptis servillei*, *Calobata ruficeps*, *Toxophora americana*, *Cuterebra americana* (the last may be South American).

**Hagen, Hermann A.**

A New Species of Simulium, with a Remarkable Nymph Case. Proceedings of the Boston Society of Natural History, XX, 305; 1879.

*Simulium pictipes*.

List of Anthomyidæ Examined by R. H. Meade, Esq., Bradford, England. Canadian Entomologist, XIII, 43-51; 1881.

List of Sarcophagidæ Examined by R. H. Meade, Esq., Bradford, England. Canadian Entomologist, XIII, 146-150; 1881.

The two preceding papers contain only some rather off-hand comments on the collections sent to England by Hagen; no new species.

Entomological Notes. Canadian Entomologist, XXX, 37; 1881 (*Cecidomyia* sp.).

On Simulium. Canadian Entomologist, XIII, 150, 151; 1881.

Trypeta cerasi Linné. Canadian Entomologist, XV, 159, 160; 1883.

Simulium Feeding upon Chrysalids. Ent. Monthly, Mag., XIX; 1883, 254, 255.

On the Hessian Fly in Italy. Canadian Entomologist, XVII, 129-131; 1885.

Cœlopa frigida Fall. Canadian Entomologist, XVII, 140, note.

On Cecidomyia liriodendri, Canadian Entomologist, XVIII, 159; 1886.

**Haldeman, S. S.**

Description of several new and interesting Animals. American Quarterly Journal of Agriculture and Science, VI, 193, 1847. Reprinted in the Proc. Boston Soc. Nat. Hist., January, 1859.

*Cecidomyia robinie* n. sp.

**Harrington, W. Hague.**

Occupants of the Galls of Eurosta solidaginis Fitch. Canadian Entomologist, XXVII, 197-198, 1895.

No new species.

**Harris, Thaddeus W.**

"Catalogue of the Insects of Massachusetts. In Prof. Hitchcock's Report on the Geology, Botany and Zoology of Massachusetts.

Professor Hitchcock's Report had two editions; in the first (1833), Dr. Harris mentioned only the generic names of the insects, adding the number of species belonging to each genus. In the second edition (1835), the specific names are also given; many of them are mere collection names, never having been published.

"A Treatise on some of the Insects of New England, which are injurious to Vegetation. Second edition. Boston, 1852.

The first edition of this work was published in 1841, under the title of A Report on the Insects of Massachusetts, Injurious to Vegetation. The second edition contains many additions.

"A Treatise on Some of the Insects Injurious to Vegetation. Third edition. Boston, 1862. With 8 plates and 278 wood-cuts.

Was published at the expense of the Commonwealth of Massachusetts and is provided with notes by different authors; these on the Diptera are by C. R. Osten Sacken. The quotations in the present volume are from this edition.

"Entomological Correspondence. Edited by Samuel Scudder. Boston, 1869.

Contains on pp. 335, 336, descriptions of *Musca harpyia* HARRIS (syn. *Musca domestica* L.) and *Musca familiaris* HARRIS (apparently the same as the European *Pollenia rudis*)." Quoted from O. S.

**Harris, H. F.**

The Eggs of *Psorophora ciliata*. Entomological News, XIV, 232, 233; 1903.

**Hart, Chas. A.**

On the Entomology of the Illinois River and Adjacent Waters. First Paper. Bulletin of the Illinois State Laboratory of Natural History, IV, Article VI, pp. 149-280, with 14 plates. The Diptera extend from p. 184 to p. 270, with 10 plates. Springfield, Ill., 1895.

Contains a large amount of valuable and interesting information about the aquatic dipterous larvæ, many species being described and figured. No new species.

**Harvey, F. L.**

The Currant Fly. Bulletin 35, Maine Experiment Station; May, 1897. 8 pp. and plate.

*Epochra canadensis* LOEW, habits, etc.

Report Entomologist and Botanist, in the Annual Report Maine Experiment Station, 1889, 148-256, 1 plate and 11 figs.

Full life history of *Trypeta (Rhagoletis) pomonella*.

**Hausmann, J. F. L.**

Entomologische Bemerkungen. Braunschweig, 1799.

*Syrphus trifasciatus* n. sp. (syn. of *Milcsia ornata*). According to Hagen, Hausmann, who afterward became a professor in Göttingen, was only sixteen years old at the time of this publication.

**Herrera, A. L.**

El Gusano de la Fruta. Boletín de la Comisión de Parasitología Agrícola, I, No. 1. Mexico City, 1900.

A pamphlet of thirty pages on *Trypeta ludens*, the fruit-fly of the orange; figures and account of damage, etc.

**Herrick, A.**

*Corethra appendiculata* n. sp., in Minnesota Geol. and Nat. Hist. Survey, 1884, 10, pl. v. Larva only, and very vaguely described. (Data from Johannsen.)

**Hine, J. S.**

*Sciara inconstans* Fitch—Reared from Carnations. Entomological News, x, 201, 202, figs.; Sept., 1899.

*Pangonia chrysocoma* O. S. Entomological News, xi, 392; March, 1900.  
Synonymy of *Goniops hippoboscoides*.

Two New Species of Tabanidæ. Canadian Entomologist, xxxii, 247; Aug., 1900.

*Tabanus pruinosus* (afterward changed to *ohioensis*) and *thoracicus*.

Collecting Tabanidæ. Ohio Naturalist, ii, 167; Dec., 1901.

Habits of adults in several species.

Observations on Insects. Ohio Naturalist, ii, 169; Dec., 1901.

Notes on habits of *Agromyza setosa* Lw., *Bibio albipennis* and *Chrysopila ornata*.

New or Little-Known Diptera. Ohio Naturalist, ii, 228-230; March, 1902.

*Pachygaster maculicornis* and *Phorantha bridwelli*; notes on several other species.

The genus *Pedicia*, with one new Species. Ohio Naturalist, iii, 416, 417; April, 1903.

*P. magnifica*.

Some Diptera from Arizona. Canadian Entomologist, xxxv, 244-246; Sept., 1903.

*Tabanus hyalinipennis*, *Myiolepta aurinota*; notes on three described species.

Tabanidæ of Ohio. Ohio Academy of Sciences, Special Papers, No. 5, 1903.

Also published as University Bulletin No. 19, series 7, Ohio State University. 63 pp., 2 plates.

*Chrysops brummeus* and *sackeni*; all the Ohio species redescribed.

On the life history of *Tabanus vivax*. Ohio Naturalist, iv, Nov., 1903, 2 pp.

**Holmgren, A. E.**

Insekten fra Nordgrönland, samlade af Prof. A. E. Nordenskiöld år 1870. Kongl. Vetenskap. Förhandlingar, 1872, No. 6, pp. 97-105.

Nine new species; thirty-nine in all.

**Holstein, G. W.**

Notes on *Hypoderma lineata* in Texas. Entomological News, iv, 299, 300; Nov., 1893.

**Hood, Lewis E.**

The Leptidæ and Bombylidæ of the White Mts. Psyche, vi, 283, 284; July, 1892.

Occurrence of about twenty species, with notes; none new.

**Hopkins, A. D.**

Notes on the Habits of Certain Mycetophilids, with Description of *Epidapus scabiei* n. sp. Proceedings of the Entomological Society of Washington, iii, 149-159, figs.; 1895.



Forms of So-Called Potato Scab Caused by Insects. Special Bulletin 2, West Virginia Experiment Station, 97-111, 1895; many figs.

Potato scab produced by *Epidapus scabici*.

The Hessian Fly in West Virginia. Bulletin 67, West Virginia Experiment Station, Aug., 1900; 14 pp., 2 plates and map.

Studies in the life history of *Mayetiola destructor*.

#### Hough, Garry deN.

Two New American Species of *Cynomyia*. Entomological News, IX, 105-111, figs.; May, 1898.

*C. americana* and *elongata*.

A Third American Species of *Cynomyia*. Entomological News, IX, 165, 166, figs.; Sept., 1898.

*C. hirta*.

The Muscidae Collected by Dr. A. Donaldson Smith in Somali Land. Proceedings of the Academy of Natural Sciences of Philadelphia, 1898, 165-167, figs.

An important discussion of chaetotaxy; no new North American species.

Parasitic Influence on *Melanoplus*. By S. J. Hunter. Kansas University Quarterly, VII, 207-210, figs.; Oct., 1898.

Description of *Sarcophaga hunteri* n. sp., by Dr. Hough.

Some North American Genera of Calliphorinae. Entomological News, X, 62-66; March, 1899.

Genera defined; no new species.

Some Muscinae of North America. Biological Bulletin I, 19-33, figs.; 1899.

*Muscina texana* and *aurantiaca*; list of genera and species, etc.

Studies in Diptera Cyclorhapha. I. The Pipunculidae of the United States. Proceedings of the Boston Society of Natural History, XXIX, 77-86; July, 1899.

*Pipunculus atlanticus*, *similis* and *flavomaculata*.

Synopsis of the Calliphorinae of the United States. Zoological Bulletin, II, 283-290, figs.; 1899.

*Chryso-myia wheeleri*, *Calliphora coloradensis* and *latifrons*, *Lucilia pilatei*.

South American Muscidae in the Collection of S. W. Williston. Kansas University Quarterly, IX, 203-232, 2 plates; July, 1900.

A few which occur also in Mexico and the United States are carefully redescribed.

#### Howard, Leland O.

Notes on a *Simulium* Common at Ithaca, N. Y. Insect Life, I, 99-101; Oct., 1888.

Life history; species not named, but probably *pictipes* HAGEN.

An Orthalid Fly Injuring Growing Cereals. Insect Life, VII, 352-354, figs.; March, 1895.

*Chatopsis aenea* WIED.; life history.

The Beet-Leaf Pegomyia. Insect Life, VII, 379-381, figs.; July, 1895.

*Pegomyia vicina* LINTNER; life history.

Mosquitoes and Fleas. Circular No. 13, second series, Division of Entomology, Department of Agriculture; 6 pp. of general information; Feb. 1, 1896.

The Principal Household Insects of the United States. Bulletin 4, new series, Division of Entomology, Department of Agriculture, 130 pp.; 1896. By Howard and Marlatt; several articles on common household Diptera by Howard.

Further Notes on the House-fly. Bulletin No. 10, new series, Division of Entomology, Department of Agriculture, pp. 63-65; 1898.

Treatment of manure to kill the larvæ.

Notes on House-flies and Mosquitoes. Bulletin 17, new series, Division of Entomology, Department of Agriculture; pp. 55, 56; 1898.

How to distinguish the Different Mosquitoes of North America. Circular No. 40, second series, Division of Entomology, Department of Agriculture; 8 pp. The tables are by Coquillett.

Notes on the Mosquitoes of the United States. Bulletin 25, new series, Division of Entomology, Department of Agriculture, 70 pp.; 1900.

Remarks on *Psorophora ciliata*, with Notes on its Early Stages. Canadian Entomologist, xxxii, 353-357, figs.; Dec., 1900.

Life history, well illustrated.

A contribution to the Study of the Fauna of Human Excrement. Washington Academy of Sciences, II, 541-604, many illustrations; Dec. 28, 1900.

Life histories of many flies living in excrement; very valuable. Partially summarized in Bulletin 30, n. ser., Div. of Ent., 1901, 39-45.

Diptera Bred from Cow-Manure. Canadian Entomologist, xxxiii, 42-44; Feb., 1901.

A list of twenty species, none new.

Mosquitoes; how they live, how they carry Disease, etc. New York, 1901, with many illustrations.

Transformations, habits, etc.; table and list of species by Coquillett.

#### Hunter, W. D.

The Dipterous Enemies of Domestic Animals and Man. Nebraska State Board of Agriculture, 1895, 288-306.

Popular account; no new species.

A Contribution to the Knowledge of North American Syrphidæ. I. Canadian Entomologist, xxvii, 87-101; April, 1896.

Four new species; many little known species redescribed.

A New Species of *Tropidia*, and Note on the Generic Position of *Melanostoma rufipes* Will. Entomological News, vii, 215, 216; Sept., 1896.

*T. nigricornis*, changed on p. 308 to *montana*.

A Summary of the Members of the Genus *Chilosia* Meig. in North America, with Descriptions of New Species. Canadian Entomologist, xxviii, 227-233; Sept., 1896.

*Ch. signatiseta*, *cyanea* and *aldrichi*; table and list of species.

A Contribution to the Knowledge of North American Syrphidæ. II. Canadian Entomologist, xxix, 121-144, 1 plate; June, 1897.

*Pyritis* n. gen.; twelve new species.

#### Hunter, Samuel J.

Parasitic Influence on *Melanoplus*. Kansas University Quarterly, vii, 205-210; Oct., 1898.



Notes on *Sarcophaga cimbicis* TOWNSEND, and description by Dr. Hough of *Sarcophaga hunteri*.

Alfalfa, Grasshoppers, Bees. Bulletin of the Entomological Department of the University of Kansas, 1898; 152 pp.

The part on Diptera, pp. 32-37, is about the same as in the preceding.

**Illiger, J. C. W.**

Neue Insekten. Magazin für Insektenkunde, I, 206; 1802.

*Midas fulvifrons* n. sp., from Georgia.

**Jaenicke, F.**

Neue Exotische Dipteren. Abhandlungen der Senckenburgischen Gesellschaft, VI, 311-407, 2 plates; 1867. Also published separately, 100 pp., 4to, Frankfurt, 1867. The pagination of the latter is used by Osten Sacken and repeated here.

Many new exotic Diptera, of which thirty-four are from Mexico and the United States.

**Johannsen, Oskar A.**

Notes on Some Adirondack Diptera Collected by MacGillivray and Houghton. Entomological News, XIV, 14-17; Jan., 1903.

*Sciophila pulchra* n. sp.; notes on several other species.

Aquatic Nematoceros Diptera. In Bulletin 68, New York State Museum, 328-448, 19 plates; Aug., 1903.

A very valuable work, monographic in the Simuliidæ, and containing tables for determining larvæ, etc., in several families. *Pelorempis* (n. gen.) *americana*, *Corethra albipes*, *Thalassomyia obscura*, and *Dixa modesta* (the last a syn. of *D. clavula* WILL.—Ent. News, XIV, 302).

**Johnson, Chas. W.**

The Puparium of *Ceria signifera*. Entomological News, IV, 91; March, 1893.

List of Diptera of Jamaica, with Descriptions of New Species. Proceedings of the Academy of Natural Sciences of Philadelphia, 1894, 271-281.

About fifty species recognized; new are *Nemotelus flavicornis*, *Chrysopila jamaicensis*, *Calobata pleuritica*, and *Leptogaster longipes* (the last changed to *clavipes*, Ent. News, VIII, 120).

A Review of the Stratiomyiæ and Odontomyiæ of North America. Transactions of the American Entomological Society, XXII, 227-278, 2 plates; July, 1895.

Seven new species; the old ones are redescribed or former descriptions quoted.

Diptera of Florida. Proceedings of the Academy of Natural Sciences of Philadelphia, 1895, 303-340.

504 species recognized, six new; also several new, described by Coquillett.

Some Notes and Descriptions of New Leptidæ. Entomological News, VIII, 117-120, figs.; May, 1897.

*Chrysopila griffithi*, *Symphoromyia hirta*, new; other species redesc.

Notes and Descriptions of New Syrphidæ from Mt. St. Elias, Alaska. Entomological News, IX, 17, 18; Jan., 1898.

*Syrphus bryantii* and *Melanostoma glacialis*; notes on four others.

Catalogue of the Diptera of New Jersey. Supplement to 27th Annual Report of New Jersey State Board of Agriculture, 1899, pp. 615-699.

About 1200 species recorded from New Jersey, mostly with exact localities and many with dates; many species figured; no new ones. This was published as a part of John B. Smith's Catalogue of the Insects of New Jersey, and the occurrence of these species is cited by me as "N. J.—Smith Cat."

Notes and Descriptions of Seven New Species and One New Genus of Diptera. Entomological News, xi, 323-328; Jan., 1900.

*Sepsisoma* n. g.

New North American Ortalidæ. Canadian Entomologist, xxxii, 246, 247; Aug., 1900.

*Pyrgota chagnoni*, *Stenopterygia bicolor*, *Rivellia floridana*.

Variation in the Venation of *Amalopsis inconstans* O. S. Entomological News, xii, 305-307, figs.; Dec., 1901.

On the Validity of *Dasyllis affinis* Macq. Entomological News, xiii, 77, 78; March, 1902.

Remarks on *Tephronota ruficeps* and Description of a New Species. Entomological News, xiii, 143, 144, fig.; May, 1902.

*Tephronota canadensis*.

New North American Diptera. Canadian Entomologist, xxxiv, 240-242; Sept., 1902.

*Macrocera immaculata*, *Phthiria coquilletti*, *Psiloccephala grandis*, and *Agromyza flaviventris*.

Some Notes, and Descriptions of Three New Leptidæ. Entomological News, xiv, 22-25, figs.; Jan., 1903.

*Rhachicercus nitidus*, *Xylomyia aterrima*, and *Symphoromyia cinerea*.

Diptera of Beulah, New Mexico. Transactions of the American Entomological Society xxix, 101, 102, fig.; Feb., 1903.

*Chilosia skinneri*, *Cuterebra similis*, and ?*Zonosema dubia*.

Two New Species of the Family Pipunculidæ. Entomological News, xiv, 107, 108; April, 1903.

*Pipunculus pallipes* and *Nephrocercus dæcki*.

A New Genus and Four New Species of Asilidæ. Psyche, x, 111-114; June, 1903.

*Ceraturgopsis* n. gen.; four species of other genera.

Descriptions of Three New Diptera of the Genus *Phthiria*. Psyche, Oct.-Dec., 1903, 184, 185.

*Ph. cyanoceph. aldrichi* and *quinque-notata*.

#### Johnson, Willis G.

The Hessian Fly in Maryland. Bulletin 58, Maryland Agricultural Experiment Station, pp. 117-122, figs.; Sept., 1898. A general discussion of habits and remedies.

#### Kahl, Hugo I.

New Species of the Syrphid Genera *Mixogaster* Macq. and *Ceria* Fabr. Kansas University Quarterly, vi, 137-146; July, 1897.

*Mixogaster breviventris* and *Ceria willistoni*.

#### Karsch, F.

Die Spaltung der Dipteren-Gattung *Systropus* Wied. Zeitsch. d. Berliner Entomologischen Gesellschaft, 1881, 654-658.

*Cephenus angulatus*, *infuscatus* and *imbecillus* (I refer *Cephenus* to *Systropus*).

**Keen, Eugene L.**

Note on *Sphyracephala brevicornis*. Canadian Entomologist, xv, 200, 1883.

List of Syrphidæ taken in Fairmount Park, Philadelphia, in the Summer of 1884. Canadian Entomologist, xvi, 145-147, 1884.

List of Diptera taken in the Vicinity of Philadelphia, from 1882 to 1884, inclusive. Canadian Entomologist, xvii, 51-55, 1885.

*Note.*—I overlooked the existence of the last two papers until it was too late to use the data in my catalogue, which I very much regret.

**Kellogg, Vernon L.**

The Mouthparts of Nematocerous Diptera. Psyche, viii, 1899: (I) Jan., 303-306; (II) Mar., 327-330; (III) Apr., 346-348; (IV) May, 355-359; (V) June, 363-365.

Notes on *Blepharocera capitata*. Entomological News, xi, 305-318, figs.; Jan., 1900.

An Extraordinary New Maritime Fly. Biological Bulletin, i, 81-87, figs.; March, 1900.

*Eretmoptera broxmi* n. gen. and sp.

A New Blepharocerid. Psyche, ix, 39-41, figs.; April, 1900.

*Liponcurea doanci*.

Food of Larvæ of *Simulium* and *Blepharocera*. Psyche, ix, 166; Feb., 1901.

An Aquatic Psychodid. Entomological News, xii, 46-49, figs.; Feb., 1901.

*Pericoma californiensis* KINCAID. (Described by Kincaid as *californica*.)

The Histoblasts (Imaginal Buds) of the Wings of the Giant Crane-Fly, *Holorusia rubiginosa*. Psyche, Sept., 1901, 248, figs.

The Development and Homologies of the Mouth-parts of Insects. American Naturalist; 1902; 683-706, figs. Discussion of homology in *Simulium* and *Bibiocephala*.

The Net-Winged Midges (Blepharoceridæ) of North America. Proceedings of the California Academy of Science, 3d series, iii, 187-224, 5 plates; Feb. 2, 1903. Also published as Contributions to Biology, xxx, Hopkins Seaside Laboratory of Leland Stanford Junior University.

A thorough revision of the family; life history of several species. New are *Blepharocera jordani* and *osten-sackeni*, and *Bibiocephala comstocki*.

The Rediscovery of *Philorus* (Blepharocera) Yosemite Osten Sacken. Psyche, Oct.-Dec., 1903, 186.

**Kertész, Koloman.**

Catalogus Tabanidarum Orbis Terrarum universi. A Museo Nat. Hungarico editus. Budapestini, 1900; 79 pp.

Catalogus Pipunculidarum usque ad Finem Anni 1900 Descriptarum. Természettudományi Füzetek, xxv, 157-168; Apr. 15, 1901.

Catalogus Dipterorum hucusque Descriptorum. Museum Nationale Hungaricum. Budapestini; typis G. Wesselenyi.

Vol. I. 1902. Sciaridæ to Rhyphidæ.

Vol. II. 1902. Cecidomyiidæ to Cylindrotomidæ.

*Note.*—The above catalogues contain references to the North American species up to the following dates respectively: Jan. 1, 1899; Jan. 1, 1901; Jan. 1, 1900, and Jan. 1, 1901.

**Kincaid, Trevor.**

The Psychodidæ of Washington. Entomological News, VIII, 143-146; June, 1897.

*Psychoda pacifica, elegans, olympia.*

Psychodidæ of the Pacific Coast. Entomological News, x, 30-37, 1 plate; Feb., 1899.

Ten new species; table of genera.

Notes on American Psychodidæ. Entomological News, XII, 193-196, 1 plate; Sept., 1901.

*Pericoma ocellaris* var. *americana*, and *P. californica*.

**Kirby, William.**

Fauna Boreali-Americana; or the Zoology of the Northern Parts of British North America, by J. Richardson, assisted by W. Swainson and Will. Kirby. London; 1829-37; 4 vols. The fourth volume contains the Diptera, which are by Kirby, nine in number. The descriptions are reprinted in Canadian Entomologist, XIII, 164-169, 1881.

**Kirkpatrick, J.**

The Army Worm. Ohio Agricultural Report for 1861.

*Exorista leucania* and *osten sackenii*, parasites of the army worm; both are supposed to be synonyms of *Winthemia quadripustulata*.

**Kowarz, Ferdinand.**

Phytomyza chrysanthemi, in Lintner's 7th New York Report, 243; 1891.

**Lamarck, J. B.**

Histoire Naturelle des Animaux sans Vertèbres, etc., 1ere ed.; 7 vols. Paris, 1815-22. Also 2ieme ed. Ibid., 1835-45.

"The insects form the third volume of the first, and the fourth of the second edition. I have quoted the first edition. Some typical forms only of American insects are mentioned in this work, and no new species described."—O. S.

**Latreille, P. A.**

Histoire Naturelle, générale et particulière des Crustacés et des Insectes; 14 vols. Paris, 1802-04. (Diptera in vols. III and XIV; 1802 and 1804.)

Genera Crustaceorum et Insectorum, etc.; 4 vols. Paris; 1806-7-9.

Both of these works "contain the mention or description of some typical forms from North America, but no new species." They are also important for genera.

**Leach, W. E.**

On the Genera and Species of Eproboscideous Insects. In the Wernerian Transaction, II, Edinburgh, 1817.

*Olfersia americana* and *Ornithomyia erythrocephala* from N. A.

**LeBaron, William.**

Second Annual Report on the Noxious Insects of the State of Illinois, 1872.

*Tachina (Exorista) phycita*, which has been referred by Coquillett to *Exorista pyste* WALK.

**Linné, Carl Von.**

Systema Naturæ per Regna Tria Naturæ Secundum Classes, Ordines, Genera, etc., 10th edition, 1758.

Contains descriptions of sixteen species referred to America, some of which are South American.

Amœnitates Academicæ, etc., 7 vols., 1749-1769.  
 Contains *Asilus astuans*, from Pennsylvania.

**Lintner, J. A.**

Reports of the New York State Entomologist. Articles on Diptera, chiefly biological and economic, almost always with bibliography, occur as follows:  
 First Report (for 1882, issued 1883).

On Some Species of Anthomyiidae, 168-202, with figs.

Notice of Some Anthomyiids Mining Beet Leaves. 203-211, figs.

*Chortophila betarum* and *Pegomyia vicina* n. sp.

*Mallota posticata*, 211-216, figs.

*Drosophila ampelophila*, 216-221, figs.

*Meromyza americana*, 221-227, figs.

Second Report, 1885.

The Emasculating Bot-fly, 45, 46.

*Bibio albipennis*, *Microdon globosus*, *Trypeta pomonella*, 110-125, figs.

Fourth Report, 1888.

*Cecidomyia balsamicola* n. sp., and Its Gall, 60-63, figs.

*Lasioptera vitis* O. S., 63-67, figs.

*Chloropisca prolifica* O. S. n. sp., and Its Winter Gathering in Dwellings, 67-72, fig.

*Phytomyza lateralis* FALL., 73-80, figs. The name is changed in 7th Report to *Ph. chrysanthemi* n. sp. Kowarz.

Fifth Report, 1889.

*Hamatobia serrata* DESV., 220-227, fig.

Sixth Report, 1889.

*Hypodermia bovis* DEG., 111-116, figs. The species is now considered to be *lineata* Vill.

*Drosophila* sp. (The Flour-paste Fly), 116, 117.

Seventh Report, 1891.

*Helophilus latifrons* LOEW, 228-234, figs.

*Chloropisca prolifica* O. S., 234-241, figs.

*Phytomyza chrysanthemi* KOWARZ n. sp., 242-246, figs.

*Cecidomyia balsamicola*, 307-310.

*Cecidomyia* sp., 308-310.

Eighth Report, 1893.

*Diplosis pyricora* RILEY, 140-151, figs.

*Exechia* sp., a Fungus Gnat, 172.

The Cow-Horn Fly in New York, 192-197.

The Apple Maggot, 245-249.

Ninth Report, 1893.

*Pollenia rudis*, the Cluster Fly, 309-314, figs.

Tenth Report, 1895 (with index to all preceding).

*Diplosis pyricora* RILEY, 386, 387, fig.

Notes on *Sciara*, 387-399, figs. and plate.

*S. coprophila* and *caldaria* n. sp.

*Phora agaraci* n. sp., 399, 406, plate and figs.

Eleventh Report, 1896.

The Birch-seed Midge, *Cecidomyia betulæ* Winn., 162-165, plate.

*Diplosis cucumeris* n. sp., 165-168, plate.

*Diplosis setigera* n. sp., 168-170, plate.

*Anthomyia* sp.? The Raspberry-Cane Maggot, 170-172. Afterward described as *Phorbia rubicora* Coq.

Twelfth Report, 1897.

Additional Notes on *Sciara*, by E. P. Felt, 223-228, plate.

Five n. sp.

*Phora albidihalteris* n. sp., by E. P. Felt, 228, 229.

*Piophilula cascii* LINN., 229-234, figs.

A Cecidomyid in Choke-cherries (undet.), 313, note.

**Lochhead, William.**

The Hessian Fly in Ontario. Bulletin 116, Ontario Agricultural College and Experiment Station, 1901; 16 pp., figs., etc.

**Loew, Hermann.**

Beschreibungen einiger neuen Tipularia terricola. Linnæa Entomologica, v, 385-406, 1851.

*Aporosa rufescens* and *virescens*. *Toxorhina fragilis*, from West Indies.

Bemerkungen über die Gattung Beris. Stett. Entomol. Zeit., VII, 1846, in four instalments.

Several North American species mentioned; no new ones.

Helophilus. Stett. Entomol. Zeit., VII, 1846, in three instalments.

Monograph of the genus; *H. glacialis* n. sp., from Labrador.

Chauna genus novum. Stett. Entomol. Zeit., VIII, 370; 1847.

*Chauna variabilis*, from Cuba.

Über Tetanocera stictica Fab. und ihre nächsten Verwandten. Stett. Ent. Zeit., VIII, 114-124; 1847.

*T. flavescens*, from Carolina.

Über Tetanocera ferruginea Meig., und die ihr verwandten Arten. Stett. Ent. Zeit., VIII, 194-202; 1847.

*Tet. plumosa*, from Sitka.

Bemerkungen über die Familie der Asiliden. Programme der Realschule zu Meseritz, 1850; pp. 1-22.

*Dasyopogon anthracinus*, from Mexico.

Ceria and Conops. In the Series, Neue Beiträge zur Kenntniss der Dipteren, which were originally printed from year to year in the Program der Realschule zu Meseritz, and afterwards by Mittler, in Berlin. Beitrag 1, 1853, 38 pp.

*Ceria pictula*, *arietis*, and *signifera*; *Conops genualis*, *bulbirostris*, and *castanoptera*.

Neue Dipteren. Neue Beitr., II, 1854, 24 pp.

*Pyrgota millepuncta* (syn. of *P. valida* HARRIS).

Bombylius. Neue Beitr., III, 1855, 52 pp.

Monograph of the genus in Europe; no new N. A. species, but some synonymical references.

Dipterologische Notizen. Neue amerikanische Dolichopoden. Wiener Entomol. Monatschrift, I, 37, 1857.

*Lyroneurus carulescens* and *Plagioneurus univittatus*.

Excursion nach dem Neusiedler See. Neue Beitr., IV, 1856, 58 pp.

"On p. 18 several European species also occurring in N. A. are mentioned, but a part of these statements is based on erroneous data about the locality. *Helophilus pendulus*, *versicolor*, *florens*, and *Chrysotoxum bicinctum* have never, as yet, been found in N. America."—O. S.



- Zur Kenntniss der Europäischen Tabanus-Arten. Verhandlungen der Zool.-Bot. Gesellsch. zu Wien, 1858, 573-612.  
*Tabanus septentrionalis*, from Labrador.
- Über einige Fliegengattungen. Berlin Entomol. Zeitschr., II, 101-122, 1 plate; 1858.  
*Plecia longipes*, from New Orleans.
- Die nordamerikanische Arten der Gattungen Tetanocera and Sepedon. Wiener Entomol. Monatschr., III, 289-300, 1859.  
 Several species, afterward embodied in Monograph I.
- Diptera americana ab Osten-Sackenio collecta, decas prima. Wiener Entomol. Monatschr., IV, 79-84, 1860.  
 Ten new species; all reproduced in later publications, except *Clinocera maculata* and *conjuncta*.
- Diptera aliquot in insula Cuba collecta. Wiener Entomol. Monatschrift, V, 33-43, 1861.  
 Twenty new species.
- Die nordamerikanischen Dolichopoden. Neue Beitr., VIII, 1861, 100 pp.  
 An extensive work, afterward embodied in Monograph II.
- Die amerikanischen Ulidina. Berl. Entomol. Zeitschr., XI, 283-326, 1 plate; 1867.  
 Several new genera and species, which were all later embodied in Monograph III.
- Monographs of the Diptera of North America, vols. I, II, III, with II plates. Washington, Smithsonian Miscellaneous Collections.  
 Vol. I, 1862.—General introduction, Trypetidae, Sciomyzidae, Ephyridae, and Cecidomyidae (the last by Osten Sacken.)  
 Vol. II, 1864.—Dolichopodidae.  
 Vol. III, 1872.—Ortalidae and additions to Trypetidae.
- Diptera americana septentrionalis indigena. In the Berliner Entomol. Zeitsch. Centuria I, 1861; II in 1862; III and IV in 1863; V in 1864; VI in 1865; VII in 1866; VIII and IX in 1869; X in 1872. Also published separately, in two volumes.  
 One thousand North American Diptera! Referred to in the present work as "Loew, Cent."
- Diptera Common to Europe and America. Silliman's American Journal of Science and Arts, XXXVII, 317; May, 1864. This list is appended to a translation of Loew's lecture on "The Diptera of the Amber Fauna." Eighty-five species are mentioned as common to the two continents, most of them not previously reported from North America. The work is referred to herein as "Silliman's Jour."
- Bemerkungen über die von Hn. Van der Wulp in der Zeitsch. d. Niederländ. Entomol. Ges. für 1867 publicirten N. A. Dipteren. Zeitsch. f. Ges. Naturwissenschaften, XXXVI, 113-120, 1870.  
 Remarks about the synonymy and generic position of the species in Van der Wulp's article.
- Über die Arten der Gattung Sphyracephala Say. Zeitsch. f. Ges. Naturwiss., XLII, 101, 1873.  
 Remarks on *Sphyracephala brevicornis*.
- Neue nordamerikanische Dasygogonina. Berliner Entomologische Zeitschr., XVIII, 353-377, 1874.  
 Fourteen new species.

Neue nordamerikanische Dipteren. Berliner Entom. Zeitsch., xviii, 378-384.  
Six new species.

Beschreibungen neuer amerikanischen Dipteren. Zeitsch. f. Ges. Naturwiss.,  
xlvi, 317-340, 1876.  
Seventeen new species.

Revision der Blepharoceridæ. Schles. Zeitschr. f. Entomol., Neue Folge, vi,  
Breslau, 1877.

The description of *Bibiocephala grandis* is reproduced here, in German.

Neue nordamerikanischen Ephydrinen. Zeitsch. f. Gesammten Naturwiss.,  
l, 192-203; March and April, 1878.

Fourteen new species.

Table of North American Species of Pachyrhina. Verh. Zool.-Bot. Ges.,  
1879, 513-516.

No new species.

Note.—There are many other important papers of Loew, which should be  
consulted. He rarely wrote anything unimportant. The above, however,  
are all in which the North American fauna is directly referred to.

#### Long, Wm. H., Jr.

New Species of Ceratopogon. Biological Bulletin, iii, May and June, 1902.  
*C. brumalis*, *stenammatis*, *texanus*, *wheeleri*.

#### Lugger, Otto.

Parasites of Man and the Domesticated Animals, in Second Report of the  
State Entomologist of Minnesota, 1896 (published 1897).

Pages 145-182 and 209-230 are devoted to Diptera; *Simulium minutum*,  
*irritatum* and *tribulatum* are named and figured, but not described.

#### Lundbeck, Will.

Entom. Unters. i Vest-Groenl. Medd. om Groenl., Heft vii, 1893.

A brief article, not seen by me; appears to be superseded by the following.

Diptera Groenlandica. I. Videnskabelige Meddelelser Naturhistoriske Forening  
i Kjöbenhavn, 1898, 236-314, 2 plates. II. Ibid., 1900, 281-316, figs.

A number of new species; the old faunal lists of Staeger, Holmgren,  
and Schiödte are carefully reviewed, and the species elucidated.

#### Lynch Arribalzaga, Felix.

Dipterologia Argentina. Culicidæ. Revista del Museo de la Plata, i, 345-413,  
with five plates (two colored); 1891.

Dipterologia Argentina. Syrphidæ. Anales de la Sociedad científica Argentin-  
a, xxxii, xxxiii, and xxxiv, in instalments; 1891-1893.

Dipterologia Argentina. Mycetophilidæ. Boletin de la Academia Nacional  
de Ciencias, xii, 377-436 and 471-483; 1892.

El Genero Sapromyza en America, Anales de la Sociedad científica Argentin-  
a, xxxiv, 253-301; 1893.

Important on account of the large number of tropical species, many of  
which are found also in Mexico and Central America, or in the West  
Indies.

#### McGillivray, A. D. and Houghton, C. O.

A List of Insects taken in the Adirondacks, N. Y. Diptera in Entomological  
News, xiv, 12, 13; Jan., 1903.

About ninety species, determined by Johannsen. The exact locality is  
Axton, N. Y.

**Macquart, Jean.**

Histoire Naturelle des Diptères. 2 vols., with 24 col. pl. Paris, 1834, 1835.  
Forms part of the Suites à Buffon, published by Roret.

The species are mostly European; there are a few scattered throughout from North America.

Diptères Nouveaux ou peu Connus. Two volumes in five parts, and five supplements in six parts. Mémoires de la Société des Sciences et des Arts de Lille.

Vol. I, part I	1838	pp. 9-225	25 plates.
I, " 2	1838	121-323	14 "
II, " 1	1841	282-414	21 "
II, " 2	1842	63-200	22 "
II, " 3	1843	162-460	36 "
Suppl. I,	1845	133-364	20 "
II,	1847	21-120	6 "
III,	1847	161-240	7 "
IV, part I	1850	309-479	14 "
IV, " 2	1851	134-294	14 "
V,	1855	25-156	7 "

This set contains an immense amount of material from North America, especially the larger flies of the southern regions. I give the dates of actual publication according to Hagen, although I observe that they do not agree exactly with Osten Sacken, nor with those penciled on my own set. The nominal date of publication was one year earlier, except with the first, second and eighth numbers. The work was also published separately, with different pagination, and this was used by Osten Sacken in his Catalogue; it is therefore continued by me. The parts without exception are indexed, so that any difficulty about the pages will readily be overcome.

Notice sur une nouveau Genre de la Famille des Pupipares, etc. Annales Soc. ent. de France, 1852, 331-333, pl. iv, f. 4.

*Megistopoda pilatei*, from Mexico and Cuba.

Notice sur une nouvelle Espèce d'Aricie. Annales Soc. ent. de France, 1853, 675, pl. xx, f. 2.

*Aricia pici*, from San Domingo.

**Marlatt, C. L.**

Report of a Trip to Investigate Buffalo Gnats. Insect Life, II, 7-11; July, 1889.

Notes on breeding habits of *Simulium meridionale*.

The Xanthium Trypeta. Insect Life, III, 312, 313, figs.; April, 1891.

Life history of *Euaersta aequalis*.

The Ox Warble. Circular No. 25, sec. ser., Div. of Entomology; July, 1897. 10 pp., figs.

*Hypoderma lineata* VILL.

The Principal Insect Enemies of Growing Wheat. Farmers' Bulletin No. 132, Division of Entomology, Dept. of Agriculture. 40 pp., 1901, figs.

Life history of *Mayetiola destructor*, *Contarinia tritici*, and *Meromyza americana*.

**Marten, John.**

New Tabanidæ. Canadian Entomologist, xv, 110-112; June, 1883.

*Tabanus allynii*, *tetricus*, *frenchii*, *susurrus*.

Description of *Asphondylia helianthi-globulus*. Psyche, Sept.-Oct., 1888, 102.

Description of a New Species of Gall-making Diptera. Bulletin of the Ohio Experiment Station, Technical series, I, No. 3, 155, 156, 1893.

*Lasioptera muhlenbergia*.

**Matas, Dr. R.**

A Man-Infesting Bot. New Orleans, 1887; privately printed. Reviewed in Ins. Life, I, 76-80, figs.

An undetermined species, supposed to be a *Dermatobia*.

**Meade, R. H.**

List of North American Anthomyiidae. Canadian Entomologist, XIII, 43-51, 1881.

No new species; several European recognized, with more or less doubt.

List of North American Sarcophagidae. Canadian Entomologist, XIII, 146-150, 1881.

Notes on a number of species; none new.

**Meigen, J. W.**

Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten. 7 vols., Achen and Hamm, 1818-1838.

The work contains only European species, but many are common to both continents.

**Melander, Axel L.**

A Decade of Dolichopodidae. Canadian Entomologist, XXXII, 134-144, figs.; May, 1900.

Ten new species.

Gynandromorphism in a New Species of *Hilara*. Psyche, IX, 213-215, figs.; June, 1901.

*Hilara wheeleri*.

Notes on the Acroceridae. Entomological News, XIII, 178-181, fig.; June, 1902.

Notes on twelve species; *Opsebius agalena* n. sp., but according to Adams this is a synonym of *Op. pterodontinus* O. S.

Monograph of the North American Empididae. Part I. Transactions of the American Entomological Society, XXVIII, 195-367, five plates; July-Oct., 1902.

Many new species and several genera. Includes all the family except the genus *Rhamphomyia* "in its wide sense."

An Interesting New *Chrysotus*. Entomological News, XIV, 72, fig.; March, 1903.

*C. philtrum*.

A Review of the North American Species of *Nemotelus*. Psyche, 1903, Oct.-Dec., pp. 171-183, 1 plate.

*arator*, *bruesii*, *trinotatus*, *wheeleri* and *bellulus*, new.

See also Wheeler and Melander.

**Melander, A. L. and Brues, C. T.**

New Species of *Hygroceleuthus* and *Dolichopus*. Biological Bulletin, I, 123-148, many figures; 1900.

Fifteen new species; several others redescribed.

Guests and Parasites of the Burrowing Bee *Halictus*. Biological Bulletin, V, 1-27, figs.; June, 1903.

*Ceratopogon hollensis*; *Phora cata*, *rostrata* and *halictorum*; *Stethopathus occidentalis*.

**Mik, Josef.**

Ueber die dipterologischen Referate in den Jahrgängen 1882 bis inclusive 1890 der Wiener Entomologischen Zeitung. Wien. Entomol. Zeitung, ix, 281-308; Dec., 1890.

A résumé of the more important dipterological matters commented upon, corrected, etc., in the first nine years of the journal.

Ein Beitrag zur "Bibliotheca Entomologica." Wiener Entomologische Zeitung, x, 65-96; April, 1891.

A digest of the author's thirty years of published work in entomology, mainly in the Diptera.

Hypocharassus gladiator, eine neue Dolichopoden-Art aus Nordamerika. Vehr. Zool.-Bot. Ges. Wien, 1878, 617-632, 1 pl.

Ueber Tachiniden, deren drittes Fühlerglied gespalten ist. Wiener Entomologische Zeitung, xiv, 101-103, 1895.

Remarks on *Dichocera* WILL., and other genera.

Bemerkungen zu den Dipteren-Gattungen Pelecocera Meig. and Rhopalomera Wd. Wiener Entomologische Zeitung, xiv, 133-135, 1895.

*Chamasyrphus* n. g.; *Willistoniella* for *Rhopalomyia* WILL.

Note.—Mik published an enormous number of small items on Diptera, among which were occasional remarks on North American genera and species. These will be found in their appropriate places in the body of the Catalogue, but need not be cited in detail here. The two articles first given above will guide to many of the earlier of these notes, comments, corrections, etc.

**Morris, Miss.**

Cicadomyia culmicola n. sp. Proc. Acad. Nat. Sciences of Phil., iv, 194, 1849.

Notes; not described.

**Motter, Murray G.**

A Contribution to the Study of the Fauna of the Grave. Journal of the New York Entomological Society, vi, 201-231, 1898.

A number of species of Diptera are mentioned.

**Morgan, H. A.**

The Texas Screw-Worm. Bull. 2, La. Ex. Sta., 29-39, figs.; 1890.

Life history of *Chrysomyia macellaria*.

Observations upon the Mosquito Conchyliaestes musicus Say. Bulletin 37, n. ser., Division of Entomology, 113-114, fig.

**Murtfeldt, Mary E.**

Hominivorous Habits of the Screw-Worm in St. Louis. Insect Life, iv, 200, 201; Dec., 1891.

On the habits of *Chrysomyia macellaria* FABR.

The Cheese or Meat Skipper. Insect Life, vi, 170-175; Dec., 1893. Also in 24th Ann. Rept. Ontario Ent. Soc., 98.

Life history of *Piophilila casei*.

**Needham, Jas. G.**

A Remarkable Occurrence of the Fly Bibio fraternus Loew. American Naturalist, xxxvi, 181; March, 1902; with figs. of larva and pupa.

Food of Brook Trout in Bone Pond. Bulletin 68, N. Y. State Museum, 204-217; Aug., 1903.

Some dipterous larvæ mentioned.

Some New Life Histories of Diptera. Bull. 68, N. Y. State Museum, 279-287, plates ix and x; Aug., 1903.

Life histories of *Tipula flavicans* and *Epiphragma fascipennis*; two undetermined larvæ mentioned.

**Needham, Jas. G. and Betten, Cornelius.**

Aquatic Insects in the Adirondacks. Bulletin 47, N. Y. State Museum; Sept., 1901. Pp. 383-612, 36 plates.

Life histories of *Tipula abdominalis*, *Stratiomyia badia*, *Sepedon fuscipennis*, *Tetanocera pictipes*, and *Raderioides juncta*; the last and *Zabrochia polita* described by Coquillett.

**Newman, Edward.**

Entomological Notes. Entomol. Mag., v, 373, 1838.

*Dimeraspis podagra* n. sp. (syn. of *Microdon globosus*).

**Niles, E. P.**

Animal Parasites. Bulletin 110, Virginia Experiment Station; March, 1900. Pp. 27-37.

A popular account of bots, with figures of several species.

**Olivier, G. A.**

"A portion of the entomological volumes of the Encyclopédie Méthodique is by him. In vol. VIII (1811) under the titles *Odontomyia*, *Ocyptera*, *Ornithomyia*, I found descriptions of several new North American species which had been overlooked by previous authors."—O. S.

**Osborn, Herbert.**

Insects Affecting Domestic Animals. Bulletin No. 5, new series, Division of Entomology, Department of Agriculture.

Contains notes on several species of Diptera.

The Hessian Fly in the United States. Bulletin No. 16, new series, Division of Entomology; 1898. Pp. 58, 8 figs., 3 plates.

Full account of habits; extensive bibliography.

An Insect occurring in Tanks and Reservoirs. In Bull. 32, Iowa Exp. Station, pp. 405-407, figs. (*Chironomus* sp.)

**Osten Sacken, C. R.**

Catalogue of the Described Diptera of North America. Washington, 1858. Smithsonian Miscellaneous Collections, vol. III.

Appendix to the Smithsonian Catalogue of the Described Diptera of North America. October, 1859, 3 pages.

New Genera and Species of North American Tipulidæ with short Palpi, with an Attempt at a New Classification of the Tribe. Proc. Acad. Nat. Sciences of Philadelphia, 1859, 197-256.

New genera and species, reproduced in a later monograph.

Appendix to the Paper entitled "New Genera and Species," etc. Proc. Acad. Nat. Sciences of Philadelphia, 1860, p. 16.

Description of Nine New Limnobiaceæ. Proc. Academy of Natural Sciences of Philadelphia, 1861, 287-292.



On the North American Cecidomyidæ. Monographs of North American Diptera, Smithsonian Institution. Vol. I, 173-205, with a plate and figs. Washington; April, 1862.

Four new species.

Characters of the Larvæ of Mycetophilidæ. Proceedings of the Entomological Society of Philadelphia, I, 151-172, 1 plate; 1862.

*Sciara toxoneura*.

Lasioptera reared from the Gall of a Goldenrod. Proceedings Entomological Society of Philadelphia, I, 368-370, 1863; also in vol. II, 77.

*Lasioptera solidaginis*.

Description of several New North American Ctenophoræ. Proceedings of the Entomological Society of Philadelphia, III, 45-49, 1864.

Five new species.

Descriptions of some New Genera and Species of North American Limnobia. Proceedings of the Entomological Society of Philadelphia, IV, 224-242, 1865.

Six new species.

Two New North American Cecidomyidæ. Proceedings of the Entomological Society of Philadelphia, VI, 219, 220, 1866.

*Cecidomyia gleditchia* and *salicifolia*.

Description of a New Species of Culicidæ. Transactions of the American Entomological Society, II, 47, 48, 1868.

*Aedes sapphirinus*.

The North American Tipulidæ. Part I; brevipalpi, *Cylindrotomina* and *Ptychopterina*. Monographs of North American Diptera, No. IV, in Smithsonian Miscellaneous Collections, vol. VIII; Washington, Jan., 1869. Pp. xi and 345, with four plates and several wood-cuts.

Many new species. Additions and corrections to this volume will be found at the end of Monograph III, published after No. IV.

Biological Notes on Diptera. Article First. Galls on *Solidago*. Transactions of the American Entomological Society, II, 299-303, 1869.

*Asphondylia monacha* and *Cecidomyia anthophila*.

Biological Notes on Diptera. Article Second. (1) A New American *Asphondylia*. (2) On some Undescribed Galls of *Cecidomyia*. Transactions of the American Entomological Society, III, 51-54, 1870-71.

*Asphondylia rudbeckia-conspicua*; four new galls described and named.

Biological Notes on Diptera. Article Third. Transactions of the American Entomological Society, III, 345-347, 1870-71.

*Diplosis resinicola*; notes on several species.

A List of the Leptidæ, Mydæidæ and Dasypogonina of North America. Bulletin of the Buffalo Society of Natural Science, 1874, 169-187.

*Mydas audax*, *carbonifer* and *chrysostomus* n. sp.; the descriptions are reproduced in the Catalogue, 1878. Additions and corrections are given in the Bulletin, Nov., 1875. p. 71.

Prodrome of a Monograph of North American Tabanidæ. Memoirs of the Boston Society of Natural History, II, 365-397. 421-479, and 555-566, published in 1875-78.

Many new species.

Report on the Diptera Collected by Lieut. W. L. Carpenter in Colorado in the summer of 1873. Hayden's U. S. Geological and Geographical Survey of Colorado, 1873, 561-566. Washington, 1874.

*Bibiocephala grandis* n. g. and sp.

Three New Galls of Cecidomyiæ. Canadian Entomologist, Nov., 1875.

*Cecidomyia ferrucicola, urnicola; Asphondylia recondita.*

Note on Some Diptera from the Island Guadelupe, Pacific Ocean, Collected by Mr. Palmer. Proceedings of the Boston Society of Natural History, xviii, 133, 134; Oct., 1875.

No new species; *Musca domestica* is the only one specifically determined.

Note.—There is also an island *Guadaloupe*, in the *West Indies*, and a number of species of Diptera are reported from it.

On the North American Species of the Genus *Syrphus* (in the narrowest sense). Proceedings of the Boston Society of Natural History, xviii, 135-153; Oct., 1875.

*Syrphus torvus, rectus, amalopis, contumax.*

A List of North American Syrphidæ. Bulletin of the Buffalo Society of Natural Science, November, 1875, 38-71.

Nine new species described in the appendix. Additions and corrections are given in the Bulletin, May, 1876, p. 130. All the descriptions and notes are reproduced in the Catalogue, 1878.

Report on the Collection of Diptera made in portions of Colorado and Arizona during the year 1873. In Lieut. Geo. M. Wheeler's Report on the Explorations and Surveys West of the One Hundredth Meridian, vol. v, Zoology, 804-807. Washington; 1875.

*Lasia klettii* n. sp.

*Blepharoptera defessa* n. sp. In an article on "A New Cave-Fauna in Utah," by A. S. Packard. Bulletin of the U. S. Geological and Geographical Survey of the Territories, III, No. 1, p. 168; 1877.

Report on the Diptera Collected by Dr. E. Bessels during the Arctic expedition of the *Polaris* in 1872. Proceedings of the Boston Society of Natural History, Dec., 1876.

*Tipula besselsi* n. sp.

Western Diptera. Descriptions of New Genera and Species of Diptera from the Region West of the Mississippi, and especially from California. Bulletin of the U. S. Geological and Geographical Survey of the Territories, III, No. 2; April, 1877; pp. 189-354.

One hundred and thirty-six new species and several new genera.

Catalogue of the Described Diptera of North America (second edition). Smithsonian Miscellaneous Collections. Pp. xlvi and 276. Washington, 1878.

Two new genera and five new species are described in the notes, and a number of species redescribed. The work contains much more than an ordinary catalogue of so many species. It is in fact a mine of information on the order and its classification.

Bemerkungen über *Blepharoceriden*; ein Nachtrag zur "Revision" dieser Familie von Professor Dr. Loew. Deutsche Ent. Zeitsch., xxii, 405-416, 1878.

A review of the structural characters of the family; no new species.

An Essay of Comparative Chaetotaxy, or the Arrangement of Characteristic Bristles of Diptera. Originally printed in Mittheil. d. Münchener Entomol. Vereins, v, 121-138, 1881; revised and republished in Trans. Entom. Society of London, 1884, pt. iv, pp. 497-517.

An attempt to locate and name the principal characteristic bristles (macrochaetæ) of Diptera, as a means of classification; very important. No new species.

On Professor Brauer's Paper, "Versuch einer Charakteristik der Gattungen der Notacanthæ." Berl. Entom. Zeitsch., xxvi, 363-380, 1882.

Many notes on genera; no new species.

On the Genus Apiocera. Berl. Entom. Zeitsch., xxvii, 287-294, 1883; correction, xxx, 139, 1886; Second Notice on Apiocerina, xxxvi, 311-316, 1891.

No new species.

Synonymica Concerning Exotic Dipterology. II. Berl. Entom. Zeitsch., xxvii, 295-298, 1883.

*Dialys* WALKER, and other genera mentioned.

A Singular North American Fly. Berl. Entom. Zeitsch., xxvii, 299-300, 1883.

*Opsebius pterodontinus* n. sp.

Studies on Tipulidæ. Part I. Review of the Published Genera of the Tipulidæ longipalpi. Berl. Entom. Zeitsch., xxx, 153-188, 1886.

*Brachypremna* n. gen., from Texas.

Studies on Tipulidæ. Part II. Review of the Published Genera of the Tipulidæ brevipalpi. Berl. Entom. Zeitsch., xxxi, 163-242, 1887.

*Rhamphidia albitarsis* n. sp., from Porto Rico.

Biologia Centrali-Americana. Vol. I. Cecidomyidæ-Empidæ. 216 pp., 3 col. plates. 128 pp. in 1886, the remainder in 1887.

Many new species, and a few genera.

On Mr. Portschinsky's publications on the larvæ of Muscidæ, including a detailed abstract of his last paper, "Comparative biology of the necrophagous and coprophagous larvæ." Berl. Entom. Zeitsch., xxxi, 17-28, 1887.

Although Portschinsky's work does not come within our faunal limits, relating to southern Russia, the subject is very interesting, and I cannot refrain from mentioning the paper. It forms a useful complement to Howard's paper on Diptera of excrement.

Some North American Tachinæ. Canadian Entomologist, xix, 161-166; Sept., 1887.

Five new species.

*Chloropisca prolifica* n. sp. Lintner's 4th New York Report, 60, 61, 1888.

See *Chlorops variceps*.

Suggestions Toward a Better Grouping of Certain Families of the Order Diptera. Entomologist's Monthly Mag., second series, ii, 35-39, 1891.

Synopsis of the Described Genera and Species of the Blepharoceridæ. Berl. Entom. Zeitsch., xxxvi, 407-411, 1891.

Analytical tables of the genera and species, with references; no new species.

On the Characters of the Three Divisions of Diptera: Nemocera vera, Nemocera anomala, and Eremochæta. Berl. Entom. Zeitsch., xxxvii, 417-466, 1892.

- Explanatory Notice of my Views on the Sub-orders of Diptera. Entomologist's Monthly Magazine, second series, iv, 149, 150, 1893.
- On the So-called Bugonia of the Ancients, and Its Relation to *Eristalis tenax*. Bull. Soc. Ent. Italiani, xxv, 186-217; 1893.
- On the Oxen-born Bees of the Ancients (Bugonia), and their Relation to *Eristalis tenax*. Heidelberg, J. Hoerning, 1894, pp. xiv and 80.  
This is a reprint and enlargement of the preceding. There is an additional article, pub. by J. Hoerning, 1895, 23 pp.
- On the Atavic Index-Characters. Berl. Entom. Zeitsch., xxxix, 69-76, 1894.
- Western Pedicia, Bittacomorphæ and Trichocera. Psyche, vii, 229-231; April, 1895.  
Notes on several species from the Western States: none new.
- Eristalis tenax* in Chinese and Japanese Literature. Berl. Ent. Zeitsch., xl, 142-147, 1895.
- Contributions to the Study of the Liponeuridæ. Berl. Ent. Zeitsch., xl, 148-169, 1895.  
Blepharoceridæ; a study of generic characters, etc. A supplement to this paper is published in vol. xl, 351-355, 1895.
- Preliminary Notice of a Subdivision of the Suborder Orthlorhapha Brachycera on Chætotactic Principles. Berl. Entom. Zeitsch., xli, 365-373, 1896.  
I have adopted for my catalogue almost the arrangement of this paper.
- Identification of Two Genera of Nemestrinidæ published by Bigot. Berl. Entom. Zeitsch., xlii, 145-149, 1897.  
*Dicrotrypana* Big., and *Parasymnictus* Big.
- Amalopsis* Haliday (O. S.) versus *Tricyphona* Bergroth (not Zett.). Berl. Entom. Zeitsch., xlii, 150-154; 1897.
- On the Synonymy of *Anopheles maculipennis* Meigen. Entomol. Monthly Mag., sec. ser., xi, 281, 282; Dec., 1900.  
*Maculipennis* vindicated as against *claviger* Fab.
- On the New Nomenclature of the Cecidomyidæ. Entomol. Monthly Mag., sec. ser., xii, 40-43, 1901.  
Opposing the abandonment of the old genus *Cecidomyia*, as finally developed by Meigen and Latreille. For reasons explained at the beginning of the family, I have adopted the "new nomenclature."
- The Position of *Phora* in the System of Diptera. Entomol. Monthly Mag., xiii, 204, 205, 1902.
- On a Distinctive Character of the Imago of the Suborders of Diptera. Ent. Monthly Mag., xiii, 228, 1902.
- Record of My Life Work in Entomology. Parts I and II. Cambridge, Mass.; Oct., 1903, 204 pp. Part III, Heidelberg, 1904, pp. 205-240, with portrait.  
Baron Osten Sacken's autobiographical volume contains so much information about the earlier work on North American Diptera, and the development of dipterological science in general, that every student of the order will find it extremely interesting and valuable. His rare and noble devotion to science throughout a long career should be an inspiring example.

#### Packard, Alpheus S.

- On Insects Inhabiting Salt Water. Proceedings of the Essex Institute, vi, 41; March, 1869.  
*Ephydra halophila* and *Chironomus helophilus* n. spp.

On Insects Inhabiting Salt Water. No. 2. American Journal of Science and Arts, 3d series, i, 100, 1872.

*Ephydra gracilis* and *californica*, described from larvæ; adults unknown.

Report upon the Invertebrate Animals of Vineyard Sound, etc. Washington, 1874.

Several larvæ of Diptera; *Chironomus halophilus* n. sp.

On the Transformations of the common House-fly. Boston Society of Natural History, xvi, 136-150, 1 plate; 1874.

Insects affecting the Cranberry, with Remarks on other Injurious Insects. Report U. S. Geol. Survey for 1876 (pub. 1878), 527.

*Diplosis pini-rigidæ* n. sp., on *Pinus rigida*.

The Hessian Fly. Bull. No. 4, U. S. Entomological Commission, 1880. 43 pp., figs.

Bot-Fly Larvæ in a Turtle's Neck. American Naturalist, xvi, 598, fig.; July, 1882. Not determined; perhaps not an Oestrid.

Larvæ of a Fly in a Hot Spring in Colorado. American Naturalist, xvi, 599, 600; July, 1882.

*Stratiomyia* sp.; larvæ in water at 157 degrees Fahrenheit.

The Hessian Fly. In the Third Report of the U. S. Entomological Commission, 1883, 198-248, figs., etc.

Forest Insects. Being the Fifth Report of the United State Entomological Commission. Washington, 1890, 955 pp., with many plates and figures.

No new species of Diptera; life history of many species briefly given.

The Entomological Writings of Alpheus S. Packard. A bibliography by Samuel Henshaw. Division of Entomology, 1887, 49 pp.

#### Palisot de Beauvois, A. M. F. J.

Insectes recueillis en Afrique et en Amérique, etc. Paris, 1805-21; with plates.

Several Tabani, one Chrysops, and one Syrphid are described and figured.

#### Pergande, Theodore.

The Ant-Decapitating Fly. Proceedings of the Entomological Society of Washington, iv, 498; July 2, 1901.

Life history of the species; described by Coquillett in same article as *Apocephalus pergandei* n. gen. et sp.

#### Pettit, Rufus H.

Bulletin 175, Michigan Exper. Station; July, 1899; pp. 356-361, notes on Hessian Fly and on the Beet-Leaf Miner, *Pegomyia vicina*.

Bulletin 186, Michigan Exper. Station, and also Annual Report of same for 1901, contains a list of Diptera collected in Northern Michigan, and an article with good figure on the Potato-Beetle Tachinid, *Phorocera doryphora*.

A Leaf-mining Chironomus sp. in Water-lilies. Mich. Acad. Science, 1900, p. 110, with plate. Habits of an undetermined species. Compare *Cricotopus sylvestris*.

#### Perty, Maximilian.

Delectus Animalium articulorum quæ in Itinere per Brasiliam Annis 1817-1820, etc., collegerunt Dr. Spix et Dr. Martius. Monachii, 1830-34. 4to, with 40 plates.

Several species described here occur also in Cuba and Mexico.

**Poey, Felipe.**

Memorias sobre la Historia Natural de la Isla de Cuba. Tomo I. Habana, 1851-54.

*Occaeta furens* n. gen. et sp.

**Reiche, L.**

Description du cinque espèces nouvelles d'Insectes, provenant de l'Expédition aux Mers arctiques. Annales Soc. Ent. France, Bulletin, p. ix, 1857.

*Anthomyia impudica* (is a *Cordylura*—O. S.).

**Riley, Charles V.**

First Report of the State Entomologist of Missouri. Jefferson City, 1869.

Life history and description of *Anthomyia zeas* n. sp. (syn. of *Phorbia fusciceps*), *Lydella doryphoræ* n. sp. (see *Phorocera*), *Pipiza radicum* n. sp. (probably syn. of *P. femoralis*); also *Meromyza americana*, *Oestrus ovis*, and *Trupaena apivora* FITCH (*Promachus fitchii* WILL.).

The Cecropia Moth. American Entomologist, II, 97-102; Feb., 1870.

*Exorista cecropiæ* n. sp. (syn. of *Winthemia quadripustulata*).

Second Missouri Report, 1870.

Life history and description of *Asilus missouriensis* n. sp. (*Proctacanthus milberti*), *Exorista flavicauda* n. sp. (*Belvosia unifasciata*), and of *Tabanus atratus*.

Fourth Missouri Report, 1872.

*Tachina anonyma* n. sp. (*Frontina frenchii*), and *T. phycitæ* LEBARON (*Exorista pyste*).

Fifth Missouri Report, 1873.

Descriptions of several galls of Cecidomyidæ on grape.

Descriptions and Natural History of two Insects which brave the Dangers of *Sarracenia variolaris*. Trans. Acad. Nat. Sci. St. Louis, III, 235-240; 1875.

*Sarcophaga sarraceniæ* n. sp.

The Clover-Seed Midge. Report of the Commissioner of Agriculture for 1878 (pub. Oct., 1879), 248-250.

*Cecidomyia leguminicola* LINTNER, life history.

Parasites of the Cotton Worm. Canad. Entomol., XI, 161-162, 1879.

*Tachina aleticæ* n. sp. (see *Frontina aleticæ*).

Natural Enemies of the Locust. Second Report of the U. S. Entomological Commission, 1880 (pub. 1881), 259-270.

Life history of *Systachus oreas* and *Triodites mus*, reared from locust eggs; some other Diptera mentioned.

Dipterous Enemies of Phylloxera vastatrix. Canadian Entomologist, xv, 39; Feb., 1883.

Mentions *Leucopis phylloxera* MS., which was never described.

Occurrence of a *Stratiomyia* larvæ in Sea-water. American Naturalist, xvii, 1287; Dec., 1883.

Not determined.

Report of the Entomologist. In the Report of the Commissioner of Agriculture for 1884 (pub. Jan. 31, 1885).

Contains articles on *Oscinis brassicæ* n. sp. (*Agromyza trifolii*), *Anthomyia* (*Phorbia*) *brassicæ*, and *Simulium* sp.

Natural Enemies of the Cotton-Worm. Fourth Report U. S. Entom. Com., 87-119; Feb. 3, 1886.

*Phora aleticæ* n. sp. (*nigriceps*).



The Pear Midge, *Diplosis pyrivora* n. sp. Report Comr. of Agriculture for 1885 (pub. 1886), 283-288. Life history, etc.

The Southern Buffalo-Gnat. Report Comr. of Agriculture for 1886 (pub. 1887), 492-517.

*Simulium meridionale* and *pecuarum* n. sp. (the latter a syn. of *invenustum*), with life histories.

Beschreibung einer den Birnen schädlichen Gall-Mücke (*Diplosis nigra* Meigen?). Wiener Entomol. Zeitung, vi, 201-206, figs.; Sept., 1887.

*Diplosis pyrivora* n. sp. proposed if distinct; it had already been so named by Riley more than a year before.

The Morelos Orange Fruit-Worm. Insect Life, I, 45-47, fig.; Aug., 1888.

Life history of *Trypeta* (*Anastrepha*) *ludens* LOEW.

The Ox Bot in the United States. Insect Life, iv, 302-317, figs.; June, 1892.

*Hypoderma lineata* VILL., life history.

Bibliography of the more important Contributions to American Economic Entomology of Charles Valentine Riley. By Samuel Henshaw. Division of Entomology, 1889, 379 pp.

#### Riley, Charles V. and Howard, Leland O.

The Corn-Feeding Syrphus Fly (*Mesogramma polita* Say). Insect Life, I, 5-8, figs.; July, 1888.

Life history of *Mesogramma polita* SAY.

On the Emasculating Bot-Fly. Insect Life, I, 214-216, fig.; Jan., 1889.

*Cuterebra emasculator* FITCH.

*Hermetia mucens* Infesting Bee-hives. Insect Life, I, 353; May, 1889.

The Horn Fly. Insect Life, II, 93-103, figs.; Oct., 1889.

Life history of *Hæmatobia serrata* DESV.

The Bot-Fly of the Ox. Insect Life, II, 156-159, figs.; Nov., 1889.

The Ox Warble. Insect Life, II, 172-177, figs.; Dec., 1889.

Both on *Hypoderma lineata* VILL.

Anthrax Parasitic on Cut-Worms. Insect Life, II, 353. 354; May and June, 1890.

No new species.

A Peach Pest in Bermuda (*Ceratitis capitata* Wied.). Insect Life, III, 5-8, figs.; Aug., 1890. Additional notes, pp. 80, 81.

Bermuda is not within the range of this catalogue, but the species may easily be introduced into our fauna.

#### Robertson, Chas.

Some New Diptera. Canadian Entomologist, xxxIII, 284-286; Oct., 1901.

Eight new species.

#### Roeder, Victor von.

Dipterologische Notizen. Berliner Entomol. Zeitsch., xxv, 210-216, 1881.

*Eurycephala myopæformis* n. g. and sp., from Cal.

Dipteren von der Insel Porto Rico, etc. Stettiner Entomol. Zeit., 1885, 337-349.

Eleven n. sp.; about eighty described species listed, many of which are redescribed.

Ueber die nordamerikanischen Lomatiina, etc. Wiener Entomol. Zeitung, v, 263; Oct., 1886.

Notes on several species of the group from N. A.; none new.

Ueber die Gattungen *Doryclus* Jæn. und *Megapoda* Macq. Berliner Entomol. Zeitschr., xxxi, 76-78, 1887.

*Asyndulum montanum* n. sp. Wiener Entomol. Zeitung, vi, 116; May, 1887. From New Hampshire.

Ueber *Myopa clausa* Loew. Wiener Entomol. Zeitung, viii, 5, 1889.

Zwei neue nordamerikanische Dipteren. Wiener Entomol. Zeitung, ix, 230; Oct., 1890.

*Bittacomorpha sackenii* and *Agathon elegantulus*, from Nevada: the latter a new genus, regarded by Kellogg as a synonym of *Bibiocephala*.

Ueber die Dipteren-Gattung *Stylogaster* Macq. Wiener Entomol. Zeitung, xi, 286; Nov., 1892.

Ueber *Trypeta amabilis* Loew. Wiener Entomol. Zeitung, xiii, 97; March, 1894.

Redesc. and figured; see *Hexachata amabilis*.

Ueber *Mydas fulvipes* Walsh. Wiener Entomol. Zeitung, xiii, 169, 170, 1894.

#### Rondani, Camillo.

Diptera exotica, revisa et notata, novis nonnullis descriptis. Archivio Canestrini, iii, 1863.

*Scatina costilandica* n. sp. from Labrador.

Osservazioni sopra alcune specie di esapodi ditteri del Museo Torinese. Nuovi Annali di Bologna, ser. 3, ii, 165-197, 1850.

*Tabanus cheliopterus* n. sp., from Carolina.

Hippoboscita exotica non vel minus cognita. Annali del Museo Civico di Storia Naturale di Genova, xii, 150-169, 1878.

Six new species of Hippoboscidae from Mexico.

#### Ruebsaamen, Ewald H.

*Sciara striata* n. sp. Berliner Entomol. Zeitschr., 1894, 37.

From Mexico.

Zoolog. Ergebnisse der . . . Grönland expedition. Grönlandische Mycetophiliden, Sciariden, Cecidomyiden, Psylliden, etc. In Bibliotheca Zoologica, xx, 103-119, 2 plates; 1898.

Six new species of *Sciara* from Greenland.

#### Saint Fargeau et Serville.

Encyclopédie Méthodique, vol. x. Paris, 1825.

A number of North American Diptera are mentioned; none new.

#### Say, Thomas.

*Diopsis brevicornis* n. sp. Journal of the Academy of Natural Sciences of Philadelphia, i, 23, 1817.

Some Account of the Insect known as the Hessian Fly, etc. Jour. Acad. Nat. Sci. Phil., i, 45-48 and 63, 64; 1817. *Cecidomyia destructor* first described.

Description of Dipterous Insects of the United States. Journal of the Academy of Natural Sciences in Philadelphia, iii, 9-54 and 73-104; 1823.

Description of North American Dipterous Insects. Journal Academy of Natural Sciences in Philadelphia, vi, 149-178 and 183-188; 1829-30.

Keating's Narrative of an Expedition to the Source of St. Peter's River, etc., under the Command of S. H. Long. 2 vols.; Philadelphia, 1824. Insects described by Say in the Appendix to the second volume, Diptera, pp. 357-378. Cited as "Long's Exped."

Description of new species of North American Insects found in Louisiana by Jos. Barabino. New Harmony, Ind., March, 1831 (not in the Complete Works; see Scudder, in Psyche, Jan., 1890, where the description of the single new species is quoted).

New Species of North American Insects found by Jos. Barabino in Louisiana. New Harmony, Ind., 1832.

American Entomology. 3 vols., with plates. Philadelphia, 1824-25-28.

The Complete Writings of Thomas Say on the Entomology of North America, with a Memoir of the Author by George Ord. Edited by John L. Leconte. New York; 1859; 2 vols., 8 vo; 1200 pp., with 36 plates.

There is also a French translation of Say's works, in vol. v of Annales Soc. Ent. de France, 1837.

There are about 250 new species of North American Diptera in Say's writings.

Say sent many of his species of Diptera to Wiedemann, who redescribed them in his Aussereropäische Zweifl. Ins. In many cases the latter description is more characteristic than Say's.

### Shimer, Henry.

Description of a New Species of Cecidomyia. Transactions of the American Entomological Society, 1, 281, 1868.

*Cecidomyia aceris*, n. sp.

A Summer's Study of Hickory-galls, with Descriptions of Supposed New Insects Bred from them. Transactions of the American Entomological Society, 11, 386, 1869.

*Cecidomyia cossæ*, n. sp.

Additional Notes on the Striped Squash-Beetle (*Diabrotica vittata*). American Naturalist, v, 217, 1871.

*Melanosphora diabroticæ*, n. sp., here placed in *Celatoria*.

### Schiner, J. R.

Fauna Austriaca. Diptera. Vienna, 2 vols., 1862-64.

Incomparably the best encyclopædic work on Diptera that was ever published. While it is intended to include only Austrian forms, many of the species occur in North America, and most of the genera.

Neue oder wenig bekannte Asiliden des kaiserl. Hofcabinet in Wien. Verhandlungen der zoologischen-botanischen Gesellschaft zu Wien, xvii, 355-412, 1867.

Five new N. A. species.

Reise der Oesterr. Fregatte Novara um die Erde in den Jahren 1857-59. Zoologischer Theil. Diptera. Wien, 1868, 1 vol. 4to, with 4 plates.

Many South American species which also occur in North America are described; also some new genera occurring in North America.

### Schnabl, Johann.

Limnospila nov. gen. Anthomyidarum. Wiener Ent. Zeitung, xxi, 111, 1902.

Type, *Canosia albifrons*, which occurs in North America.

### Schwarz, E. A.

The Insect Fauna of the Great Salt Lake, Utah. Canadian Entomologist, xxiii, 235-241, 1891.

Extended notes on the larva of *Ephydra gracilis* PACK.

The Hippelates Plague in Florida. *Insect Life*, VII, 374-379, figs.; July, 1895.  
Notes on *H. flavipes* and *plebeius*, annoying people in Florida.

**Scudder, Samuel H.**

Description of *Tachina theclarum*, in an article by Osten Sacken, Canadian Entomologist, XIX, 166; Sept., 1887.

The species is referred by Coquillett to *Exorista confinis* FALL.

An Unknown Tract on American Insects by Thomas Say. *Psyche*, Jan., 1899, 306-308.

Contains reprint of *Trypeta trifasciata* SAY.

*Note*.—Mr. Scudder's work on fossil Diptera is not listed, not being within the scope of the present catalogue.

**Schiödte, J. G.**

Naturhistoriske Tillæg til Rink: "Grönland geographisk og statistisk beskrevet," 1857; a German translation of the "Tillæg" or appendix was printed in *Berliner Entomolog. Zeitschr.*, 1859, 134-157.

No new species; some synonymy, and a list of described Diptera from Greenland.

**Sirrine, F. A.**

The Spinach-leaf Maggot or Miner. *Bull.* 99, N. Y. Experiment Station; Jan., 1896; pp. 21-31, figs. Also in Annual Report N. Y. Exp. Sta. for 1895 (pub. 1896), 625-633, 1 plate.

Life history of *Pegomyia vicina* LINT.

A Little-known Asparagus Pest (*Agromyza simplex* Lw.). *Bull.* 189, N. Y. Exp. Sta.; 1900.

**Skinner, Henry.**

Diptera of Beulah, New Mexico. *Trans. Amer. Entom. Society.* XXIX, 104-106; Feb., 1903.

About 135 species listed. The new ones described by Coquillett and Johnson, *q. v.*

**Slingerland, Mark Vernon.**

The Cabbage Root Maggot, with Notes on the Onion Maggot and Allied Insects. *Bull.* 78, Cornell University Exp. Station; Nov., 1894, pp. 481-577, 18 figs.

Life history of *Phorbia brassicæ* BOUCHÉ, and notes on other species. An admirably thorough piece of work.

The Current-Stem Girdler and the Raspberry-Cane Maggot. *Bull.* 126, Cornell University Exp. Sta.; Feb., 1897, pp. 39-60, figs.

The Raspberry-Cane Maggot is described and its habits given, with bibliography, but the species is not determined. It is mentioned as *Phorbia* sp. See next article.

The Raspberry-Cane Maggot. *Canadian Entomologist*, XXIX, 162, 163; July, 1897.

Life history; described in the article as *Phorbia rubivora* by Coquillett.

A New Cherry Pest. *Bull.* 172, Cornell University Exp. Sta., Sept., 1899; 19 pp., 15 figs.

Supposed to be *Rhagoletis cingulata* LOEW; the determination is confirmed from bred specimens in *Canad. Ent.*, XXXIV, 28, 1902.

**Slosson, Annie Trumbull.**

List of Diptera from the White Mountains, New Hampshire. In *Entomological News*, as follows: Vol. V, 6; VI, 6, 7 and 319, 320; VII, 263, 264; VIII, 239, 240; IX, 252; XI, 320, 321; XIII, 7, 8 and 319, 320.

In all several hundred species, none described as new, but some European species and genera not hitherto reported from the United States. The determinations are almost all by Coquillett.

Mount Washington Again. Entomological News, v, 271-274, 1894.

Collecting notes; several Diptera mentioned.

Singular habit of a Cecidomyid. Entomological News, vii, 238, 1896.

An undetermined species riding on the wing of a flying Chrysopa.

Hunting Empids. Entomological News, xiv, 265-268, 1903.

Collecting notes; habits of several species.

#### Smith, John B.

Note on Habits of *Volucella fasciata*. Canadian Entomologist, xxiii, 242, 243, 1891.

The Horn Fly. Special Bulletin No. 62, New Jersey Experiment Station. Nov., 1889; 40 pp., 9 figs.

Life history of *Hæmatobia serrata* Desv.

The Insects Injurious affecting Cranberries. Special Bulletin K, N. J. Exp. Sta., Feb., 1890; 43 pp., 26 figs.

*Cecidomyia vaccinii*, n. sp.; the name was changed by Johnson to *oryzococcana*, on account of preoccupation.

A Contribution towards the Knowledge of the Mouth Parts of Diptera. Trans. Amer. Entom. Society, xxii, 319-339, 1890.

Notes on the Structure and History of *Hæmatobia serrata* Desv. Psyche, v, 343-347, figs., 1890.

An Essay on the Development of the Mouth Parts of Certain Insects. Transactions of the American Philosophical Society, xix, 175-198, 3 plates; 1896.

Treats of mouth parts of Diptera especially.

Life History of *Aedes smithii*. Jour. N. Y. Ent. Society, x, 10-15; Mar. 1902.

Notes on the early Stages of *Corethra brakeleyi*. Canadian Entomologist, xxxiv, 139; June, 1902.

The Salt-Marsh Mosquito. Special Bulletin T, N. J. Exp. Sta., 1902; 10 pp., figs.

Life history of *Culex sollicitans* WALK.

Notes on the Early Stages of *Culex canadensis* Theob. Entomological News, xiii, 267-273; Nov., 1902.

Characters of some Mosquito Larvæ. Entomological News, xiii, 299-303, 1 pl.; Dec., 1902.

Report of the Entomological Department of the N. J. Exp. Sta. for 1902.

A Report on Mosquito Investigations, pp. 511-556, mostly on the Salt-Marsh Mosquito, *Culex sollicitans* Walk. Also has an article on Mosquitoes and malaria, by Herbert Parlin Johnson.

Notes on *Culex serratus* Theob. Entomological News, xiv, 309-311, 1 pl.; Dec., 1903.

#### Snodgrass, R. E.

The Inverted Hypopygium of *Dasyllis* and *Laphria*. Psyche, x, 399, 400, 1902. Purely morphological.

The Terminal Abdominal Segments of Female Tipulidæ. Jour. N. Y. Ent. Soc., xi, 177-188, 2 pl.; December, 1903.

Characters of several previously-known species described.

**Snow, F. H.**

*Musca domestica* L. versus *Vespa occidentalis* Cress. *Psyche*, III, 340; May, 1882.

Notes on the distribution of *Musca domestica*.

A Preliminary List of the Diptera of Kansas. *Kans. Univ. Sci. Bull.*, II, 211-223; Nov., 1903.

392 species listed; 6 new species are described by Adams. Unfortunately this reached me so late that I could add only the new species to the catalogue.

**Snow, William A.**

The Moose-fly—A New *Hæmatobia*. *Canadian Entomologist*, XXIII, 87-89, 1891.

*Hæmatobia alcis*, n. sp., from Northern Minnesota.

Notes and Descriptions of Syrphidæ. *Kans. Univ. Quarterly*, I, 33-40, I pl., 1892.

Four new species; many others mentioned.

Descriptions of North American Trypetidæ. *Kans. Univ. Quarterly*, II, 159-174, 2 plates, 1894.

Fourteen new species; *Xenochata* and *Polymorphomyia* n. gen.

American Platypezidæ. *Kans. Univ. Quart.*, III, 143-152, I pl., 1894.

American Platypezidæ. II. *Op cit.*, III, 205-207; 1895.

In these papers eleven new species are described; there are also tables of genera and species.

*Cnephalia* and its Allies. *Kans. Univ. Quarterly*, III, 177-186, 1895.

A study of the genera in the neighborhood of *Gonia* and *Spallanzinia*; *Cnephalia pansa* and *finitima*, n. sp.

A New Species of Pelecocera. *Kans. Univ. Quarterly*, III, 187, 1895.

*P. willistonii*, from New Mexico.

Diptera of Colorado and New Mexico. *Kans. Univ. Quarterly*, III, 225-247, 1895.

Confined to Syrphidæ. 13 n. spp.; notes on many other western species.

Supplementary List of North American Syrphidæ. *Kans. Univ. Quarterly*, III, 249-262, 1895.

List of species from 1878, with some changes in nomenclature.

On *Toxotrypana* of Gerstaecker. *Kans. Univ. Quart.*, IV, 117-119, fig., 1895.

A List of Asilidæ, Supplementary to Osten Sacken's Catalogue, etc. *Kans. Univ. Quarterly*, IV, 173-190, 1896.

Considerable changes in synonymy, especially of the tropical species.

**Snow, W. A. and Mills, Helen.**

The Destructive Diplosis of the Monterey Pine. *Entomological News*, XI, 490-494, I plate; June, 1900.

*Diplosis pini-radiata* n. sp.

**Snyder, Mrs. A. J.**

*Trypeta solidaginis*. *Canadian Entomologist*, XXX, 99, 100; Apr., 1898.

Description of the emergence of the adult.

**Speiser, Paul.**

Ueber die Nycteribiiden. *Wiegmann's Archiv. für Naturgeschichte*, LXVII, 11-78, I plate; 1901.

Important for the classification; no new North American species.



Besprechung einiger Gattungen und Arten der Diptera pupipara. Termész. Füzetek, xxv, 1902, 327-338.

*Ornithomyia erythrocephala* LEACH is made the type of a new genus, *Ornithoctona*; *Ornithoica confluenta* SAY redesc.

Studien über Diptera Pupipara. Zeitschr. f. Syst. Hym. und Dipterologie, III, 145-180, 1903.

A very thorough work, referring to several North American species; *Lynchia pusilla* n. sp., from Cuba. Bigot's types in the family are elucidated, from examination.

#### Staeger, C.

Greenland's Anliater. In Kröyer's Naturhist. Tidsskrift, new ser., I, 346-369, 1845.

Eight new species; fifty-five species mentioned in all.

#### Stedman, J. M.

Thirty-fourth Report Board of Agriculture of Missouri, 1902.

Contains articles on Hessian Fly (p. 76) and Wheat Bulb-Worm (p. 85); no new species.

#### Stein, P.

Die Anthomyiden-Gruppe Homalomyia. Berliner Entom. Zeitsch., XL, 1-146, 1895.

Several North American species also occurring in Europe are redesc.

Nordamerikanischen Anthomyiden. Berliner Entom. Zeitschr., XLII, 161-288, 1897.

Many new species, several new genera; the foundation of our knowledge of the North American fauna in this family.

Die Walker'schen Aussereuropäischen Anthomyiden in der Sammlung des British Museums zu London. Zeitschr. f. Syst. Hym. und Dipterologie, 1901, 185-221.

A reexamination of Walker's types, with descriptions of many. Three labeled but unpublished species of Walker are described—*Hydrotæa succedens*, *Hylemyia relata* and *Pegomyia debilis*, from North America. These of course are credited to Stein, not Walker.

Die Zetterstedt'schen, Holmgren'schen und Boheman'schen Anthomyidentypen des Stockholmer Museums. Wiener Entom. Zeitung, XXI, 29-66, 1902.

Holmgren's Greenland species are elucidated.

#### Summa, H.

The Pseudo-parasitism of Diptera in Man, or Myiasis. St. Louis Med. & Surg. Journal; April, May and June, 1889; sep., 16 pp., 5 figs.

#### Swederus, Samuel.

Et Nytt Genus och Femtio Nya Species af Insecter. In the Vetenskap. Acad. Nya Handl., 1787, p. 181 and 276.

"Two North American species: *Musca tomentosa*, which is probably *Brachypalpus verbosus*, and *Musca (Syrphus) monoculus*; I cannot make out the synonymy of the latter."—O. S.

#### Theobald, Fred. V.

A Monograph of the Culicidæ of the World. London, British Museum. Vols. I and II and vol. of col. plates, 1901; Vol. III, 1903.

All the North American species known at the time of preparation are redescribed in this great work; there are also numerous new species, espe-

cially from along the southern limits of our field. In the 3d volume many new genera are introduced. The classification of Theobald is closely followed herein.

Description of a New N. A. Culex. Canadian Entomologist, xxxv, 211-213, 1903.

*C. Kelloggii*, which is a synonym of *C. tarsalis* Coq.

Notes on Culicidæ and their Larvæ from Pecos, N. M., and Description of a New Grabhamia. Canadian Entomologist, xxxv, 311-316, 1903.

*G. vittata*.

**Thomson, C. G.**

Kongliga Svenska Fregatten Eugénies Resa Omkring Jordan. Diptera. Stockholm, 1868; 1 vol., 4to.

Forty-nine new species from California and Panama.

**Thunberg, Carl P.**

Description of Pantophthalmus tabaninus, in Acta Soc. Gotheburg, 1819, pars III, 7, pl. VII, f. 2. So quoted by Wiedemann, who reproduces the description in Auss. Zweifel, I, 110. The paper is not mentioned by Hagen in his Bibliotheca.

**Townsend, C. H. Tyler.**

Notes on Some Interesting Flies from the Vicinity of Washington. Proc. Ent. Society of Washington, I, 254, 255, 1890.

Notes on six species; none new.

On the Fall Occurrence of Bibio and Dilophus. Proc. Ent. Soc. Wash., I, 260-263, 1890.

Notes; no new species.

A Remarkable New Hippoboscid from Mexico. Entomological News, II, 105, 106; June, 1891, and note III, 177, 178, 1892.

*Trichobius dugesii* n. sp.

Two New Tachinidæ. Psyche, VI, 83-85; May, 1891.

*Tachina clisiocampæ* (syn. of *mella*) and *Phorocera promiscua* (syn. of *Frontina frenchii*).

Description of a Muscid Bred from Swine Dung, with Notes on Two Muscid Genera. Canadian Entomologist, xxIII, 152-155; July, 1891.

*Cleigastra suisterci* n. sp. (syn. of *Scatophaga furcata* SAY).

A New Simulium from Southern New Mexico. Psyche, VI, 106, 107; July, 1891.

*S. occidentale* (syn. of *meridionale*).

A Tachinid Bred from a Chrysalis. Canadian Entomologist, xxIII, 206, 207; Oct., 1891.

*Meigenia websteri* n. sp. (syn. of *Frontina frenchii*).

An Exorista Parasitic on Lagoa opercularis. Entomological News, II, 159, 160; Oct., 1891.

*Exorista lagoa* n. sp., from Mexico.

A Parasite of the Fall Web-worm. Psyche, VI, 176, 177; Nov., 1891.

*Meigenia hyphantriæ* n. sp.; afterwards referred to *Hyphantrophaga* n. gen. as type.

A Tachinid Parasite of Chrysophanus dione. Entomological News, II, 197-199; Dec., 1891.

*Exorista chrysophani* n. sp. (syn. of *E. confinis*).

- A Tachinid Parasite of the Oak Unicorn Prominent (*Schizura unicornis*).  
 Psyche, vi, 187, 188; Dec., 1891.  
*Masicera schizura* n. sp. (syn. of *Frontina frenchii*).
- Note on the Genera *Triptotracha* and *Agnotomyia*. Proc. Ent. Soc. Wash.,  
 II, 117, 118, 1891.  
 No new species.
- The North American Genera of Calyprate Muscidae.  
 I. Proc. Ent. Soc. Wash., II, 89-100; 1891.  
 II. Trans. Amer. Ent. Soc., XIX, 133-144; 1892.  
 III. Trans. Amer. Ent. Soc., XIX, 273-278; 1892.  
 IV. Trans. Amer. Ent. Soc., XIX, 279-284; 1892.  
 V. Trans. Amer. Ent. Soc., XIX, 290-294; 1892.  
 Tables of genera, with notes and references; no new species.
- Notes on North American Tachinidæ, with Descriptions of New Species.  
 I. Proc. Ent. Soc. Wash., II, 134-146; 1891.  
 II. Trans. Amer. Ent. Soc., XVIII, 249-382; 1891.  
 III. Trans. Amer. Ent. Soc., XIX, 88-132; 1892.  
 IV. Entomological News, III, 80, 81 and 129, 130; 1892.  
 V. Canadian Entomologist, XXIV, 64-70 and 77-82; 1892.  
 VI. Canadian Entomologist, XXIV, 165-172; 1892.  
 VII. Trans. Amer. Ent. Soc., XIX, 284-289; 1892.  
 Many new genera and species.
- Description of a Sarcophagid Bred from Helix. Psyche, vi, 220, 221; Feb.,  
 1892.  
*Sarc. helcis* n. sp.
- A Tachinid Bred from *Protoparce jamaicensis* Butler in Jamaica. Jour.  
 Inst. of Jamaica, I, No. 2, p. 70; Feb., 1892.  
*Masicera protoparcis* n. sp. (syn. of *Sturmia distincta*).
- A New Genus of Tachinidæ. Psyche, vi, 247; Apr., 1892.  
*Hyphanthropaga* n. gen.; type *hyphantriae* TOWNSEND.
- A Tachinid Parasite of *Eucaterva variaria* Grote, and Other Notes. Psyche,  
 vi, 258, 259; Apr., 1892.  
*Hyphanthropaga hyphantriae* TOWNS.; no new species.
- A Sarcophagid Parasite of *Cimbex americana*. Canadian Entomologist,  
 XXIV, 126, 127; May, 1892.  
*Sarcophaga cimbicis*, n. sp.
- New Jamaica Tachinidæ. I. Entomological News, III, 146, 147; June, 1892.  
*Pseudohsyticia exilis*, n. sp.
- The North American Genera of Nemocerous Diptera. Trans. Amer. Ent.  
 Soc., XIX, 144-160; June, 1892.  
 Tables of genera, with notes and references; no new species.
- An *Aporia* Bred from *Limacodes* sp. Psyche, vi, 275, 276; June, 1892.  
*Aporia limacodis*, n. sp. (syn. of *Macquartia pristis*).
- Descriptions of Oestrid Larvæ taken from the Jack-rabbit and the Cotton-  
 tail. Psyche, vi, 298-300; June, 1892.  
 Two species of larvæ, one identified (1893, 541 and 1897, 8, 9) as *Cute-  
 rebra fontinella* CLARK, and later as a new species, *C. lepusculi*; the other  
 was described as *Dermatobia* sp., and afterward referred to *Bogeria*. See  
 also Ins. Life, v, 137.

- Introduction to Brauer and von Bergenstamm's Vorarbeiten, etc. *Psyche*, vi, 313-316 and 329-332; 1892.  
 A translation of the introduction mentioned. Contains some interesting generalizations; no species mentioned.
- On the So-Called Throat Bot. *Entomological News*, III, 227; Nov., 1892.  
 Notes on *Gastrophilus nasalis* LINN.
- Preliminary Grouping of Sapromyza, with one New Species. *Canadian Entomologist*, xxiv, 301-304; Dec., 1892.  
*S. ocellaris*, n. sp. (syn. of *vulgaris* FITCH).
- A Dexiid Parasite of a Longicorn Beetle. *Journal of the Institute of Jamaica*, I, pt. 3, 1892.  
*Sarcodexia sternodontis* n. gen. and sp., from Jamaica.
- A Scorpion Parasite. *Jour. Inst. of Jamaica*, I; Dec., 1892.  
 Same species as preceding.
- A General Summary of the Known Larval Food-habits of the Acalyprate Muscidae. *Canadian Entomologist*, xxv, 10-16; Jan., 1893.  
 A useful compilation; no new species.
- An Interesting Blood-sucking Gnat. *Psyche*, vi, 369-371; Jan., 1893.  
*Tersesthes torrens* n. gen. and sp., from New Mexico.
- The Pupa of *Argyramæba œdipus*. *American Naturalist*, Jan., 1893, p. 60.
- A Trypetid Bred from Galls of *Bigelovia*. *Canadian Entomologist*, xxv, 48; Feb., 1893.  
*Eurosta bigelovia* n. sp.; on p. 112 Cockerell calls attention to the fact that the species had already been described by himself as *Trypeta bigelovia*.
- On the Geographic Range and Distribution of the Genus *Trichopoda*. *Entomological News*, iv, 69-71; March, 1893.  
 No new species.
- Description of a new and Interesting Phasiid-like Genus of Tachinidæ, s. str. *Psyche*, vi, 429, 430; April, 1893.  
*Hyalomyodes wcedii* n. gen. and sp. (syn. of *H. triangulifera* Lw.).
- The Puparium of *Blepharipeza*. *American Naturalist*, April, 1893, 402.
- A New Trypetid from Chacaltianguis, Mex., with note on *Trypeta amabilis* Loew. *Zoe*, iv, 13-16; Apr., 1893.  
*Euaresta latipennis* n. sp.
- On a Species of *Simulium* from the Grand Canyon of the Colorado. *Trans. Amer. Ent. Soc.*, xx, 45-48, figs.; Apr., 1893.  
 Larva and pupa of *Simulium* sp., not determined.
- The Puparium and Pupa of *Subula pallipes* Loew. *Entomological News*, iv, 163; May, 1893.
- Description of the Pupa of *Toxophora virgata* O. S. *Psyche*, vi, 455-457; May, 1893.
- Note on *Atrapharista jurinoides*. *Psyche*, vi, 461; May, 1893.
- A Nycteribid from a New Mexican Bat. *Journal of the New York Entomological Society*, I, 79, 80; June, 1893.  
*Nycteribia antrozoi* n. sp.
- Hosts of North American Tachinidæ, etc. Paper I. *Psyche*, vi, 466-468; June, 1893.

Breeding records of 27 species, reared by Professor S. A. Forbes; *Sarcophaga leucania* n. sp. "if found to be undescribed."

Comments on Mr. Van der Wulp's Recent Diagnoses of New Species of Mexican Muscidae. Canadian Entomologist, xxv, 164-168; July, 1893.

An attempt to interpret Van der Wulp's too brief diagnoses, without the material to throw any particular light on them; an altogether superfluous piece of meddling. The changes of generic names are both uncalled for.

A Cabbage-like Cecidomyidous Gall on *Bigelovia*. Psyche, vi, 490; July, 1893. *Cecidomyia bigelovia-brassicoides* n. sp.; gall only.

Further Notes on the Cotton-tail Bot. Insect Life, v, 317-320; July, 1893.

*Cuterebra fontinella* CLARK redescribed. This afterward proved to be a new species and was named *C. lepusculi* in Psyche, Jan., 1897, 8, 9.

Notes on Some Jamaican Muscidae. Journal of the Institute of Jamaica, 1, No. 7; Aug., 1893.

No new species.

Dipterous Parasites in Their Relation to Economic Entomology. Insect Life, vi, 201-204; Dec., 1893.

No new species.

Notes on some Cecidomyidae of the Vicinity of Washington, D. C. Proc. Ent. Soc. Wash., II, No. 4, pp. 388-390; 1893.

Three species mentioned; none new.

Notes on Certain Cecidomyidous Galls on *Cornus*. Proc. Ent. Soc. Wash., II, 390, 1893.

Describes the gall of the species afterward named *Cecidomyia clazula* by Beutenmüller.

Occurrence of *Oecacta furens* Poey in Jamaica. Jour. Inst. Jamaica, 1, 381, 1893.

A Tachinid Reared from the Cells of a Mud-dauber Wasp. Bulletin Ohio Exp. Station, Technical series 1, 165, 166; 1893.

*Sarcomacronychia tryporylonis* n. sp., from Ohio (syn. of *Pachyophthalmus floridensis* Towns.).

A very Remarkable and Anomalous Syrphid, with Peculiarly Developed Hind Tarsi. Canadian Entomologist, xxvi, 50-52, figs.; Feb., 1894.

*Calotarsa ornatipes* n. gen. and spec. It belongs to the Platypezidae, and the genus is but little different from *Platypeza*. Townsend published another note on same, p. 102.

New Santo Domingo Tachinidae. Jour. New York Entomological Society, II, 78, 79; June, 1894.

*Trichopoda subciliipes* n. sp. and *Ocypterosiphon willistoni* n. gen. and species; the latter is a syn. of *Beskia alops*, according to Coquillett.

A Cone-like Cecidomyid Gall on *Bigelovia*. Psyche, vii, 176; Dec., 1894.

*Cecidomyia bigelovia-strobiloides* n. sp.; gall only.

On the Horse-Flies of New Mexico and Arizona. Kansas Academy of Science, 1894, 133-135.

*Diachlorus guttatulus* n. sp., afterward referred to *Tabanus*.

Note on a Peculiar Acalyptrate Muscid found near Turkey Tanks, Ariz. Kansas Acad. of Science, 1894, 135, 136.

*Micropeza turcana* n. sp.

Contributions to the Dipterology of North America.

I. Syrphidæ. Trans. Amer. Ent. Soc., xxii, 33-55; March, 1895.

Mentions 75 species of Syrphidæ, 8 new.

II. Tabanidæ, Conopidæ, Tachinidæ, etc. Ibid., 55-80.

Notes on many species of these families, 9 new.

Notes on The Diptera of Baja California. Proc. Cal. Acad. Acad. Sci., ser. 2, vol. iv, 593-620; Apr., 1895.

Occurrence and notes on many species; 14 new.

Note.—Baja California is Lower California, and is so cited in the catalogue. It is in Mexico.

On the Cabbage-shaped Gall of *Cecidomyia salicis-brassicoides*, and its Occupants. Canadian Entomologist, xxvii, 205-207; Aug., 1895.

Description of gall and its larva.

On the Correlation of Habits in Nemocerous and Brachycerous Diptera between Aquatic Larvæ and Blood-sucking Adult Females. Jour. N. Y. Ent. Soc., iii, 134-136; Sept., 1895.

No new species.

On the Bio-geography of Mexico, Texas, New Mexico and Arizona. Texas Acad. Science, Dec., 1895, pp. 77-96 and June, 1897, pp. 33-86.

The second part contains some local lists of Diptera; all or nearly all are printed in other papers.

Notes on the Species of Exorista of Temperate North America. Psyche, vii, 329-331; Jan., 1896.

*E. nigripalpis* n. sp.

On a Collection of Diptera from the Lowlands of Rio Nautla in the State of Vera Cruz. Annals and Mag. of Nat. Hist., ser. 6, vol. xix, 15-34, and xx, 20-33 and 272-291; January, July and September, 1897.

16 new species; a few varieties named; notes on a number of species.

Diptera from the Sacramento and White Mountains in Southern New Mexico. Annals and Mag. of Nat. Hist., ser. 6, vol. xix; Feb., 1897.

*Pipiza occidentalis*, *Milcsia bella*, *Echinomyia victoria* and *neglecta*, new; the last two are assigned by Coquillett to *Archytas lateralis* and *Pcleteria tessellata*.

Diptera from Yucatan and Campeche. I. Canadian Entomologist, xxix, 197-199; Aug., 1897.

*Tabanus campechianus* and *yucatanus* n. spp.; notes on others.

Diptera from the Lower Rio Grande or Tamaulipan Region of Texas. Journal of the New York Entomological Society, v, 171-190; Dec., 1897.

*Simulium tamaulipense*, *Baccha tropicalis*, *Zodion albonotatum* n. spp.; notes on others.

Part II of same, vi, 50-52; 1898; contains one new sp., *Volucella tamaulipana*, with notes on other species.

Description of the Bot-fly of the Cotton-tail Rabbit in New Mexico. Psyche, viii, 8, 9; Jan., 1897.

*Cuterebra lepusculi* n. sp.

Diptera from the Head Waters of the Gila River. I. Psyche, viii, 38-41; Mar., 1897.

*Chrysops ccras* and *facialis*, *Myobia gilensis* n. spp., and a few notes.

II. Ibid., pp. 92-94; July, 1897.

*Tabanus gilanus* and *intensis* n. spp.; notes on three species.



Some characteristic maritime Diptera from the South End of Padre Island and the adjacent Texas Coast. I. Entomological News, IX, 167-169; Sept., 1898.

*Tabanus maritimus* and *Lipochata texensis* (syn. of *slossonæ*) n. spp.

Diptera from the Organ Mountains of Southern New Mexico.

I. Psyche, VIII, 126-128; Oct., 1897.

Notes on four species, none new.

II. Psyche, VIII, 267-269; Oct., 1898.

Notes on seven species; *Gadiopsis monticola*, new.

Diptera from the White Sands on the Tularosa Plains of Southern New Mexico. I. Psyche, VIII, 138-140; Nov., 1897.

A few notes on variations of species, etc.; no new species.

Diptera from the Mesilla Valley of the Rio Grande in New Mexico.

I. Psyche, VIII, 147-150; Dec., 1897.

Notes on a dozen species, none new.

II. Ibid., 211, 212; May, 1898.

Notes on three or four species, none new.

New and Little-known Diptera from the Organ Mountains and Vicinity in New Mexico. Transactions of the American Entomological Society, XXVII, 159-164; 1901.

Four new species; notes on a number of old ones.

A Bot-like Parasite of a Bird. Journal Institute of Jamaica.

Not seen; I am unable to complete the reference.

#### Van der Wulp, Frederick M.

Eenige noordamerikaansche Diptera. Tijdschrift voor Entomologie, x, 125-164, 3 pl.; 1867 (Also cited as vol. II, sec. series; Osten uses this form, and I have followed him, but in later work Van der Wulp cites it as vol. X).

30 new N. A. spp., 18 European species recognized, and 24 described N. A. spp. identified, all from Wisconsin.

Nog iets over Noordamerikaansche Diptera. Tijdschrift v. Ent., XII (or IV, sec. ser.), 80-86; 1869.

Five new N. A. species.

Opmerkingen omtrent Uitlandische Asiliden. Tijdschrift v. Ent., XIII (or V, sec. ser.), sep. 11 pp., 1 pl.; 1870.

*Stenopogon ochraceus* n. sp., from North America.

Amerikaansche Diptera.

No. 1. Tijdsch. v. Ent., XXIX, 141-168, 1 col. plate; 1881.

No. 2. Tijdsch. v. Ent., XXV, 77-136, 2 col. plates; 1883.

No. 3. Tijdsch. v. Ent., XXVI, 1-60, 2 col. plates; 1883.

These contain 14 new species from North America, with notes on about 127 other species.

Notes from the Leyden Museum. IV, 73-93, 1882.

*Anthrax melasoma* and *Jurinia nitida* n. spp., the former redesc. in Amer. Dipt., No. 2.

*Chrysops geminata* Wied. and Macq. Wiener Ent. Zeitung, III, 139-141, 1884.

*Chrysops crassicornis* n. sp., from Guanajuato, Mex.

Quelques Diptères Exotiques. Comptes Rendus de la Soc. Ent. Belgique, XXVII, p. cxcxi, 1884.

*Hystricia cyaneiventris* n. sp., from Guanajuato, Mex.

Nalezing over Amerikaansche Diptera. Tijdsch. v. Ent., xxvii, 1884; sep. 3 pp.

Notes on four described species from New England.

Langwerpige Dexinen-Formen. Tijdsch. v. Ent., xxviii, 189-200, 1 col. plate; 1885.

*Euantha* and *Leptoda* n. gen.; the species were previously described.

Sarcophagula, een nieuw Geslacht der Sarcophaginæ. Tijdsch. v. Ent., xxx, 173, 174, 1887.

No new species.

Biologia Centrali-Americana. Diptera, vol. II. Pp. 1-489, 13 col. plates, title-page, introduction, and index of plate-figures. London; April, 1888, to May, 1903. The date is printed at the bottom of every eighth page.

Many new genera and species.

Eenige Uitlandische Diptera. Tijdschr. v. Ent., xxxiv, 193-218, 1891.

*Volucella testacea* n. sp., from Curaçao.

Diagnoses of New Mexican Muscidae. Tijdsch. v. Ent., xxxv, 183-195, 1892.

Four genera and about 60 species new; all described in full in subsequent parts of Biologia.

#### Vanhoffen, E.

Fauna und Flora Grönlands. Grönlands-Expedition der Gesell. für Erdkunde zu Berlin, 1891-93, unter Leitung v. Erich v. Drygalski. Vol. II, 1, 1897.

Contains a list of Greenland Diptera, compiled, pp. 156, 157. This is reproduced by Lundbeck, Dipt. Groenl., II, 314, correcting nomenclature.

#### Verrall, G. H.

British Flies. Vol. VIII: Platypezidæ, Pipunculidæ and Syrphidæ. London, Gurney and Jackson, 1901. With catalogue and bibliography in appendix. Pp. 691 and 121; many figures in the text.

This fine work contains descriptions of many genera and a considerable number of species, common to Great Britain and North America.

#### Walker, Francis.

List of the Specimens of Dipterous Insects in the Collection of the British Museum. Four parts and three supplements. London; 1848-55. The dates are as follows: Part I, 1848; II, III, and IV, 1849; Suppl. I, II, 1854; III, 1855.

Many new species.

*Note.*—In the Osten Sacken catalogue occur many species of Walker with the locality "Huds. B. Terr." These are cited by Walker as "St. Martin's Falls, Albany River, Hudson Bay." I requested Dr. Jas. Fletcher to find this locality for me on the modern maps; he found it now named Martin's Falls, and located in longitude 86.30, latitude 51.30.—in other words, about 200 miles north of the northern arch of Lake Superior.

Insecta Saundersiana. Diptera. Five Parts, with eight plates by Westwood. London, 1850-56. Dates as follows: Part I in 1850, II, in 1851, III and IV in 1852, and V in 1856.

Many species and a few genera.

Characters of Undescribed Diptera in the Collection of Wm. Saunders. Transactions of the Entomological Society [of London], new series, IV, 1857. pp. 119-158 and 190-235; V, 1858, 268-334.

Many new species, mostly described in a very brief and unsatisfactory manner.

On Some Insects of Nova Scotia and Canada. Canadian Entomologist, III, 141; Oct., 1871.

A short list of Diptera occurring in Nova Scotia; no new species.

In the appendix to "The Naturalist in Vancouver Island and British Columbia," by J. K. Lord (London, 1866, 2 vols.), Walker described four new species of Diptera from those regions—*Culex pinguis*, *Laphria columbica*, *Cuterebra approximata* and *Eurygaster septentrionalis*.

Note.—Walker's descriptions are notoriously bad. Osten Sacken, Catalogue, 1878, preface, p. xvi, has enlarged a little upon this subject. It was the policy of Osten Sacken and Loew not to adopt Walker's names unless, as is very rarely the case, the description contains some positive mark of identification. In their view, it was preferable to describe as a new species in doubtful cases. Some recent American workers have followed a different principle, and recognized Walker's species on mere preponderance of evidence; this I take it is especially true of Mr. Coquillett. It is desirable that each student of the order examine the descriptions for himself, and form his own conclusions as to the recognizability of any particular one. Furthermore, it is very desirable, in case that one of these specific names be resurrected, that the species be redescribed at the same time; otherwise in most cases other entomologists will be completely in the dark as to the species referred to, and confusion will be increased. This pending a fuller knowledge of the type, which must some time be arrived at.

#### Walsh, Benjamin D.

Insects Injurious to Vegetation in Illinois. Rock Island, 1861 (pamphlet).

*Exorista (Senometopia) militaris* n. sp. (syn. of *Winthemia quadripustulata*).

On certain Remarkable or Exceptional Larvæ, etc. Boston Society of Nat. Hist., IX, 286-308, 1864.

*Mydas fulvipes* n. sp.

On the Insects, coleopterous, hymenopterous and dipterous, Inhabiting Galls of certain Species of Willow. Proceedings of the Entomological Society of Philadelphia, III, 543-644 and VI, 223-288; 1864 and 1868.

Numerous species of Cecidomyidæ and their galls, new.

First Annual Report on the Noxious Insects of the State of Illinois. Transactions of the Illinois State Horticultural Society, appendix. Chicago, 1868.

*Trypeta pomonella* n. sp., now referred to *Rhagoletis*.

Mr. Couper's Thorn-leaf Gall. Canadian Entomologist, I, 79, 1869.

*Cecidomyia crategi-bedeguar* n. sp.

Larvæ in the Human Body. American Entomologist, II, 137, 1870.

"Contains description of three larvæ of Homalomyia, designated as *H. wilsoni*, *leydii* and *prunivora*. Perfect insect not described." O. S.

#### Washburn, F. L.

Hessian Fly Reared in the Laboratory. Canadian Entomologist, XXXV, 316; Nov., 1903.

Existence of a second brood proved in Minnesota.

*Gastrophilus epilepsalis*. Canadian Entomologist, XXV, 320; Nov., 1903.

A species identified as this affecting man as a *subcutaneous* parasite;

evidently an error of determination, as stated by Banks in the succeeding number of the journal.

**Webster, F. M.**

Report on Buffalo Gnats. Bull., 14, Division of Entomology, Dept. of Agriculture, 29-39; 1887.

On the breeding-places, etc., of Simuliidæ in the south; no new species.

Notes on a species of Necrophagous Diptera. Insect Life, II, 356-358 and 370-372; 1890.

Habits of *Conicera* sp.

Larvæ of a Crane-fly Destroying Young Wheat in Indiana. Insect Life, III, 12-14; Aug., 1890.

An undetermined Tipulid.

Report on Several Species of Crane-Flies Infesting Meadows, etc. Bull. 26, Div. of Entomology, Dept. of Agriculture, 65-74; 1892.

*Tipula costalis* mentioned as one.

Methods of Oviposition in Tipulidæ. Bulletin Ohio Exp. Sta., Technical Ser., vol. 1, No. 3, p. 151-154, figs.; 1893.

Habits of *Tipula bicornis* LÖEW MS. and *Pachyrhina* sp.

A Dipterous Gall-maker and Its Associates. Bull. Ohio Exp. Sta., Tech. ser., I, 154, 155; 1893.

Gall and Associates of *Lasioptera muhlenbergiæ* MARTEN.

Notes and Observations on Several Species of Diptera. Canadian Entomologist, XXX, 18, 19; Jan., 1898.

Notes on seven species, mostly reared.

Species of Diptera Reared in Indiana in 1884-1889. Proc. Indiana Acad. Science, 1898, 2 pp.

These rearings had already been reported in Division of Entomology bulletins, No. 10, new ser., and 7, Technical ser.

Some Species of Diptera Inhabiting or Frequenting the Wheat Fields of the Middle West. Canadian Entomologist, XXXI, 212, 213; July, 1900.

18 species reared from wheat and 34 species collected by sweeping in wheat fields; no new species.

Some Insects attacking the Stems of Growing Wheat, Rye, Barley and Oats. Bull. 42, Division of Entomology, 1903, 62 pp.

Treats, among other insects, of *Meromyza americana*, *Oscinis carbonaria* and *soror*.

**Weed, C. M.**

Note on the Horn Fly. American Naturalist, Jan., 1893, 63.

**Weed, H. E.**

Note on the Natural Habitat of the Screw-Worm Fly. Canadian Entomologist, XXIII, 243, 1891.

**Westcott, Oliver S.**

The Distribution of Some North American Syrphidæ. Entomological News, VIII, 190, 191; October, 1897.

Locality of collection given for 56 species.

**Westwood, John O.**

On Diopsis, a Genus of Dipterous Insects, etc. Trans. of Linnæan Soc., XVII, 283-313 and 543-550, 2 col. plates; 1837.

*Sphyracephala brevicornis* is reproduced, description and figure, from Say.

Insectorum novorum exoticorum ex ordine dipterorum Descriptiones. London and Edinburgh Philosophical Magazine, ser. 3, vi, 280, 281 and 447-449; 1835.

*Bittacomorpha* n. g.; *Lepidophora ægeriiformis* GRAY, *Pangonia macroglossa* and *Gynoplistia annulata*, all from North America.

Insectorum nonullorum novorum (ex ordine Dipterorum) Descriptiones. Annales Soc. Ent. de France, iv, 681-685; 1835.

*Limnobiorynchus canadensis* n. sp., from Canada.

Note.—I have not seen this and the preceding; from data in Osten Sacken, Hagen, etc., they seem to be the same article, the latter having one species added.

Description of Some New Exotic Acroceridæ. Transactions of the Entomological Society [of London], v, 91, 1848.

Six new species from North America.

Synopsis of the Dipterous Family Midasiidæ, with Descriptions of numerous Species. Arcana Entomologica, i, two col. plates; 1841-43.

Five new species from North America.

Generis Dipterorum Monographia Systropi. Guérin's Magazin de Zoologie, 1842.

*Systropus favoides* n. sp., from Mexico.

Diptera nonnulla exotica Descripta. Trans. Ent. Society, v, 231, 1850.

*Ceria daphnæus* WALKER, from Jamaica, described and figured.

Notæ Dipterologicae. Monogr. of the Genus *Systropus*, etc. Trans. Ent. Soc. London, 1876.

Reproduces description of *Systropus favoides*.

Notæ Dipterologicae. Desc. of New Genera and Species of the Family Acroceridæ. Trans. Ent. Soc. London, 1876.

*Pialoidea* n. gen. for *Cyrtus magnus* from Georgia.

#### Wheeler, Wm. M.

On Two New Species of Cecidomyid Flies Producing Galls on *Antennaria plantaginifolia*. Proc. Wis. Nat. Hist. Society, April, 1889, 209-216.

*Cecidomyia antennaria* and *Asynapta antennaria* n. spp.; note on habits of adult, and on courtship of *Dolichopus plumipes*.

Descriptions of Some New North American Dolichopodidæ. Psyche, 1890, 337-343; 355-362; 373-379.

*Aphantotimus* and *Peloropcodes* n. gen. (the former syn. of *Thrypticus*); several new species.

The Supposed Bot-fly Parasite of the Box-turtle, Psyche, 1890, 403.

The Genus *Ochthera*. Entomological News, vii, 121-123, figs.; Apr., 1896.

*O. lauta* n. sp.

Two Dolichopodid Genera New to America. Entomological News, vii, 152-156; May, 1896.

*Xiphandrium americanum* (syn. of *Chrysotus barbatus* Lw.) and *Thinophilus pectinifer* n. sp.

A New Genus and Species of Dolichopodidæ. Entomological News, vii, 185-189, figs.; June, 1896.

*Parhydrophorus canescens*; the genus is hardly distinct from *Hydrophorus*.

A New Empid with Remarkable Middle Tarsi. Entomological News, vii, 189-192, fig.; June, 1896.

*Rhamphomyia scaurissima* n. sp.

An antenniform Extra Appendage on *Dilophus tibialis* Loew. Archiv für Entwickelungsmechanik der Organismen, III, 261-268, 1 plate; Leipzig, 1896.

A New Genus of Dolichopodidæ. Zoological Bulletin, I, 217-222, figs; 1898.

*Drepanomyia* (syn. of *Hypocharassus* Mlk) *pruinosa* and *johnsoni* (the latter a syn. of *H. gladiator* Mlk).

New Species of Dolichopodidæ from the United States. Proc. Cal. Acad. Sci., 3d series, I, 1-80, 4 plates; 1899.

Many new species; two new genera, *Parasyntormon* and *Nothosympycnus*.

A Genus of Maritime Dolichopodidæ new to America. Proc. Cal. Acad. Sci., 3d ser., I, 145-152, 1 plate; 1899.

*Aphrosylus predator*, *diraptor* and *grassator*, new, from California.

Anemotropisms and Other Tropisms in Insects. Archiv für Entwickelungsmechanik der Organismen, VIII, 373-381; 1899.

Several Diptera mentioned as illustrations.

The Genus *Hypocharassus*. Entomological News, XI, 423, 1900.

Synonymy of *Drepanomyia*.

Microdon Larvæ in *Pseudomyrma* Nests. Psyche, July, 1901, 222, fig.

An undetermined species collected in Mexico.

An Extraordinary Ant-guest. American Naturalist, XXXV, 1007-1016, figs.; Dec., 1901.

Larva and puparium of an undetermined Phorid, commensal with the larva of *Pachycondyla harpax* at Austin, Tex.; one of the most interesting entomological articles I have ever seen.

**Wheeler, Wm. M. and Melander, Axel L.**

Biologia Centrali-Americana. Diptera, vol. I. Family Empidæ, pp. 366-376; Dec., 1901.

Eighteen new species.

**Whitney, C. P.**

New Species of Tabanidæ. Canadian Entomologist, XI, 35-38, 1879.

Six species; see also note by Burgess, same volume, p. 80.

**Wiedemann, C. R. W.**

Diptera Exotica. Vol. I, Kilia, 1821.

This is a Latin work; on the completion of this first volume, it was decided to change to German, and all of this part is incorporated, in German, in his principal work, "Aussereuropäische Zweifl. Insekten."

Analecta Entomologica. Kilia, 1824.

Not seen. Contains 154 Diptera in all, comparatively few from North America.

Aussereuropäische Zweiflügelige Insekten. 2 vols., with 12 plates; Hamm, 1828 and 1830.

This great work contains very many North American Diptera. One of its objects was to elucidate the species of Fabricius, and nearly all the Diptera of that entomologist are redescribed; the original descriptions are also quoted in full. Another valuable feature is the redescription of a large number of Say's species, from material set on by Say himself, presumably typical in most cases. Wiedemann changed some of the specific names of



these; where there seemed to be no valid reason for the alteration, I have followed Say in nomenclature. In most cases of redescription, I omit the locality, as it is the same as in Say's description.

*Achias*, Dipterorum Genus a Fabricio conditum. Kiliæ, 1830; 16 pp., 1 plate.  
*Sphyracephala (Achias) brevicornis* SAY, redesc. and figured.

Monographia Generis Midarum. Nova Acta Academiæ Naturæ Curiosorum, xv, 19-56, 3 col. plates; 1831.

Four new species from North America.

**Williston, Samuel Wendell.**

An Anomalous Bombylid. Canadian Entomologist, Nov., 1879, 215.

"*Anthrax* nov. sp., near *fuliginosa*."

Some Interesting New Diptera. Transactions of the Connecticut Academy of Arts and Sciences, iv, 243-246, 1880.

*Rhynchocephalus sackenii*, *Silvius pollinosus*, *Chrysops discalis*, new.

*Eristalis tenax*. Note on distribution, Canadian Entomologist, xiii, 76; Aug., 1881.

New or Little Known Genera of North American Syrphidæ. Canadian Entomologist, xiv, 77-82, 1882.

Three new genera, five species; superseded by his Synopsis of the Syrphidæ.

*Drosophila ampelophila* Loew. Canadian Entomologist, xiv, 138, 1882.

Note on habits and distribution.

Contribution to a Monograph of North American Syrphidæ. Proceedings of the American Philosophical Society, xx, 299-332, 1882.

23 new species, all reproduced in the Synopsis.

On the North American Asilidæ (Dasypogoninæ, Laphrinæ) with a New Genus of Syrphidæ. Transactions of the American Entom. Society, xi, 1-36, 3 pl.; 1883.

20 new species of Asilidæ; *Nausigaster punctulata* n. g. and sp. of Syrphidæ.

The North American Species of Nemestrinidæ. Canadian Entomologist, xv, 69-72, fig.; 1883.

*Rhynchocephalus volaticus* n. sp., from Fla.; table of species.

North American Conopidæ. Transactions of the Conn. Academy:

I. *Conops*. Vol. iv, 325-342, 1 plate; 1883.

II. *Stylogaster*, *Dalmannia*, *Oncomyia*. Vol. vi, 87-94; 1884.

III. Conclusion. Vol. vi, 377-394, 1 plate; 1885.

In these three numbers are tables of genera and species, old species re-described, and several new; practically a monograph of the family.

The Screw-worm Fly. Psyche, 1883, 132.

Notes on *Chrysomyia macclaria* FAB.

Eine Merkwürdige neue Syrphiden-Gattung. Wiener Entom. Zeitung, iii, 185, 186, 1884.

*Eucratomyia pergandei* n. g. and sp., from D. C.

Note on the Genus *Merapioidis* Bigot. Wiener Entom. Zeitung, iii, 282, 1884.

Dipterous Larvæ from the Western Alkaline Lakes, and their Use as Food. Transactions Conn. Academy, vi, 83-86; July, 1884.

*Ephydra californica* PACK., described, larva figured.

- On the Collection and Preservation of Diptera. Psyche, 1884, 130-132.
- Notes on Injurious Insects. Entomological Laboratory, Michigan Agricultural College, 1884. By Professor A. J. Cook.
- Description of *Scopolia sequax* n. sp., by Williston; here referred to *Phorichata*.
- Article Diptera in Standard Natural History, Vol. v, pp. 403-433, many figs., 1884 (Later editions designated as Riverside Natural History).
- General treatment; no new species.
- On the North American Asilidæ. II. Transactions of the American Entomological Society, XII, 53-76, 1885.
- 17 new species.
- Exorista infesta* n. sp. In 14th Report State Entomol. of Ill., for the year 1884 (pub. 1885), p. 65.
- Herein referred to *Winthemia quadripustulata*.
- On the Classification of North American Diptera. I. Bull. Brooklyn Entom. Society, VII, 129-131; Feb., 1885.
- II. Entomologica Americana, I, 10-13; Apr., 1885.
- III. Entomologica Americana, I, 114-118 and 152-155; 1885.
- Part II contains *Apatolestes comastes* n. g. and sp.; Part III contains *Scoliopelta luteipes* n. g. and sp.
- Notes and Descriptions of North American Xylophagidæ and Stratiomyidæ. Canadian Entomologist, XVII, 121-128; July, 1885.
- Nine new species.
- Ueber einige Leptiden-Characteren. Entomol. Nachrichten, LXVI, 400, 1885.
- On two Interesting New Genera of Leptidæ. Entomologica Americana, II, 105-108, 1886.
- Agnotomyia* (n. g.) *elongata* SAY and *Arthroceras pollinosum* n. g. and sp. The first genus is a synonym of *Dialysis*.
- Ueber *Mallota cimbiciformis*. Berliner Entom. Zeitschr., XXVI, 171, 172, 1886.
- Notes on synonymy and dimorphism.
- Dipterological Notes and Descriptions. Trans. Amer. Entom. Soc., XIII, 287-307, 1886.
- 21 new species; many notes on others.
- Synopsis of the North American Syrphidæ. Bulletin of the U. S. Natl. Museum, No. 31, Washington, 1886. Pp. xxx and 335, 12 plates.
- Contains descriptions of all the North American genera and species known at that time; many new. Indispensable for the family.
- North American Tachinidæ. *Gonia*. Canadian Entomologist, XIX, 6-12; Jan., 1887.
- G. scnilis*, *porca*, *exul*, and *sequax*; some of these are perhaps synonyms of *capitata*, as indicated by Coquillett.
- Table of the Families of Diptera. Kansas Academy of Science, X, 122-128, 1887.
- Notes and descriptions of North American Tabanidæ. Kans. Acad. Sci., X, 129-142, 1887.
- 14 new species; tables of species, supplementary to Osten Sacken.
- An Australian Parasite of *Icerya purchasi*. Insect Life, I, 21, 22, fig.; July, 1888.

- Lestophonus iceryæ* n. g. and sp.; see also same volume, pp. 144, 199, and 328-331, figs.
- Hilarimorpha and Apiocera. Psyche, Sept.-Oct., 1888, 99-102.
- Hilarimorpha mikii* n. sp.; discussion of family position.
- Synopsis of the Families and Genera of North American Diptera. New Haven, Conn., 1888; J. T. Hathaway.
- A pamphlet of 84 pp., with tables of families and genera, and bibliography; on pp. 81 and 82 are reproduced the original descriptions of *Exoptata*, *Enoplempis*, *Megacyttarus* and *Hypocharassus*.
- Leucopis bellula* n. sp. Insect Life, 1, 258-259; Feb., 1889.
- Notes on Asilidæ. Psyche; Aug.-Dec., 1889, pp. 255-259.
- Atonia* n. g.; table of genera around *Atomosia*.
- The Horn-fly. Entomologica Americana, v, 180, 181; Sept., 1889.
- Hæmatobia cornicola* n. sp., a syn. of *H. serrata*.
- A New Cattle Pest. American Naturalist, 1889 (sep.), 7 pp. and plate.
- Notes on the preceding species.
- The Dipterous Parasites of North American Butterflies. In Scudder's "Butterflies of the Eastern United States and Canada." Cambridge, 1889.
- Six new species; *Acroglossa* n. g.
- Note on Syrphids Reared from Cactus. Entom. News, II, 162; Oct., 1891.
- Copestylum marginatum* and *Volucella fasciata* so reared.
- Biologia Centrali-Americana. Diptera, Vol. III, 89 pp., 2 col. plates. London; Dec., 1891-May, 1892. In August, 1903, three more pages of text were added to complete the volume, along with index, etc.
- Vol. I. Supplement, pp. 217-332, 3 col. plates. London; Dec., 1900-Dec., 1901.
- Vol. III contains the Syrphidæ, Conopidæ, Pipunculidæ and Platypezidæ; the supplement to Vol. I contains additions to most of the families of Orthorhapha. There are many new species, and a few genera.
- A New Species of Criorhina, with notes on Synonymy. Entomological News, III, 145, 146; June, 1892.
- C. coquilletti* n. sp.; notes on syn. of ten species of Syrphidæ.
- On the Apioceridæ and their Allies. Kans. Univ. Quarterly, I, 101-118, 2 plates and text figs.; Jan., 1893.
- An important paper on anatomy; no new species.
- Diptera Brasiliæna. III. Kans. Univ. Quarterly, I, 119-122; Jan., 1893.
- Contains a discussion of *Stylogaster* and its species.
- Notes on Tachinidæ. Psyche, VI, 409, 410; March, 1893; also further notes. p. 492.
- Syn. of *Atropharista*; see Townsend, p. 461 and 492.
- North American Psychodidæ. Entomological News, IV, 113, 114; Apr., 1893.
- Psychoda albipuncta* and *slossoni* n. spp.
- Belvosia: A Study. Insect Life, v, 238-240, 1 plate; April, 1893.
- A discussion of the variability of generic and specific characters.
- Diptera of Death Valley, Cal. In "North American Fauna" (Bull. of Division of Ornithology and Mammalogy, Dept. of Agriculture), No. 7, part 2, pp. 253-259. Washington, May 31, 1893.
- 16 new species; *Melanodexia* and *Pelomyia* n. gen.

- A List of Species of Diptera from San Domingo. Canadian Entomologist, xxv, 170, 171; July, 1893.  
43 species listed; none named as new.
- New or Little Known Diptera. Kansas Univ. Quarterly, II, 59-70; Oct., 1893.  
Many new species, largely from state of Washington; *Orthoneuromyia* n. g. (syn. of *Psilocurus*).
- Description of a New Species of Chlorops Reared from Galls on Muhlenbergia. Bull. Ohio Exp. Sta., Technical series, vol. I, No. 3, pp. 156, 157; 1893.  
*Chlorops ingrata*.
- Bibio tristis n. sp. In Kellogg's Insect Notes, Trans. Kans. Acad. Sci., XIII, 113, 1893.
- Notes on the Habits of Rhychocephalus sackenii Will. Entomological News, v, 47; Feb., 1894.
- On the Genus Erax. Entomological News, v, 136, 137; May, 1894.  
Invalidity of *Efferia* Coq., etc.
- The American Genera of Sapromyzidæ. Entomological News, v, 196, 197; June, 1894.  
Table of genera; notes on distribution of species.
- On the Genus Dolichomyia, with Description of a New Species from Colorado. Kans. Univ. Quarterly, III, 41-43; July, 1894.  
*D. gracilis*; notes on other genera of Bombyliidæ.
- A New Tachinid with Remarkable Antennæ. Entomological News, VI, 29-32, figs.; Jan., 1895.  
*Dichocera lyrata* n. g. and sp., from Idaho.
- On the Rhopalomeridæ. Psyche, VII, 183-187; Jan., 1895.  
The material is all South American.
- Rhopalomera xanthops n. sp. Psyche, VII, 213; March, 1895.  
From Yucatan.
- Dialysis and Triptotricha. Kansas Univ. Quarterly, III, 263-266, fig.; April, 1895.  
*Dialysis aldrichii* n. sp., from Idaho.
- New Bombyliidæ. Kans. Univ. Quart., III, 267-269; Apr., 1895.  
*Desmatoneura argentifrons* and *Desmatomyia anomala*, new genera and species.
- Two Remarkable New Genera of Diptera. Kans. Univ. Quart., IV, 107-109; Oct., 1895.  
*Townsendia* and *Arthrostylum*; the latter a syn. of *Phcneus* WALK.
- Bibliography of North American Diptera. Kans. Univ. Quart., IV, 129-144 and 199-204; Jan. and Apr., 1896.
- Fissicorn Tachinidæ. Kans. Univ. Quart., IV, 171, 172, fig.; Jan., 1896.  
Notes on *Dichocera* and others.
- A New Genus of Hippoboscidæ. Entomological News, VII, 184, 185; June, 1896.  
*Brachypteromyia femorata* n. g. and sp., from Wyoming; in a note at end, 12 genera not previously reported from North America are mentioned.
- Manual of North American Diptera. Second edition, rewritten and enlarged. New Haven, Conn., 1896; James T. Hathaway. Pp. liv. and 167.

Anatomy of Diptera, bibliography, table of families, definition of each family, and table of North American genera for each family except Tachinidæ and Dexiïdæ. A few generic names are altered, or new ones proposed, on account of preoccupation. I have omitted all references to this work, except where names are changed, because I assume that all workers with Diptera are familiar with it. To the beginner it is indispensable, and to the advanced worker a great convenience.

On the Diptera of St. Vincent. Transactions of the Entomological Society of London, 1896, pt. 3, pp. 253-446, 7 plates.

Many new genera and species from this island, which is far south in the Lesser Antilles.

Diptera Brasiliana. iv. Kans. Univ. Quarterly, vi, 1-12; Jan., 1897.

Notes on *Lipochata*; some new genera and species from Grenada, W. I.

On the Genus *Thlipsogaster* Rond. Psyche, March, 1899, 331, 332.

The American species are not of this genus.

Notes and Descriptions of Mydaidæ. Kansas Acad. Science, 1897, 53-58.

*Mydas quadrilineatus* and *Ecthypus townsendi*, new North American species; a few South American species.

*Note.*—An admirable feature of Williston's work, which does not show fairly in the above list, is the attention he has given to identifying and redescribing the species of other writers. In all his longer papers this is a prominent part, frequently occupying as much space as the new descriptions, and requiring more time than they in preparation.

#### Woodworth, Chas. W.

*Gonia senilis* Will., Psyche, v, 43, 1889.

#### Zetterstedt, J. W.

Diptera Scandinaviæ, disposita et descripta. Lundæ, 1842-1860.

While this work treats only of Scandinavian species, there are many which are circum-polar. Zetterstedt's earlier work, *Insecta Lapponica*, is mostly reproduced in this.





# CATALOGUE

## TIPULIDÆ.

OSTEN SACKEN, Studies in Tipulidæ, I (longipalpi), Berl. Ent. Zeitsch., xxx, 153-188, 1886; II (brevipalpi), loc. cit., xxxi, 163-242, 1887. These papers are crowded with information regarding the genera of Tipulidæ; a few species are mentioned.

SNODGRASS, Jour. N. Y. Ent. Soc., xi, 177-188, 2 pl., 1903; on the structure of the ovipositor, etc., in a number of species.

## GERANOMYIA.

HALIDAY, Ent. Mag., i, 54, 1833.

MACQUART, Dipt. Exot., i, 1, 62, 1838 (*Aporosa*).

PHILIPPI, Verh. Zool.-Bot. Ges., 1865, 597, pl. xxxiii, f. 1 (*Plettusa*).

WESTWOOD, Trans. Ent. Soc. Lond., 1881, pl. xix, f. 10.

OSTEN SACKEN, Mon. N. A. Dipt., iv, 78, 1869; Stud. Tipul., ii, 173, 1887.

**canadensis** WESTWOOD, Annales Soc. Ent. France, 1835, 683 (*Limnobiahynchus*).—Canada.

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 207 (*communis*); Mon. N. A. Dipt., iv, 80.—D. C., Wisconsin R., Ill. Cat. gives Cal.

HART, Bull. Ill. State Lab. N. H., iv, 200, oc. in Ill. and note on habits. Canada to Fla. Cal.—O. S. Cat.

**distincta** DOANE, Jour. N. Y. Ent. Soc., viii, 186, pl. vii, f. 13.—New Bedford, Mass.

**diversa** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 207; Mon. N. A. Dipt., iv, 80.—Trenton Falls, N. Y.

N. J.—Smith Cat.

**intermedia** WALKER, List, i, 47 (*Limnobia*).—Jamaica.

**mexicana** BELLARDI, Saggio, App., 4 (*Aporosa*).—Mex.

**pallida** WILLISTON, Trans. Ent. Soc. Lond., 1896, 284, pl. ix, f. 53.—St. Vincent, W. I.

**rostrata** SAY, Jour. Acad. Sci. Phil., iii, 22; Compl. Works, ii, 47 (*Limnobia*).—Pa. and Md.

WIEDEMANN, Auss. Zw., i, 35 (*Limnobia*).

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 206; Mon. N. A. Dipt., iv, 79.—D. C., N. Y., Mass., Ill., Canada; perhaps Cuba.

St. Vincent, W. I.—Will.; Ill.—Hart; N. J.—Smith Cat.

**rufescens** LOEW, Linnæa Ent., v, 396, pl. ii, f. 9-12 (*Aporosa*).—Porto Rico. Roeder, Stett. Ent. Zeit., 1885, 339, note on male from same locality.

**virescens** LOEW, Linnæa Ent., v, 396 (*Aporosa*).—St. Thomas.

## RHIPIDIA.

MEIGEN, Syst. Besch., i, 153, 1818.

SCHINER, Fauna Austr., ii, 564, 1864.

OSTEN SACKEN, Mon. N. A. Dipt., iv, 81, 1869; iii, in Additions and Corrections, 1873; Studies in Tipul., ii, 174, note.

- bipectinata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 285, pl. IX, f. 54.—St. Vincent, W. I.
- costalis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 286, pl. IX, f. 56.—St. Vincent, W. I.
- domestica** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 208; Mon. N. A. Dipt., IV, 84, pl. III, f. 5.—D. C., N. J.; perhaps Brazil.  
Fla., Drayton Id. and Ormond—Johnson.
- fidelis** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 209; Mon. N. A. Dipt., IV, 83.—Sharon Spr., N. Y.; Ill. Canada—O. S. Cat.
- maculata** MEIGEN, Syst. Besch., I, 153, pl. V, f. 9-11.—Europe.  
MACQUART, Hist. Nat. Dipt., I, 93, pl. II, f. I.  
STAEGER, Dipt. Dan., 27.  
ZETTERSTEDT, Dipt. Scand., X, 4009.  
SCHINER, Fauna Austr., II, 564.  
OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 208; Mon. N. A. Dipt., IV, 82.—Huds. Bay Terr.; Me. to Ill.  
Sitka—Bergroth.
- subjectinata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 287, pl. IX, f. 57, and pl. X, f. 57a; Biologia, Dipt., Suppl., 226, oc.—St. Vincent, W. I., and Tabasco, Mex.
- unipectinata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 286, pl. IX, f. 55.—St. Vincent, W. I.

#### DISCOBOLA.

- OSTEN SACKEN, Proc. Phil. Ent. Soc., 1865, 226; Mon. N. A. Dipt., IV, 97 (*Trochobola*, on account of supposed preoccupation of *Discoboli*); Stud. Tipul., II, 178; notes; Berl. Ent. Zeitsch., XXXIX, 256. "There is a group of fishes called *Discoboli* Cuv.;" this however, would not constitute preoccupation of the name, hence I use the original form, following Kertész.
- argus** SAY, Long's Exped., App., 358; Compl. Works, I, 243 (*Limnobia*).—N. W. Terr.  
WIEDEMANN, Auss. Zw., I, 33 (*Limnobia*).  
OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 217 (*Limnobia*); Mon. N. A. Dipt., IV, 98, pl. I, f. 4 (*Trochobola*).—Mass., Me., N. Y., N. J., Nova Scotia.  
White Mts., N. H.—Slosson.
- elegans** DOANE, Jour. N. Y. Ent. Soc., VIII, 186, pl. VII, f. 14.—Tokeland, Wash.; Collins, Ida.

#### DICRANOMYIA.

- STEPHENS, Cat. Brit. Ins., 1829
- OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859; Mon. N. A. Dipt., IV, 53, 1869; Stud. Tipul., II, 172, 1887.
- badia** WALKER, List, I, 46 (*Limnobia*).—Nova Scotia.  
OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 210 (*humidicola*); Mon. N. A. Dipt., IV, 72, pl. III, f. 2.—D. C., N. Y., Conn.; Cal. in Cat.
- brevivena** OSTEN SACKEN, Mon. N. A. Dipt., IV, 66.—N. Y., D. C.
- brunnea** DOANE, Jour. N. Y. Ent. Soc., VIII, 184, pl. VII, f. 6.—Nantucket, Mass.
- chorea** MEIGEN, Syst. Besch., I, 134 (*Limnobia*).—Europe.  
SCHUMMEL, Beitr. z. Ent., I, 126 (id.).  
SCHINER, Fauna Austr., II, 569 (id.).  
BERGROTH, Wien. Ent. Zeit., VII, 194, oc. in Br. Col. (High Cascades).

- cinerea* DOANE, Jour. N. Y. Ent. Soc., VIII, 182, pl. VII, f. 2.—Pullman, Wash.
- citrina* DOANE, Jour. N. Y. Ent. Soc., VIII, 183, pl. VII, f. 3.—Wawawai, Wash.
- distans* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 211; Mon. N. A. Dipt., IV, 67.—Fla.
- diversa* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 212; Mon. N. A. Dipt., IV, 64.—D. C.
- duplicata* DOANE, Jour. N. Y. Ent. Soc., VIII, 185, pl. VII, f. 12.—Tokeland, Wash.
- floridana* OSTEN SACKEN, Mon. N. A. Dipt., IV, 67.—Fla.
- fulva* DOANE, Jour. N. Y. Ent. Soc., VIII, 185, pl. VII, f. 9.—Pullman, Wash.
- gladiator* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 212; Mon. N. A. Dipt., IV, 63, pl. III, f. 4.—D. C.
- globithorax* OSTEN SACKEN, Mon. N. A. Dipt., IV, 74.—White Mts., N. H.; D. C.
- gracilis* DOANE, Jour. N. Y. Ent. Soc., VIII, 184, pl. VII, f. 1.—Moscow, Ida.
- hæretica* OSTEN SACKEN, Mon. N. A. Dipt., IV, 70, pl. I, f. 3.—N. Y.; Ft. Resolution, Huds. Bay Terr.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- halterata* OSTEN SACKEN, Mon. N. A. Dipt., IV, 71.—Labrador.  
BERGROTH, Wien. Ent. Zeit., VII, 194, oc. at Sitka, and note on male. Alaska.—Coq.; Beulah, N. M.—Skinner.
- helva* DOANE, Jour. N. Y. Ent. Soc., VIII, 183, pl. VII, f. 4.—Col.
- immodesta* OSTEN SACKEN, Proc. Acad. Sci. Phil., 1859, 211; Mon. N. A. Dipt., IV, 62.—D. C., N. Y., Me.
- infuscata* DOANE, Jour. N. Y. Ent. Soc., VIII, 185, pl. VII, f. 11.—Collins, Ida.  
COQUILLET, Proc. Wash. Acad. Sci., II, 398, oc. in Alaska.
- isabellina* DOANE, Jour. N. Y. Ent. Soc., VIII, 183, pl. VII, f. 5.—Pa.
- liberta* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 209; Mon. N. A. Dipt., IV, 69, pl. III, f. 3.—Ala., Ga.; N. Y., D. C., Wis. Cat. gives Canada.  
N. J.—Smith Cat.
- longipennis* SCHUMMEL, Beitr. zur Ent., I, 104 (*Limnobia*).—Europe.  
OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1861, 287 (*immemor*); Mon. N. A. Dipt., IV, 61, pl. I, f. 1.—N. Y. Cat. gives Mass. and Quebec.
- marmorata* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1861, 288; Mon. N. A. Dipt., IV, 77.—Cal. West. Dipt., 197, note.
- moniliformis* DOANE, Jour. N. Y. Ent. Soc., VIII, 184, pl. VII, f. 8.—Col., Long Id., Nantucket.
- morioides* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 212 (*morio*, prec.); Mon. N. A. Dipt., IV, 73.—Trenton Falls, N. Y.  
N. J.—Smith Cat.
- ochracea* DOANE, Jour. N. Y. Ent. Soc., VIII, 182, pl. VII, f. 1.—Moscow, Ida.
- pupipennis* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 211; Mon. N. A. Dipt., IV, 73, pl. I, f. 2.—D. C. Cat. gives N. Y.  
VERRALL, Ent. Mo. Mag., XXIII, 158, says this is the same as the European *pilipennis* EGGER.  
OSTEN SACKEN, Berl. Ent. Zeitsch., XXXIX, 254, should be compared with the European species before dropping name.  
N. J.—Smith Cat.
- pudica* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 212; Mon. N. A. Dipt., IV, 64.—Ill.  
White Mts., N. H.—Slosson.
- rara* OSTEN SACKEN, Mon. N. A. Dipt., IV, 75.—N. Y.  
N. J.—Smith Cat.
- rostrifera* OSTEN SACKEN, Mon. N. A. Dipt., IV, 65.—N. Y.
- simulans* WALKER, List, I, 45 (*Limnobia*).—Martin Falls, Canada.

- OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 213 (*defuncta*); Mon. N. A. Dipt., iv, 76 (id.); Cat. 24, and note 26. [Synonymy Mon., iv, 41.]—D. C., N. Y., Me., Canada. Cat. adds Cal.  
 N. J.—Smith Cat. Beulah, N. M.—Skinner.
- stigmata* DOANE, Jour. N. Y. Ent. Soc., VIII, 185, pl. VII, f. 10.—Palo Alto, Cal.
- stulta* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 210; Mon. N. A. Dipt., iv, 68.—Trenton Falls, N. Y.; Canada.  
 N. J.—Smith Cat.
- venusta* BERGROTH, Wien. Ent. Zeit., VII, 193.—Sitka.  
 Yakutat, Alaska.—Coq.
- vulgata* BERGROTH, Wien. Ent. Zeit., VII, 194.—Sitka.

## LIMNOBIA.

- MEIGEN, Syst. Besch., I, 116, 1818.
- OSTEN SACKEN, Mon. N. A. Dipt., iv, 84, 1869; Stud. Tipul., II, 177, 1887.
- borealis* DOANE, Jour. N. Y. Ent. Soc., VIII, 187, pl. VII, f. 15 (*Dicranoptycha*; corrected by Doane *in litt.*).—Unalaska, Alaska.
- californica* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1861, 288; Mon. N. A. Dipt., iv, 96.—Cal.
- cinctipes* SAY, Jour. Acad. Sci. Phil., 1859, 214; Compl. Works, II, 47.—Mo.  
 WIEDEMANN, Auss. Zw., I, 32.  
 OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 214; Mon. N. A. Dipt., iv, 88.—Mass., D. C., Ill.  
 N. J.—Smith Cat.; Montreal.—Chagnon; Chatham, Mich.—Pettit; Wash.—Will., K. U. Quart., II, 61.
- concinna* WILLISTON, K. U. Quart., II, 60.—Wash.
- hudsonica* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1861, 289; Osten Sacken, Mon. N. A. Dipt., iv, 91.—Great Slave Lake, Hudson's Bay Terr.
- ignobilis* WALKER, Dipt. Saund., 437.—N. A.  
 OSTEN SACKEN, Mon. N. A. Dipt., iv, 41, 327; Cat., 33, notes; desc. unrecognizable.
- immatura* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 214; Mon. N. A. Dipt., iv, 89.—D. C., Wis., Me.  
 N. J.—Smith Cat.
- indigena* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 215; Mon. N. A. Dipt., iv, 94, pl. III, f. 7.—Maine; Upper Wis. R.; D. C.; N. Y. Cat. gives Col. and Canada.
- insularis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 287, pl. x, f. 58.—St. Vincent, W. I.
- livida* SAY, Jour. Acad. Sci. Phil., VI, 151; Compl. Works, II, 349.—Mex.
- modesta* MEIGEN, Syst. Besch., I, 134.—Europe.  
 SCHUMMEL, Beitr. zur Ent., I, 124.  
 STAEGER, Kröyer's Tidsskr., III, 51 (*Glochina autumnalis*).  
 SCHINER, Fauna Austr., II, 570.  
 LUNDBECK, Dipt. Groenl., I, 269, oc. in Greenland; II, 313, note.
- parietina* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1861, 289; Mon. N. A. Dipt., iv, 93.—Trenton Falls, N. Y. Cat. gives White Mts., N. H.
- sciophila* OSTEN SACKEN, West. Dipt., 197.—Marin and Sonoma Cos., Cal.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 398, oc. in Alaska and Col.  
 HOWARD, Proc. Wash. Acad. Sci., II, 559, note on habits.
- sociabilis* OSTEN SACKEN, Mon. N. A. Dipt., iv, 95.—Ill.  
 N. J.—Smith Cat.

- solitaria** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 215; Mon. N. A. Dipt., iv, 90, pl. III, f. 6.—N. Y.; White Mts., N. H.; Me.; N. W. part of Huds. Bay Terr.
- stupens** WALKER, Trans. Ent. Soc., v, 333.—Mex.  
O. S. Cat., 33, note on position.
- triozellata** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 216; Mon. N. A. Dipt., iv, 92.—D. C.; Trenton Falls, N. Y.; Upper Wis. R.  
N. J.—Smith Cat.; Beulah, N. M.—Skinner.
- tripunctata** FABRICIUS, Spec. Ins., II, 405; Ent. Syst., iv, 241; Syst. Antl., 31 (all *Tipula*).—Europe.  
GMELIN, Syst. Nat., v, 2817 (*Tipula*).  
MEIGEN, Syst. Besch., I, 138.  
SCHINER, Fauna Austr., II, 568.  
BERGROTH, Wiener Ent. Zeit., VII, 239, oc. in British Columbia (*Limonia*).
- tristigma** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 216; Mon. N. A. Dipt., iv, 94.—Ill., near Chicago.  
N. J.—Smith Cat.
- turpis** WALKER, Dipt. Saund., 434.—Canada.  
OSTEN SACKEN, Mon. N. A. Dipt., iv, 41, 327; Cat. 33: original is unrecognizable, erroneous, and preoccupied!

#### TOXORHINA.

- LOEW, Linnæa Ent., v, 400, 1851.  
OSTEN SACKEN, Mon. N. A. Dipt., iv, 109, 1869.
- fragilis** LOEW, Linn. Ent., v, 401, pl. II, f. 16-18.—Porto Rico. Also reported from Porto Rico by Roeder.
- magna** OSTEN SACKEN, Proc. Phil. Ent. Soc., 1865, 232; Mon. N. A. Dipt., iv, 114.—N. J.
- muliebris** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1865, 233; Mon. N. A. Dipt., iv, 115; III, App.—Princeton, Mass. Cat. adds N. Y.

#### RHAMPHIDIA.

- MEIGEN, Syst. Besch., VI, 281, 1830.  
ST. FARGEAU, Encycl. Méth., X, 585, 1825 (*Leptorhina*); index, 831 (*Megarhina*).  
STEPHENS, Cat., II, 243, 1829 (*Leptorhina*).  
SCHINER, Fauna Austr., II, 558, 1864.  
OSTEN SACKEN, Mon. N. A. Dipt., iv, 103, 1869; Stud. Tipul., II, 183, 1887, notes.
- albitarsis** OSTEN SACKEN, Berl. Ent. Zeitsch., XXXI, 184, 1887.—Porto Rico.  
WILLISTON, Dipt. St. Vincent, 288, pl. X, f. 59, oc. in St. Vincent.
- flavipes** MACQUART, Dipt. Exot., Suppl., v, 17, pl. I, f. 4.—Baltimore.  
WALKER, Dipt. Saund., 435 (*promincus*).—U. S. [O. S.]  
OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 222, 1859 (*brevirostris*); Mon. N. Dipt., iv, 105.—D. C.; N. Y.; White Mts., N. H.; Wis.; Ill.; S. C.  
N. J.—Smith Cat.

#### ELEPHANTOMYIA.

- OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 220, 1859; Mon. N. A. Dipt., iv, 106, 1869; Stud. Tipul., II, 184, 1887, notes.
- longirostris** WILLISTON, Trans. Ent. Soc. Lond., 1896, 288.—St. Vincent, W. I.

**westwoodi** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 221 (*Limnobia-rhynchus canadensis* WESTWOOD, mistaken reference); Mon. N. A. Dipt., iv, 109, pl. I, f. 5 and III, 8.—Trenton Falls, N. Y. Cat. gives "Quebec to Fla."

#### DIOTREPHA.

OSTEN SACKEN, Cat., 1878, 220.

WILLISTON, Trans. Ent. Soc. Lond., 1896, 291.

**mirabilis** OSTEN SACKEN, Cat., 220.—Ga., Tex., Cuba?

? WILLISTON, Trans. Ent. Soc. Lond., 1896, 291, pl. x, f. 65, doubtfully identified from St. Vincent, W. I.

#### ELLIPTERA.

SCHINER, Wien. Ent. Monatsch., VII, 222, 1863; Fauna Austr., II, 559, 1864.

OSTEN SACKEN, Mon. N. A. Dipt., VI, 123, 1869.

MIK, Wien. Ent. Zeit., v, 337, pl. VI, full desc. of early stages of a European species; larva in running water.

**clausa** OSTEN SACKEN, West. Dipt., 197.—Yosemite Valley, Cal.

#### ORIMARGA.

OSTEN SACKEN, Mon. N. A. Dipt., IV, 122, 1869.

**arizonensis** COQUILLET, Proc. U. S. N. M., XXV, 83.—Yavapai Co., Arizona.

#### ATARBA.

OSTEN SACKEN, Mon. N. A. Dipt., IV, 127, 1869.

**picticornis** OSTEN SACKEN, Mon. N. A. Dipt., IV, 128, pl. I, f. 13.—Del.; D. C.? Cat. gives D. C. and Trenton Falls, N. Y.

N. J.—Smith Cat.

**pleuralis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 289, pl. x, f. 61.—St. Vincent, W. I.

COQUILLET, Proc. U. S. N. M., XXII, oc. in Porto Rico.

**puella** WILLISTON, Trans. Ent. Soc. Lond., 1896, 288, pl. x, f. 60.—St. Vincent, W. I.

#### DICRANOPTYCHA.

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 217; Mon. N. A. Dipt., IV, 116, 1869.

**borealis** DOANE, see *Limnobia*.

**germana** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 217; Mon. N. A. Dipt., IV, 117.—Trenton Falls, N. Y.

N. J.—Smith Cat.

**nigripes** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 218; Mon. N. A. Dipt., IV, 119, pl. III, f. 11.—Dalton, Ga.

**sobrina** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 218 (*sobrina* and *sororcula*); Mon. N. A. Dipt., IV, 118, pl. I, f. 8 and III, 12.—D. C.

#### TEUCHOLABIS.

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 222; Mon. N. A. Dipt., IV, 129, 1869.

**annulata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 290, pl. x, f. 63.—St. Vincent, W. I.

WILLISTON, Biologia, Dipt., Suppl., 225, oc. in Tabasco, Mex., and note.



- chalybeiventris** LOEW, Wien. Ent. Monatschr., 1861, 33 (*Rhamphidia*).—Cuba.  
OSTEN SACKEN, Mon. N. A. Dipt., iv, 132, note.  
WILLISTON, Biologia, Dipt., Suppl., 226, oc. in Morelos, Mex.
- complexa** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 223; Mon. N. A. Dipt., iv, 132.—D. C.; Trenton Falls, N. Y.; Ill.; Ga.?  
JOHNSON, Ent. News, xi, 324, reared from larvæ under bark of decayed oak tree in N. J.  
WILLISTON, Trans. Ent. Soc. Lond., 1896, 289, pl. x, f. 62, oc. in St. Vincent, W. I.
- gracilis** OSTEN SACKEN, Biologia, Dipt., i, 7.—Orizaba, Mex.
- molesta** OSTEN SACKEN, Biologia, Dipt., i, 6.—Orizaba, Mex.; may be the same as *Limnobia morionella* SCHINER, Novara, 47, from S. A., which is a *Teucholabis*.—O. S.

## ANTOCHA.

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 219; Mon. N. A. Dipt., iv, 125, 1869; Stud. Tipul., ii, 187, 1887, notes; Berl. Ent. Zeitsch., xxxvi, 407, 1891.

SCHINER, Fauna Austr., ii, 558, 1864.

MIK, Wien. Ent. Zeit., 1883, 198 (*Orimargula*) [O. S.].

- opalizans** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 220 (*opalizans* and *saxicola*); Mon. N. A. Dipt., iv, 126, pl. i, f. 11, and iii, f. 10.—Dalton, Ga.; D. C.; N. Y.; Montreal; Ill.; Huds. Bay Terr.; Europe.  
?MEIGEN, Syst. Besch., vi, 279 (*Limnobia vitripennis*) [O. S., Stud. Tipul., with a doubt].  
N. J.—Smith Cat.

## CLADURA.

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 229; Mon. N. A. Dipt., iv, 187, 1869.

- flavoferruginea** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 229; Mon. N. A. Dipt., iv, 188, pl. iv, f. 22.—D. C.

- indivisa** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1861, 291; Mon. N. A. Dipt., iv, 189 (and wing, p. 34).—Trenton Falls, N. Y.; Mass.

## CRYPTOLABIS.

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 224, 1859; Mon. N. A. Dipt., iv, 185, 1869.

- bisinuata** DOANE, Jour. N. Y. Ent. Soc., viii, 189, pl. vii, f. 22.—Spokane, Wash.

- paradoxa** OSTEN SACKEN, Proc. Acad. Nat. Sci., 1859, 225; Mon. N. A. Dipt., iv, 186, pl. ii, f. 11 and iii, f. 13.—White Sulphur Spr., Va.

## RHYPHOLOPHUS.

KOLENATI, Wien. Ent. Monatschr., iv, 393, 1860.

SCHINER, Wien. Ent. Monatschr., vii, 221, 1863 (*Dasyptera*): Fauna Austr., ii, 536, 537, 1864 (*Rhypholophus* and *Dasyptera*).

OSTEN SACKEN, Mon. N. A. Dipt., iv, 141, 1869; Stud. Tipul., ii, 192, 1887.

- affinis** LUNDBECK, Dipt. Groenl., i, 266.—Greenland.

COQUILLET, Proc. Wash. Acad. Sci., ii, 398, oc. in Alaska.

- cockerelli** COQUILLET, Psyche, Jan., 1901, 149.—N. M., high altitude.

- fascipennis** ZETTERSTEDT, Dipt. Scand., x, 3777 (*Erioptera*).—N. Norway and Greenland.

STAEGER, Groenl. Antliater, 355, oc. in Greenland.

- OSTEN SACKEN, Mon. N. A. Dipt., iv, App. 1, 328. quotes Zetterstedt; Stud. Tipul., II, 192, note.
- flaveolus* COQUILLETT, Proc. Wash. Acad. Sci., II, 398.—Orca, Alaska.
- fumatus* DOANE, Jour. N. Y. Ent. Soc., VIII, 188, pl. VII, f. 19.—Collins, Ida.
- fusiformis* DOANE, Jour. N. Y. Ent. Soc., VIII, 187, pl. VII, f. 16.—Collins, Ida.
- holotrichus* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 227 (*Erioptera*); Mon. N. A. Dipt., iv, 143.—D. C.; Cat. adds N. Y.
- innocens* OSTEN SACKEN, Mon. N. A. Dipt., iv, 142.—D. C., N. J.
- lanuginosus* DOANE, Jour. N. Y. Ent. Soc., VIII, 188, pl. VII, f. 18.—Collins, Ida.
- manicatus* DOANE, Jour. N. Y. Ent. Soc., VIII, 187, pl. VII, f. 17.—Collins, Ida.
- meigenii* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 226 (*Erioptera*); Mon. N. A. Dipt., iv, 144.—Middle States; Cat. gives U. S. and Canada.
- monticola* OSTEN SACKEN, Mon. N. A. Dipt., iv, 145.—White Mts., N. H.
- nigripilus* OSTEN SACKEN, Mon. N. A. Dipt., iv, 142.—D. C.
- nubilus* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 227 (*Erioptera*); Mon. N. A. Dipt., iv, 141, pl. I, f. 14.—D. C., N. Y.
- rubellus* OSTEN SACKEN, Mon. N. A. Dipt., iv, 144, pl. I, f. 15.—West Point, N. Y.; Del.

#### SIGMATOMERA.

- OSTEN SACKEN, Mon. N. A. Dipt., iv, 137, 1869; Stud. Tipul., II, 205, 1887.
- flavipennis* OSTEN SACKEN, Mon. N. A. Dipt., III, App.—Mex.

#### ERIOPTERA.

- MEIGEN, Illig. Mag., II, 262, 1803; Syst. Besch., I, 108, 1818.
- SCHINER, Fauna Austr., II, 541, 1864.
- OSTEN SACKEN, Mon. N. A. Dipt., iv, 146, 1869; Stud. Tipul., II, 193, 1887, notes on subgenera, etc.
- MIK, Wien. Ent. Zeit., XVII, 62, 1898, notes on larvæ.
- annulipes* WILLISTON, Trans. Ent. Soc. Lond., 1896, 294.—St. Vincent, W. I.
- armata* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 227; Mon. N. A. Dipt., iv, 160, pl. I, f. 18 and iv, f. 14.—D. C., Ill., N. Y., Wis. Cat. gives Atlantic St. and Quebec.
- N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- armillaris* OSTEN SACKEN, Mon. N. A. Dipt., iv, 158.—Trenton Falls, N. Y.; D. C.; Cat. gives Quebec.
- bipartita* OSTEN SACKEN, West. Dipt., 199; Stud. Tipul., II, 193, refers to subg. *Acyphona*.—San Francisco, Cal.
- caloptera* SAY, Jour. Acad. Sci. Phil., III, 17; Compl. Works, II, 44 (*caliptera*).—Mo.
- WIEDEMANN, Auss. Zw., I, 23 (*caloptera*).
- OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 226; Mon. N. A. Dipt., iv, 161, pl. IV, f. 15.—U. S., common; west to Col.; Quebec; Cuba.
- St. Vincent, W. I.—Will.
- chlorophylla* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 226; Mon. N. A. Dipt., iv, 157, pl. I, f. 16.—Middle States. Cat. gives Quebec.
- N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- chrysocoma* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 226; Mon. N. A. Dipt., iv, 156.—D. C., and farther north; Cat. gives Atl. St. and Quebec.
- White Mts., N. H.—Slosson.
- dulcis* OSTEN SACKEN, West. Dipt., 198.—Sierra Nevadas, Cal.
- graphica* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 227; Mon. N. A. Dipt., iv, 159.—D. C.
- Ill.—Hart.

- parva** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 227; Mon. N. A. Dipt., iv, 162.—D. C., N. J.
- septemtrionalis** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 226; Mon. N. A. Dipt., iv, 155.—Me., N. Y., D. C.  
N. J.—Smith Cat. Beulah, N. M.—Skinner.
- straminea** OSTEN SACKEN, Mon. N. A. Dipt., iv, 157.—No locality; Cat. gives Middle States.  
N. J.—Smith Cat.
- venusta** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 227; Mon. N. A. Dipt., iv, 158, pl. I, f. 17 and iv, f. 16.—Middle States, common.
- vespertina** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 226; Mon. N. A. Dipt., iv, 157, pl. iv, f. 20.—D. C., Fla., Wis. Cat. gives Quebec.  
N. J.—Smith Cat.
- villosa** OSTEN SACKEN, Proc. Acad. Nat. Sci., 1859, 229; Mon. N. A. Dipt., iv, 155.—Middle States.

**MOLOPHILUS.**

- CURTIS, Brit. Ent., 444, 1833.
- OSTEN SACKEN, Mon. N. A. Dipt., iv, 1869, 153; Stud. Tipul., II, 193, 1887
- colonus** BERGROTH, Wien. Ent. Zeit., VII, 195.—Sitka.  
Alaska—Coq. Beulah, N. M.—Skinner.
- comatus** DOANE, Jour. N. Y. Ent. Soc., VIII, 188, pl. VII, f. 20 (*Erioptera*).—Pullman and Seattle, Wash.
- falcatus** BERGROTH, Wien. Ent. Zeit., VII, 196.—Sitka.  
Alaska—Coq.
- forcipula** OSTEN SACKEN, Mon. N. A. Dipt., iv, 163; West. Dipt., 200, oc. in Cal., with a doubt.—South Orange, N. J.
- hirtipennis** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 228; Mon. N. A. Dipt., iv, 163.—N. J., D. C., Md.  
Beulah, N. M.—Skinner.
- paulus** BERGROTH, Wien. Ent. Zeit., VII, 196.—Sitka.  
Alaska—Coq.
- pubipennis** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 228; Mon. N. A. Dipt., iv, 162.—D. C.  
N. J.—Smith Cat.
- ursinus** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 228; Mon. N. A. Dipt., iv, 164; West. Dipt., 200, note.—D. C., Md.  
N. J.—Smith Cat.

**GONIOMYIA.**

- OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 229; Mon. N. A. Dipt., iv, 176, 1869, and III, 1873, Appendix; Stud. Tipul., II, 200, 1887.
- SCHINER, Fauna Austr., II, 542, 1864 (inclusive of *Empeda*).
- BELING, Verh. Zool.-Bot. Ges., 1866, 145, desc. of larva and pupa of European sp.; loc. cit., 1878, reports finding larva in sand of half-dried brook. [O. S.]
- blanda** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 231; Mon. N. A. Dipt., iv, 182, pl. IV, f. 17.—D. C., N. Y., S. C.  
N. J.—Smith Cat.
- caudata** LUNDBECK, Dipt. Groenl., I, 267.—Greenland.
- cognatella** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 230; Mon. N. A. Dipt., iv, 181, pl. IV, f. 18.—D. C.  
N. J.—Smith Cat.
- galactoptera** BERGROTH, Wien. Ent. Zeit., VII, 196.—Sitka.

- manca* OSTEN SACKEN, Mon. N. A. Dipt., iv, 178.—N. J.  
*subcinerea* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 231; Mon. N. A. Dipt., iv, 181, pl. II, f. 4.—Trenton Falls, N. Y.; D. C. Cat. gives Quebec.  
*sulphurella* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 230; Mon. N. A. Dipt., iv, 180, pl. II, f. 2.—D. C.; Trenton Falls, N. Y. Cat. gives Quebec. N. J.—Smith Cat.  
*virgata* DOANE, Jour. N. Y. Ent. Soc., VIII, 189, pl. VII, f. 21.—Tokeland, Wash.

**EMPEDA.**

- OSTEN SACKEN, Mon. N. A. Dipt., iv, 183, 1869.  
*stigmatica* OSTEN SACKEN, Mon. N. A. Dipt., iv, 184.—Trenton Falls, N. Y.

**MONGOMA.**

- WESTWOOD, Trans. Ent. Soc. Lond., 1881, 364.  
 WILLISTON, Ent. News, VII, 185, 1896, reports the genus from N. A.; Trans. Ent. Soc. Lond., 1896, 291.  
*manca* WILLISTON, Trans. Ent. Soc. Lond., 1896, 293.—St. Vincent, W. I.  
*pallida* WILLISTON, loc. cit., and pl. x, f. 67.—St. Vincent, W. I.

**PARATROPESA.**

- SCHINER, Verh. Zool.-Bot. Ges., XVI, 932, 1866; Novara, 44, 1868.  
*præusta* OSTEN SACKEN, Biologia, Dipt., I, 8.—Jalapa and Orizaba, Mex.

**HELOBIA.**

- ST. FARGEAU, Encycl. Méth., x, 585, 1825.  
 MEIGEN, Syst. Besch., VI, 282, 1830 (*Symplecta*).  
 SCHINER, Fauna Austr., II, 545, 1864 (id.).  
 PHILIPPI, Verh. Zool.-Bot. Ges., 1865, 615 (*Idioncura*).  
 OSTEN SACKEN, Mon. N. A. Dipt., iv, 170, 1869 (*Symplecta*); Stud. Tipul., II, 197, 1887, notes.  
 MIK, Wien. Ent. Zeit., 1886, 318 (*Symplectomorpha*) [O. S.].  
*punctipennis* MEIGEN, Syst. Besch., I, 147 (*Limnobia*); VI, 283 (*Symplecta*); Klassif., 57, 1804 (*Limonia hybrida*).—Europe.  
 MACQUART, Hist. Nat. Dipt., I, 109.  
 STAEGER, Dipt. Dan., 39, 1840 (*Symplecta*).  
 SCHINER, Fauna Austr., II, 543 (id.).  
 WALKER, List, I, 48 (*Limnobia cana*).—Martin Falls, Canada. [O. S.]  
 OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 228; Mon. N. A. Dipt., IV, 171, pl. I, f. 20, and IV, f. 21 (*Symplecta*).—N. A. generally; D. C., Ala., N. Y., Canada, Ill.  
 HART, Bull. Ill. State Lab. N. H., IV, 199, desc. and figs. of larva, which lives in sand of river bank.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 399, oc. in Alaska.  
 Common in Idaho and Washington.—J. M. A.  
*Note*.—I have not seen the description of *hybrida*, and Meigen himself abandoned it. There may be some reason, unknown to me, for not restoring it as the first name of the species.

**CHIONEA.**

- DALMAN, Kongl. Vetensk. Ak. Handl., 1816, 102, pl. II, f. 2.  
 OSTEN SACKEN, Mon. N. A. Dipt., iv, 168, 1869; Stud. Tipul., II, 106.

SCHINER, Fauna Austr., II, 573, 1864.

**nivicola** DOANE, Jour. N. Y. Ent. Soc., VIII, 185.—Pullman, Wash., on snow.

**scita** WALKER, List, I, 82.—N. A.

**valga** HARRIS, Ins. Inj. Veg., 3d ed., 601, f. 260.—Mass.

WALKER, List, I, 82 (*aspersa*).—Martin Falls, Can. [O. S.].

LUGGER, 2d. Rept. Ent. Minn., 1896, 230, pl. XVI, notes on habits; figures both sexes; oc. in Minn.

### TRIMICRA.

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 290, 1861; Mon. N. A. Dipt., IV, 165, 1869.

VAN DER WULP, Ann. Soc. Ent. Belg., XXXVII, 1893, 499, notes on, and fig. of an abnormal specimen without discal cell.

**anomala** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1861, 290; Mon. N. A. Dipt., IV, 167, pl. II, f. 1; West. Dipt., 200, note.—D. C.; New Rochelle, N. Y.; Newport, R. I. Also in Cal. and Oaxaca, Mex.—O. S. N. J.—Smith Cat.

### GNOPHOMYIA.

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 223; Mon. N. A. Dipt., IV, 172, 1869; Stud. Tipul., II, 198, 1887.

SCHINER, Fauna Austr., II, 535, 1864.

**ferruginea** WILLISTON, Biologia, Dipt., Suppl., 226.—Tabasco, Mex.

**luctuosa** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 224; Mon. N. A. Dipt., IV, 174.—Fla.

WALKER, Trans. Ent. Soc. Lond., v, pt. 7, 66 (*Limnobia nigricola*).—U. S. [O. S.].

**tristissima** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 224; Mon. N. A. Dipt., IV, 175, pl. II, f. 5 and IV, f. 19.—D. C., N. Y., Va., Upper Wis. R. Cat. gives Atlantic States and Canada. N. J.—Smith Cat.; White Mts., N. H.—Slosson.

### POLYMERA.

WIEDEMANN, Dipt. Exot., 40, 1821; Auss. Zw., I, 57, 1828.

OSTEN SACKEN, Mon. N. A. Dipt., IV, 335, 1869 and III, Appendix, 1873; Stud. Tipul., II, 215, 1887.

WILLISTON, Ent. News, VII, 185, 1896, reports the genus from N. A.

**albitarsis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 296, pl. x, f. 71.—St. Vincent, W. I.

### PHYLLOLABIS.

OSTEN SACKEN, West. Dipt., 202, 1877; Stud. Tipul., II, 216, 1887.

**claviger** OSTEN SACKEN, West. Dipt., 203.—San Bernardino, Cal.

**encausta** OSTEN SACKEN, West. Dipt., 204.—Marin Co. and San Mateo, Cal.

**obscura** DOANE, Jour. N. Y. Ent. Soc., VIII, 192, pl. VIII, f. 7.—Pullman, Wash.

### ULOMORPHA.

OSTEN SACKEN, Mon. N. A. Dipt., IV, 232, 1869.

**pilosella** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 342 (*Limnophila*); Mon. N. A. Dipt., IV, 233.—Trenton Falls, N. Y.

ALDRICH, 21st Rept. Geol. Ind., 1898, 188.—Oc. in cavern in Ind. N. J.—Smith Cat.

## TRICHOCCERA.

- MEIGEN, Illig. Mag., II, 262, 1803; Syst. Besch., I, 211, 1818.  
 SCHINER, Fauna Austr., II, 546, 1864.  
 OSTEN SACKEN, Mon. N. A. Dipt., IV, 233; Stud. Tipul., II, 217, 1887, notes on habits, etc.
- annulata** MEIGEN, Syst. Besch., I, 215.—Europe.  
 SCHINER, Fauna Austr., II, 548.  
 BERGROTH, Wien. Ent. Zeit., VII, 197, oc. in Sitka.
- bimacula** WALKER, List, I, 84.—Nova Scotia.  
 OSTEN SACKEN, Mon. N. A. Dipt., IV, 236, 325, desc. quoted.
- brumalis** FITCH, Winter Insects, etc.; Amer. Quart. Jour. Ag. and Sci., V, 274; reprinted in Lintner's 2d N. Y. Rept., 243, Appendix.—N. Y.  
 OSTEN SACKEN, Mon. N. A. Dipt., IV, 237, 323, desc. quoted.
- gracilis** WALKER, List, I, 84.—New York Factory, Huds. Bay Terr.  
 OSTEN SACKEN, Mon. N. A. Dipt., IV, 325, quotes desc.  
 White Mts., N. H.—Slosson; in spite of this identification, I consider the description quite unrecognizable.
- hiemalis** DEGEER, Ins., VI, 360, pl. XXI, f. 1, 2, 5 (*Tipula*).—Europe.  
 LATREILLE, Gen. Crust. et Ins., IV, 258 (id.).  
 MEIGEN, Syst. Besch., I, 213.  
 MACQUART, Hist. Nat. Dipt., I, 114, pl. II, f. 16.  
 SCHINER, Fauna Austr., II, 548.  
 ZETTERSTEDT, Dipt. Scand., X, 404I.—N. Europe and Greenland.  
 HOLMGREN, Ins. Nordgroenl., oc. Greenland.  
 British Col. (High Cascades)—Bergroth.
- maculipennis** FABRICIUS, Ent. Syst., IV, 240; Syst. Antl., 30 (both *Tipula cinerea*).—Europe.  
 MEIGEN, Klassif., 149 (*Limnobia cinerea*); Syst. Besch., I, 214.  
 ZETTERSTEDT, Ins. Lapp., 853 (oc. in Greenland); Dipt. Scand., X, 4046.  
 SCHINER, Fauna Austr., II, 547.  
 STAEGER, Groenl. Antl., 1845, 356, oc. in Greenland.  
 N. J.—Smith Cat.; Montreal—Chagnon.
- regelianis** LINNÉ, Fauna Suec., 1754 (*Tipula*).—Europe.  
 FABRICIUS, Spec. Ins., II, 405; Ent. Syst., IV, 242; Syst. Antl., 32 (all *Tipula*).  
 GMELIN, Syst. Nat., V, 2817 (id.).  
 O. FABRICIUS, Fauna Groenl., 202 (id.), oc. in Greenland.  
 SCHRANK, Austr. Spec., 873 (id.).  
 MEIGEN, Syst. Besch., I, 214.  
 SCHINER, Fauna Austr., II, 547.  
 BERGROTH, Wien. Ent. Zeit., VII, 239, oc. in Brit. Col. N. A.
- scutellata** SAY, Long's Exped., App., 360; Compl. Works, I, 244.—“Falls of Kakabikka, beyond Lake Superior.”  
 WIEDEMANN, Auss. Zw., I, 60.  
 OSTEN SACKEN, Mon. N. A. Dipt., IV, 322, quotes orig. desc.
- trichoptera** OSTEN SACKEN, West. Dipt., 204.—Marin Co., Cal. See also Psyche, April, 1895, 230, note.

## EPIPHRAGMA.

- OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 238; Mon. N. A. Dipt., IV, 193, 1869; Stud. Tipul., II, 208, 1887, notes.  
 SCHINER, Fauna Austr., II, 550, 1864.
- circinata** OSTEN SACKEN, Biologia, Dipt., I, 9.—Costa Rica.



**fascipennis** SAY, Jour. Acad. Sci. Phil., III, 19; Compl. Works, II, 45 (*Limnobia*).—U. S.

WIEDEMANN, AUSS. ZW., I, 31 (id.).

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 239 (*parvonia*); Mon. N. A. Dipt., IV, 194.—Ga., Me., White Mts., N. H., D. C., Ill. Cat. gives Quebec. N. J.—Smith Cat.; Montreal—Chagnon.

NEDHAM, Bull. 68, N. Y. State Mus., 281, pl. VIII and IX, larva and pupa.—Lake Forest, Ill.

? **nebulosa** BELLARDI, Saggio, I, 206, pl. I, f. 4 (*Tipula*).—Mex.

OSTEN SACKEN, Biologia, Dipt., I, 19, "seems to be allied to *Epiphragma*."

**picta** FABRICIUS, Ent. Syst., Suppl., 550 (*Tipula*); Syst. Anul., 29 (id.).—Europe.

MEIGEN, Klassif., 60 (*Limonia*); Syst. Beschri., I, 123 (*Limnobia*).

CURTIS, Brit. Ent., 50 (*Limnobia ocellaris*).

SCHINER, Fauna Austr., II, 551.

BERGROTH, Wien. Ent. Zeit., VII, 239, oc. in Brit. Col., N. A.

**sackeni** WILLISTON, Trans. Ent. Soc. Lond., 1896, 294, pl. x, f. 68.—St. Vincent, W. I.

**solatrix** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 238; Mon. N. A. Dipt., IV, 195, pl. II, f. 8.—D. C.; perhaps also Brazil.

#### LIMNOPHILA.

MACQUART, Hist. Nat. Dipt., I, 95, 1834.

OSTEN SACKEN, Acad. Nat. Sci. Phil., 1859, 231; Mon. N. A. Dipt., IV, 196, 1869; Stud. Tipul., II, 209, 1887, notes.

**adusta** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 235; Mon. N. A. Dipt., IV, 215.—Maine to Ga. and Wis. Cat. gives Quebec. N. J.—Smith Cat.; White Mts., N. H.—Slosson.

**aprilina** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 235; Mon. N. A. Dipt., IV, 223, pl. IV, f. 23.—D. C.; White Mts., N. H.

**areolata** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 237; Mon. N. A. Dipt., IV, 214.—Trenton Falls, N. Y.; Md.; D. C.

White Mts., N. H.—Slosson.

**badia** DOANE, Jour. N. Y. Ent. Soc., VIII, 191, pl. VIII, f. 5.—Olympia, Wash.

**brevifurca** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 237; Mon. N. A. Dipt., IV, 221.—D. C. Cat. gives Quebec.

**contempta** OSTEN SACKEN, Mon. N. A. Dipt., IV, 218.—Middle States.

**carbonaria** MACQUART, Dipt. Exot., I, 1, 66.—Carolina.

OSTEN SACKEN, Mon. N. A. Dipt., IV, 323, quotes orig. desc.

**costata** COQUILLET, Psyche, Jan., 1901, 149.—N. M., high altitude.

**cubitalis** OSTEN SACKEN, Mon. N. A. Dipt., IV, 229.—Va., Ohio.

**damula** OSTEN SACKEN, West. Dipt., 201.—San Bernardino, Cal.

**fasciolata** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 234 (*fasciata* Schum.); Mon. N. A. Dipt., IV, 206.—Mass.

**flavipilus** DOANE, Jour. N. Y. Ent. Soc., VIII, 190; pl. VIII, f. 1.—Pullman, Wash.

**fratria** OSTEN SACKEN, Mon. N. A. Dipt., IV, 220.—Either N. Y. or N. H.

**fulvocostalis** COQUILLET, Dipt. of Commander Ids., 342.—Bering Id.

**fuscovaria** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 240; Mon. N. A. Dipt., IV, 225.—D. C., and north to Quebec.

N. J.—Smith Cat.

**gracilis** WIEDEMANN, AUSS. ZW., I, 28 (*Limnobia*).—Pa.

OSTEN SACKEN, Mon. N. A. Dipt., IV, 322, quotes orig. desc.

- imbecilla* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 237; Mon. N. A. Dipt., IV, 213.—Trenton Falls, N. Y.; Md.  
N. J.—Smith Cat.
- indistincta* DOANE, Jour. N. Y. Ent. Soc., VIII, 191, pl. VIII, f. 6.—Collins, Idaho.  
COQUILLET, Proc. Wash. Acad. Sci., II, 399, oc. in Alaska.
- inornata* OSTEN SACKEN, Mon. N. A. Dipt., IV, 219; III, appendix.—Mass.; Cat. gives Tarrytown, N. Y.
- lenta* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 241; Mon. N. A. Dipt., IV, 231.—Va., Md., Ill.
- lutea* DOANE, Jour. N. Y. Ent. Soc., VIII, 191, pl. VIII, f. 4.—Pa.
- luteipennis* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 236; Mon. N. A. Dipt., IV, 217, pl. II, f. 10, and IV, f. 25; Biologia, Dipt., I, 8.—D. C.; Fla.; S. C.; Mass.; Cal. and N. Sonora, Mex.  
? WALKER, Dipt. Saund., 437 (*Limnobia biterminata*).—U. S. [O. S., with a ?]  
HART, Bull. Ill. State Lab. N. H., IV, 200, desc. and figs. of larva, found in water among dead aquatic plants; Ill.  
N. J.—Smith Cat.
- macrocera* SAY, Jour. Acad. Sci. Phil., III, 20; Compl. Works, II, 46 (*Limnobia*).—E. Fla.  
WIEDEMANN, Auss. Zw., I, 34 (id.).  
MACQUART, Hist. Nat. Dipt., I, 108 (*Cylindritoma*).  
OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 234 (*Lasiomastix*); Mon. N. A. Dipt., IV, 204.—S. Va., Fla., Ill., Quebec.  
JOHANNSEN, Ent. News, XIV, 14, oc. at Axton, N. Y., and notes.  
N. J.—Smith Cat.; Montreal—Chagnon.
- montana* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 240 (*Dactylolabis*); Mon. N. A. Dipt., IV, 227, pl. II, f. 7, and IV, f. 26.—Near New York City; Cat. gives Quebec and Cal.
- munda* OSTEN SACKEN, Mon. N. A. Dipt., IV, 226.—White Mts., N. H.; Cat. gives Quebec.
- nebulosa* BELLARDI, see *Epiphragma*.
- nigrilinea* DOANE, Jour. N. Y. Ent. Soc., VIII, 190, pl. VIII, f. 2.—Olympia, Wash.
- niveitarsis* OSTEN SACKEN, Mon. N. A. Dipt., IV, 209.—Del., Md.
- poetica* OSTEN SACKEN, Mon. N. A. Dipt., IV, 207.—Milton, Mass.
- quadrata* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 241; Mon. N. A. Dipt., IV, 230; pl. II, f. 9.—N. Y., Va., Md.; Cat. gives Quebec.
- recondita* OSTEN SACKEN, Mon. N. A. Dipt., IV, 212.—N. Y., Pa., Ga.  
N. J.—Smith Cat.
- rufibasis* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 239 (*Prionolabis*); Mon. N. A. Dipt., IV, 225, pl. II, f. 3, and IV, f. 27.—D. C., N. Y., Mass.  
DOANE, Jour. N. Y. Ent. Soc., VIII, 190, pl. VIII, f. 3.—Wawawai, Wash.  
N. J.—Smith Cat.; Montreal—Chagnon.
- tenuicornis* OSTEN SACKEN, Mon. N. A. Dipt., IV, 208.—White Mts., N. H.
- tenuipes* SAY, Jour. Acad. Sci. Phil., III, 21; Compl. Works, II, 46 (*Limnobia*).—Pa.  
OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 235; Mon. N. A. Dipt., IV, 41 and 210; Biologia, Dipt., I, 8.—D. C., Ga., Ill., Quebec, and N. Sonora, Mex.  
WIEDEMANN, Auss. Zw., I, 33 (*Limnobia humeralis* Say) [O. S.].
- toxoneura* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 236; Mon. N. A. Dipt., IV, 213.—Trenton Falls, N. Y.  
N. J.—Smith Cat.

- ultima** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 238; Mon. N. A. Dipt., IV, 222, pl. IV, f. 24.—D. C.; Maine; Quebec; Yukon R., Alaska.
- undulata** BELLARDI, Saggio, App., 3, pl. I, f. 2.—Mex.
- unica** OSTEN SACKEN, Mon. N. A. Dipt., IV, 205.—White Mts., N. H.  
COQUILLET, Proc. Wash. Acad. Sci., II, 399, oc. in Alaska.

## GYNOPLISTIA.

- WESTWOOD, London and Edinb. Philos. Mag., VI, 280, 1835; Trans., Ent. Soc. Lond., 1881, 369, pl. XVIII, f. 5, 6.
- OSTEN SACKEN, Stud. Tipul., II, 210, 1887, full discussion; thinks is not a North American genus.
- annulata** WESTWOOD, Lond. and Edinb. Philos. Mag., VI, 280.—Newfoundland.
- OSTEN SACKEN, loc. cit., thinks there was an error of locality, and the species does not occur in N. A.

## ANISOMERA.

- MEIGEN, Syst. Besch., I, 210, 1818.
- MACQUART, Hist. Nat. Dipt., I, 117, 1834.
- ZETTERSTEDT, Dipt., Scand., X, 4037, 1851.
- SCHINER, Fauna Austr., II, 532, 1864.
- LOEW, Zeitsch. f. Ges. Naturwiss., XXVI, 1865.
- OSTEN SACKEN, Mon. N. A. Dipt., IV, 238, 1869; Stud. Tipul., II, 219, 1887, notes.
- LATREILLE, Gen. Crust. et Ins., IV, 260, 1809 (*Hexatoma*) [O. S.].
- megacera** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 242; Mon. N. A. Dipt., IV, 243, pl. II, f. 12.—D. C., Md.

## ERIOCERA.

- MACQUART, Dipt. Exot., I, 1, 74, 1838.
- OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 243 (*Eriocera* and *Arrhenica*); Mon. N. A. Dipt., IV, 244, 1869; Biologia, Dipt., I, 10, table of Mexican and Central Amer. forms; Stud. Tipul., II, 220, 1887.
- WALKER, List, I, 78, 1848 (*Pterocosmus*) [O. S.].
- LOEW, Bernstein, etc., 38, 1850 (*Allarithmia*) [O. S.].
- BIGOT, Annales, 1859, 123 (*Physecrania*) [O. S.].
- antennaria** DOANE, Jour. N. Y. Ent. Soc., VIII, 194, pl. VIII, f. 12.—Columbus, O.
- aurata** DOANE, Jour. N. Y. Ent. Soc., VIII, 194, pl. VIII, f. 13.—N. C.
- austera** DOANE, Jour. N. Y. Ent. Soc., VIII, 192, pl. VIII, f. 9.—Olympia, Wash.
- brachycera** OSTEN SACKEN, West. Dipt., 204.—White Mts., N. H.
- brunneipes** WILLISTON, Biologia, Dipt., Suppl., 227, pl. IV, f. 5.—Orizaba, Mex.
- californica** OSTEN SACKEN, West. Dipt., 204.—Marin Co., Cal.
- eriphora** WILLISTON, Kans. Univ. Quart., II, 61.—Wash.
- erythræa** OSTEN SACKEN, Biologia, Dipt., I, 11.—Guatemala.
- fasciata** WILLISTON, Biologia, Dipt., Suppl., 226, pl. IV, f. 4.—Morelos, Mex.
- flavida** WILLISTON, Biologia, Dipt., Suppl., 227.—Morelos, Mex.
- fuliginosa** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 243; Mon. N. A. Dipt., IV, 255, pl. IV, f. 28.—Va., D. C.  
N. J.—Smith Cat.
- gibbosa** DOANE, Jour. N. Y. Ent. Soc., VIII, 193, pl. VIII, f. 10.—Mich.
- gracilis** OSTEN SACKEN, Biologia, Dipt., I, 12.—Orizaba, Mex.
- hæmorrhœa** OSTEN SACKEN, Biologia, Dipt., I, 11.—Orizaba, Mex.
- lessepsi** OSTEN SACKEN, Biologia, Dipt., I, 13.—Panama.

- longicornis* WALKER, List, 1, 82 (*Anisomera*).—Martin Falls, Canada.  
 OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 245 (*Arrhenica*); Mon. N. A. Dipt., iv, 253.—Trenton Falls, N. Y.; Me.; Ill.; Mass.  
*mesoxantha* OSTEN SACKEN, Biologia, Dipt., 1, 10.—Orizaba, Mex.  
*obscura* WILLISTON, Kans. Univ. Quart., ii, 61.—Wash., Cal.  
*obsoleta* WILLISTON, Biologia, Dipt., Suppl., 227.—Honduras.  
*parva* DOANE, Jour. N. Y. Ent. Soc., viii, 192, pl. viii, f. 8.—Stanford Univ., Cal.  
*pretiosa* OSTEN SACKEN, Biologia, Dipt., 1, 12.—Orizaba, Mex.  
*spinosa* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859 (*Arrhenica*); Mon. N. A. Dipt., iv, 252, pl. iv, f. 29 (the female belongs to *brachyccra*.—See West. Dipt., 205).—Trenton Falls, N. Y.; Mass.  
 N. J.—Smith Cat.; Beulah, N. M.—Skinner.  
*trifasciata* ROEDER, Stett. Ent. Zeit., 1885, 338.—Porto Rico.  
*velveta* DOANE, Jour. N. Y. Ent. Soc., viii, 193, pl. viii, f. 11.—Col.  
*wilsonii* OSTEN SACKEN, Mon. N. A. Dipt., iv, 255.—Del.  
 N. J.—Smith Cat.  
*zonata* OSTEN SACKEN, Biologia, Dipt., 1, 10.—Orizaba, Mex.

#### PENTHOPTERA.

- SCHINER, Wien. Ent. Monatschr., vii, 220, 1863; Fauna Austr., ii, 534, 1864.  
 OSTEN SACKEN, Mon. N. A. Dipt., iv, 256, 1869.  
*albitarsis* OSTEN SACKEN, Mon. N. A. Dipt., iv, 257.—New London, Conn.; Pa.

#### DICRANOTA.

- ZETTERSTEDT, Ins. Lapp., 851, 1840; Dipt. Scand., x, 4033, 1851.  
 SCHINER, Fauna Austr., ii, 530, 1864.  
 OSTEN SACKEN, Mon. N. A. Dipt., iv, 278, 1869.  
*argentea* DOANE, Jour. N. Y. Ent. Soc., viii, 196, pl. viii, f. 19.—Seattle, Wash.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 401, oc. in Alaska, at Berg Bay.  
*eucera* OSTEN SACKEN, Mon. N. A. Dipt., iv, 281.—D. C.  
*rivularis* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 249; Mon. N. A. Dipt., iv, 281, pl. ii, f. 16.—D. C.

#### RHAPHIDOLABIS.

- OSTEN SACKEN, Proc. Ent. Soc. Phil., 1865, 225; Mon. N. A. Dipt., iv, 284, 1869.  
*debilis* WILLISTON, Kans. Univ. Quart., ii, 62.—Cal.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 401, oc. in Alaska, several places.  
*flaveola* OSTEN SACKEN, Mon. N. A. Dipt., iv, 288.—Md., Mass.  
*tenuipes* OSTEN SACKEN, Mon. N. A. Dipt., iv, 287, pl. ii, f. 17.—Md.; Saratoga Spr., N. Y.

#### PLECTROMYIA.

- OSTEN SACKEN, Mon. N. A. Dipt., iv, 282, 1869 (mentioned without desc. as *Astrolabis* in Proc. Ent. Soc. Phil., 1865, 225).  
*modesta* OSTEN SACKEN, Mon. N. A. Dipt., iv, 284, pl. ii, f. 18.—White Mts., N. H.

#### ULA.

- HALIDAY, Ent. Mag., 1, 153, 1833.  
 SCHINER, Fauna Austr., ii, 531, 1864.  
 OSTEN SACKEN, Mon. N. A. Dipt., iv, 274, 1869.  
*elegans* OSTEN SACKEN, Mon. N. A. Dipt., iv, 276.—White Mts., N. H.  
*pauper* OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 251 (*pilosa*, preoc.); Mon. N. A. Dipt., iv, 277.—D. C.

## AMALOPIS.

HALIDAY, in Walker's Ins. Brit., Dipt., III, addenda, p. xv, 1856.

SCHINER, Fauna Austr., II, 527, 1864.

KOLENATI, Wien. Ent. Monatschr., IV, 391, 1860 (*Crumobia*) [O. S.].

ZETTERSTEDT, Ins. Lapp., 852, 1840 (*Tricyphona*, in part); Dipt. Scand., X, 4035, 1851 (*id.*).

OSTEN SACKEN, Mon. N. A. Dipt., IV, 260, 1869.

*Note.*—The controversy between Osten Sacken and Bergroth as to the propriety of displacing the name *Amalopsis* for *Tricyphona* will be found in the following papers:

BERGROTH, Wien. Ent. Zeit., VII, 199.

OSTEN SACKEN, Berl. Ent. Zeitsch., XXXI, 224.

BERGROTH, Wien. Ent., Zeit., XVII, 267.

OSTEN SACKEN, Berl. Ent. Zeitsch., XLII, 150.

In my opinion Osten Sacken makes out a good case for the retention of *Amalopsis*.

- ampla** DOANE, Jour. N. Y. Ent. Soc., VIII, 195, pl. VIII, f. 17.—Seattle, Wash.
- auripennis** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 247; Mon. N. A. Dipt., IV, 268.—Mass.
- calcar** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 247; Mon. N. A. Dipt., IV, 268, pl. II, f. 14; West. Dipt., 205, note.—Wis., White Mts., N. H.; Quebec; Cal?
- constans** DOANE, Jour. N. Y. Ent. Soc., VIII, 196, pl. VIII, f. 18.—Olympia, Tokeland, and South Bend, all in Wash.
- diaphana** DOANE, Jour. N. Y. Ent. Soc., VIII, 195, pl. VIII, f. 16 (*disphana*, a misprint).—Pullman, Olympia, and Seattle, all in Wash.
- COQUILLET, Proc. Wash. Acad. Sci., II, 399, oc. in Alaska, several places.
- exoloma** DOANE, Jour. N. Y. Ent. Soc., VIII, 194, pl. VIII, f. 14.—Pullman, Wash.
- hyperborea** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 292; Mon. N. A. Dipt., IV, 269.—Labrador.
- inconstans** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 247; Mon. N. A. Dipt., IV, 266, pl. II, f. 15 and IV, f. 30.—Va.; White Mts., N. H.; D. C.; N. Y.
- EGGER, Verh. Zool. Bot. Ges., XIII, 1103, 1863 (*tipulina*).—Europe.
- SCHINER, Fauna Austr., II, 528 (*id.*).
- BERGROTH, Verh. Zool.-Bot. Ges., XXXVIII, 1888, 650, syn. and notes (*Tricyphona*).
- JOHNSON, Ent. News, XII, 305, figs. showing variation in venation.  
N. J.—Smith Cat.: Quebec—O. S. Cat.
- septentrionalis** BERGROTH, Wien. Ent. Zeit., VII, 199 (*Tricyphona*).—Sitka.
- vernalis** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 291; Mon. N. A. Dipt., IV, 270.—White Mts., D. C.
- vitripennis** DOANE, Jour. N. Y. Ent. Soc., VIII, 195, pl. VIII, f. 15.—Wawawai and Olympia, Wash.
- COQUILLET, Proc. Wash. Acad. Sci., II, 399, oc. in Lowe Inlet, Brit. Col. (*Tricyphona*).

## PEDICIA.

LATREILLE, Gen. Crust. et Ins., IV, 255, 1809.

MACQUART, Hist. Nat. Dipt., I, 91, 1834.

SCHINER, Fauna Austr., II, 526, 1864.

OSTEN SACKEN, Mon. N. A. Dipt., IV, 273, 1869.

ALDRICH, Psyche, Feb., 1895, 201, notes.

- BELING, Verh. Zool. Bot. Ges., 1878, 45, desc. of larva and pupa of a European species.
- HINE, Ohio Naturalist, III, 416, 1903, table of species.
- albivitta** WALKER, List, I, 37; loc. cit., 38 (*contermina*) [O. S.].—Nova Scotia.
- OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 248; Mon. N. A. Dipt., IV, 273.—Trenton Falls, N. Y.; Conn.; Mass.
- ALDRICH, Psyche, Feb., 1895, 201, fig. of wing.—N. J.
- PETTIT, Bull. Mich. Ex. Sta., oc. at Chatham, in N. Mich.
- Quebec—Wulp.
- magnifica** HINE, Ohio Naturalist, III, 417.—Port Renfrew, B. C.
- obtusa** OSTEN SACKEN, West. Dipt., 205; Stud. Tipul., II, 224.—San Francisco.
- ALDRICH, Psyche, Feb., 1895, 202, redesc.—Wash.
- OSTEN SACKEN, Psyche, April, 1895, notes.
- COQUILLET, Proc. Wash. Acad. Sci., II, 401, oc. in Alaska.
- Note.*—The specimen I described has the dark mark on the wing extending to the hind border; Osten Sacken's had not. I have now another (broken) specimen which agrees with his. There may be three western species.
- rivosa** LINN., see *Tipula nodulicornis*.

#### ORNITHODES.

- COQUILLET, Proc. Wash. Acad. Sci., II, 400, 1900.
- harrimani** COQUILLET, loc. cit.—Virgin Bay, Prince William Sound, Alaska.

#### POLYANGÆUS.

- DOANE, Jour. N. Y. Ent. Soc., VIII, 196, 1900.
- maculatus** DOANE, Jour. N. Y. Ent. Soc., VIII, 197, pl. VIII, f. 20.—Seattle and Olympia, Wash.

#### CYLINDROTOMA.

- MACQUART, Hist. Nat. Dipt., I, 107, 1834.
- ZETTERSTEDT, Dipt. Scand., X, 3900, 1851.
- SCHINER, Fauna Austr., II, 562, 1864.
- OSTEN SACKEN, Mon. N. A. Dipt., IV, 296, 1869.
- MIALl and SHELFORD, Trans. Ent. Soc. Lond., 1897, 343-346, 4 plates, contains a discussion of the larva of a European species.
- americana** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1865, 236; Mon. N. A. Dipt., IV, 299.—White Mts., N. H.
- juncta** COQUILLET, Proc. Wash. Ac. Sci., II, 401.—Virgin Bay, Alaska.
- nodicornis** OSTEN SACKEN, see *Liogma*.
- splendens** DOANE, Jour. N. Y. Ent. Soc., VIII, 197, pl. VIII, f. 21.—Unalaska.

#### TRIOGMA.

- SCHINER, Wiener Ent. Mon., VII, 223, 1863; Fauna Austr., II, 560, 1864.
- OSTEN SACKEN, Mon. N. A. Dipt., IV, 303, 1869.
- exsculpta** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1865, 239; Mon. N. A. Dipt., IV, 304.—Pa.

#### LIOGMA.

- OSTEN SACKEN, Mon. N. A. Dipt., IV, 298, 1869; Stud. Tipul., II, 226, note.
- nodicornis** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1865, 239 (*Triogma*); Mon. N. A. Dipt., IV, 301 (*Cylindrotoma*); Stud. Tipul., II, 226, note.—D. C.; N. Y.; White Mts., N. H.; Ill.; N. J. Cat. gives Quebec.



## PHALACROCERA.

SCHINER, Wien. Ent. Mon., vii, 224, 1863; Fauna Austr., ii, 1864.

OSTEN SACKEN, Mon. N. A. Dipt., iv, 305, 1869.

MIALl and SHELFORD, Trans. Ent. Soc. Lond., 1897, 343-366, 4 plates, gives full desc. of larva of *Ph. replicata*, a European species, etc.

**tipulina** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1865, 241; Mon. N. A. Dipt., iv, 308.—White Mts., N. H.

## IDIOPLASTA.

OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 252 (*Protoplasa*); Mon. N. A. Dipt., iv, 316, 1869 (*id.*); West. Dipt., 208 (amended to *Protoplasa*); Cat., 222, note 38, name changed to *Idioplasta* on account of preoccupation; Stud. Tipul., ii, 230, notes on preoccupation, etc.; Verh. Zool.-Bot. Ges., xxix, 517, review of relations.

*Note.*—Whether *Protoplasa* LEIDY, in Rhizopoda, was really published prior to 1877 is a question for investigation; see O. S., Stud. Tipul., ii, 230.

**fitchii** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 252 (*Protoplasa*); Mon. N. A. Dipt., 319, fig. (*id.*); Cat., 222, note 38.—N. Y.; Cat. gives Ga.

**vipio** OSTEN SACKEN, West. Dipt., 208 (*Protoplasa*).—San Mateo, Cal.

## BITTACOMORPHA.

WESTWOOD, Lond. and Edinb. Philos. Mag., vi, 281, 1835.

OSTEN SACKEN, Mon. N. A. Dipt., iv, 313, 1869; Verh. Zool.-Bot. Ges., xxix, 517, notes.

ALDRICH, Psyche, Feb., 1895, 200, table of species.

**clavipes** FABRICIUS, Spec. Ins., 404 (*Tipula*); Mant. Ins., ii, 323 (*id.*); Ent. Syst., iv, 239 (*id.*); Syst. Antl., 22 (*Ptychoptera*).—N. A.

WIEDEMANN, Auss. Zw., i, 59 (*Ptychoptera*).—Pa.

WESTWOOD, Lond. and Edinb. Philos. Mag., vi, 281.—Newfoundland.

OSTEN SACKEN, Mon. N. A. Dipt., iv, 315.—Nova Scotia, Wis., Fla.

BRUES, Biol. Bull., i, 155, note on tracheal dilatations in legs.

White Mts., N. H.—Slosson; N. J.—Smith Cat.; Saranac Inn, N. Y.—Needham.

**occidentalis** ALDRICH, Psyche, Feb., 1895, 201.—Seattle, Wash.

OSTEN SACKEN, Psyche, April, 1895, 230, note.

**sackenii** ROEDER, Wien. Ent. Zeitung, ix, 230.—Nevada.

ALDRICH, Psyche, Feb., 1895, 200, redesc.—Seattle, Wash.

## PTYCHOPTERA.

MEIGEN, Illig. Mag., ii, 262, 1803; Syst. Besch., i, 204, 1818.

MACQUART, Hist. Nat. Dipt., i, 76, 1834.

ZETTERSTEDT, Dipt. Scand., x, 4024, 1851.

SCHINER, Fauna Austr., ii, 495, 1864.

OSTEN SACKEN, Mon. N. A. Dipt., iv, 309, 1869; Cat., 221, note 36, on larva and syst. position; Verh. Zool.-Bot. Ges., xxix, 517, notes.

**lenis** OSTEN SACKEN, West. Dipt., 206.—Yosemite, Cal.

? WALKER, List, i, 80 (reproduced in Osten Sacken, Mon. iv, 324) (*metallica*).—Martin Falls, Canada. Synonymy by Osten Sacken, with a question; it seems to me very doubtful. Northern Ida.—J. M. A. Hudsonian zone, N. M.—Cockerell; he also mentions Col.

**quadrfasciata** SAY, Long's Exped., App., 359; Compl. Works, i, 244.—Pa.

WIEDEMANN, Auss. Zw., i, 60.

OSTEN SACKEN, Mon. N. A. Dipt., iv, 321, quotes Say.

- rufocincta** OSTEN SACKEN, Proc. Acad. Nat. Sci. Phil., 1859, 252; Mon. N. A. Dipt., IV, 313, pl. II, f. 19.—Quebec and White Mts. to Ill. N. J.—Smith Cat.

#### DOLICHOPEZA.

- CURTIS, Brit. Ent., 1825, 62.  
 MEIGEN, Syst. Besch., VI, 283, pl. LXV, f. 10, 11 (called *Leptina* on plate), 1830.  
 ZETTERSTEDT, Dipt. Scand., X, 4038, 1851.  
 SCHINER, Fauna Austr., II, 525, 1864.  
 OSTEN SACKEN, Stud. Tipul., I, 157, 1886.  
**annulata** SAY, Jour. Acad. Sci. Phil., III, 25 (*Tipula*); Compl. Works, II, 49 (*id.*).—Pa.  
 WIEDEMANN, Auss. Zw., I, 54 (*id.*).  
 OSTEN SACKEN, Cat., 40; Stud. Tipul., I, 157.  
 Middle States—O. S. Cat.; N. J.—Smith Cat.  
*Note.*—Both Wiedemann and Osten Sacken erroneously refer to Say's desc. of *Tipula annulicornis*, an entirely different insect.

#### MEGISTOCERA.

- WIEDEMANN, Dipt. Exot., 41, 1821 (*Mackistocera*); Auss. Zw., I, 55, 1828.  
 OSTEN SACKEN, Stud. Tipul., I, 158, 1886.  
**longipennis** MACQUART, Dipt. Exot., I, 1, 57, pl. v, f. 1 (*Tipula*).—Cuba.  
 OSTEN SACKEN, Stud. Tipul., I, 161, gen. ref.  
 Porto Rico—Roeder.

#### BRACHYPREMNA.

- OSTEN SACKEN, Stud. Tipul., I, 161, 1886.  
**dispellens** WALKER, Trans. Ent. Soc. Lond., n. s., v, 333 (*Tipula*).—Mex.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., XXX, 162.—D. C., Tex.  
 WILLISTON, Biologia, Dipt., Suppl., 229, oc. in Tabasco and Vera Cruz, Mex.  
**similis** WILLISTON, Biologia, Dipt., Suppl., 229.—Tabasco, Mex.  
**unicolor** OSTEN SACKEN, Stud. Tipul., II, 239.—Porto Rico.

#### TANYPREMNA.

- OSTEN SACKEN, Biologia, Dipt., I, 19, 1886.  
**opilio** OSTEN SACKEN, loc. cit., fig.—Guatemala.

#### XIPHURA.

- BRULLÉ, Annales Soc. Ent. France, 1832, 205.  
 OSTEN SACKEN, Stud. Tipul., I, 165, and early stages, 173, 1886.  
**atrata** LINNÉ, Fauna Suec, 1749 (*Tipula*).—Europe.  
 FABRICIUS, Syst. Antl., 19 (*Ctenophora*).  
 MEIGEN, Syst. Besch., I, 158; VI, 285 (*id.*).  
 DEGEER, Insectes, VI, 138, pl. XIX, f. 10 (*Tipula icheumonca*).  
 BRULLÉ, Annales, I, 208, pl. v, f. 2, 1832 (*villaretiana*).  
 STAEGER, Dipt. Dan., 3 (*Ctenophora ruficornis*).  
 SCHINER, Fauna Austr., II, 499 (*Ctenophora*).  
 VAN DER WULP, Tijdsch. v. Ent., XXIV, 147, oc. in Quebec (*Ctenophora*).  
 OSTEN SACKEN, Stud. Tipul., I, 166, oc. in N. A.  
**frontalis** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1864, 48 (*Ctenophora*).—Mass.  
 ? WALKER, List, I, 76 (*Ctenophora dorsalis*).—Newfoundland.

? WALKER, Dipt. Saund., 448 (*Ctenophora succedens*).—Canada. Syn. of both by O. S., with a doubt.

N. J.—Smith Cat.

**fumipennis** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1864, 47 (*Ctenophora*).—Va. Also Stud. Tipul., I, 167, gen. ref.

N. J.—Smith Cat.

**topazina** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1864, 47 (*Ctenophora*); Stud. Tipul., I, 167, gen. ref.—Va.

Montreal—Chagnon.

#### CTENOPHORA.

MEIGEN, Illig. Mag., II, 263, 1803; Syst. Besch., I, 155, 1818.

MACQUART, Hist. Nat. Dipt., I, 77, 1834.

SCHINER, Fauna Austr., II, 498, 1864.

OSTEN SACKEN, Stud. Tipul., I, 164, and early stages, 173, 1886.

**angustipennis** LOEW, Cent., x, 3.—Cal.

OSTEN SACKEN, West. Dipt., 211.—Cal.

WILLISTON, Kans. Univ. Quart., II, 63.—Wash.

BERGROTH, Wien. Ent. Zeit., VII, 201.—Vancouver Id., Brit. Col.

**apicata** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1864, 46.—Me., N. H. Montreal—Chagnon.

**dorsalis** WALKER, List, I, 76.—Newfoundland.

**nubecula** OSTEN SACKEN, Proc. Ent. Soc. Phil., 1864, 45.—Ill.

N. J.—Smith Cat.

**similis** WILLISTON, Kans. Univ. Quart., II, 63.—Wash.

#### PACHYRHINA.

MACQUART, Hist. Nat. Dipt., I, 88, 1834.

ZETTERSTEDT, Dipt. Scand., x, 3985, 1851.

SCHINER, Fauna Austr., II, 503, 1864.

OSTEN SACKEN, Biologia, Dipt., I, 15, table of Mex. and C. A. spp.

WEBSTER, Insect Life, III, 12, mentions damage done to wheat by a species in Indiana; Bull. Ohio Ex. Station, Tech. Ser., I, No. 3, 152, describes oviposition of an undetermined sp.

**abbreviata** LOEW, Cent., IV, 36.—Miss.

**affinis** BELLARDI, Saggio, I, 10 (*Tipula*).—Mex.

OSTEN SACKEN, Biologia, Dipt., I, 15, note on the type.

**altissima** OSTEN SACKEN, West. Dipt., 210.—Pike's Peak, Col.; Taos Peak, N. M., above timber line.

**circumscripta** LOEW, Cent., IV, 38.—Cuba.

**collaris** SAY, Jour. Acad. Sci. Phil., III, 23; Compl. Works, II, 49 (*Tipula*).—Pa.

WIEDEMANN, Auss. Zw., I, 52 (id.).

Mass. and D. C.—O. S.; N. J.—Smith Cat.

**consularis** OSTEN SACKEN, Biologia, Dipt., I, 17.—Costa Rica, Nicaragua.

SCHINER, Novara, 34 (*elegans* FAB.).—Venezuela [O. S.].

WILLISTON, Biologia, Dipt., Suppl., 228, oc. in Tabasco, Mex.

**elegantula** WILLISTON, Trans. Ent. Soc. Lond., 1896, 295, pl. x, f. 70.—St. Vincent, W. I.

**erythrophrys** WILLISTON, Kans. Univ. Quart., II, 63.—Col.

JOHNSON, Trans. Amer. Ent. Soc., XXIX, 101.—N. M. and Col.

Beulah, N. M.—Skinner.

**eucera** LOEW, Cent., IV, 39.—D. C.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

- excelsior** BERGROTH, Wien. Ent. Zeit., VII, 239.—Cascade Mts., Brit. Col.
- ferruginea** FABRICIUS, Syst. Antl., 28 (*Tipula*).—N. A.  
 WIEDEMANN, Dipt. Exot., 28; Auss. Zw., I, 55 (id.).—Pa.  
 MACQUART, Dipt. Exot., I, I, 50 (*quadrilineata*).—Mex. [O. S.].  
 MACQUART, Dipt. Exot., Suppl., IV, 13, pl. I, f. 3.—N. A.  
 BELLARDI, Saggio, I, 9 (*proxima*).—Mex. [O. S.].  
 OSTEN SACKEN, West. Dipt., 211, oc. in Cal. and Col.; Biologia, Dipt., I, 18, oc. in Durango, Mex., syn., etc.  
 HART, Bull. Ill. State Lab. Nat. Hist., IV, 218, desc. and figs. larva and pupa; larva in the ground.  
 WILLISTON, Biologia, Dipt., Suppl., 228, oc. in Morelos, Guerrero and Orizaba, Mex.  
 Fla.—Johnson; White Mts., N. H.—Slosson; N. J.—Smith Cat.; Montreal—Chagnon. Beulah, N. M.—Skinner; Axton, N. Y.—M. & H.
- gracilicornis** LOEW, Cent., v, 32.—Western N. Y.
- histrion** FABRICIUS, see *lineata* SCOP.
- incurva** LOEW, Cent., IV, 32.—D. C.  
 Atl. States—O. S.  
 ? WALKER, List, I, 72 (*alterna*).—Nova Scotia [O. S., with a doubt].
- lineata** SCOPOLI, Ent. Carn., 320 (*Tipula*).—Europe.  
 FABRICIUS, Ent. Syst., IV, 237; Syst. Antl., 28 (*Tipula histrion*).  
 DEGEER, Ins., VI, 137, pl. XIX, f. 2, 3 (*Tipula flavomaculata*).  
 MEIGEN, Klassif., 71 (*T. cornicina*) and 77; Syst. Besch., I, 198 (*Tipula*).  
 WALKER, Ins. Brit., III, 332 (*flavescens*).  
 SCHINER, Fauna Austr., II, 507 (*histrion*).  
 BERGROTH, Wien. Ent. Zeit., VII, 239, oc. in Brit. Col.  
 LUNDBECK, Dipt. Groenl., I, 263, oc. in Greenland (*histrion*).
- lugens** LOEW, Cent., v, 26.—White Mts., N. H.  
 Canada—O. S.; Montreal—Chagnon. Province of Quebec—Fyles.
- macrocera** SAY, Jour. Acad. Sci. Phil., III, 24; Compl. Works, II, 48.—Pa.  
 WIEDEMANN, Auss. Zw., I, 52.  
 MACQUART, Hist. Nat. Dipt., I, 1108.—West. Fla.  
 Atl. States—O. S.; N. J.—Smith Cat.; Kans.—J. M. A.
- mexicana** MACQUART, Dipt. Exot., Suppl., I, 12.—Mex.
- nigrolutea** BELLARDI, Saggio, I, 11 (*Tipula*).—Mex.  
 WALKER, Trans. Ent. Soc., v, III.  
 OSTEN SACKEN, Biologia, Dipt., I, 16, full desc.—Orizaba, Mex.; Costa Rica.
- nobilis** LOEW, Cent., v, 24.—White Mts., N. H.  
 Jacksonville, Fla.—Johnson.
- occipitalis** LOEW, Cent., v, 30.—Yukon Riv.
- ordinaria** OSTEN SACKEN, Biologia, Dipt., I, 16.—Durango, Mex.
- pedunculata** LOEW, Cent., IV, 33.—Saskatchewan R., Canada.  
 JOHANNSEN, Ent. News, XIV, 14, note.—Axton, N. Y.  
 Ill. and Catskill, N. Y.—O. S.; White Mts., N. H.—Slosson.
- polymera** LOEW, Cent., IV, 40.—Ill.  
 Ohio—O. S.
- proxima** BELLARDI, see *ferruginea*.
- punctum** LOEW, Cent., IV, 34.—Ill.  
 Me.—O. S.
- quadrilineata** MACQUART, see *ferruginea*.
- sodalis** LOEW, Cent., v, 29.—Conn.

N. J.—Smith Cat.

**suturalis** LOEW, Cent., iv, 37.—Ga.

Fla.—O. S.

**tenuis** LOEW, Cent., iv, 41.—Sharon Spr., N. Y.

Va.—O. S.; N. J.—Smith Cat.

**unifasciata** LOEW, Cent., iv, 35.—D. C.

Middle States—O. S.; N. J.—Smith Cat.

**unimaculata** LOEW, Cent., v, 28.—N. Y.

**usta** OSTEN SACKEN, Biologia, Dipt., i, 17.—Costa Rica.

**virescens** LOEW, Cent., v, 25.—D. C.

N. J.—O. S. and Smith Cat.

**vittula** LOEW, Cent., v, 27.—Huds. Bay Terr.

COQUILLET, Proc. Wash. Acad. Sci., ii, 405, oc. in Alaska.

White Mts., N. H.—Slosson.

**wulpiana** BERGROTH, Wien. Ent. Zeit., vii, 200.—Siskiyou Co., Cal.

**xanthostigma** LOEW, Cent., v, 31.—Ill.

### STYGEROPIS.

LOEW, Stett. Ent. Zeit., 1844, 170 (*Prionocera*, preoc.); Cent., iv, 42, 1863, change of name.

OSTEN SACKEN, Stud. Tipul., i, 182, 1886.

*Note.*—Whether *Prionocera* is really preoccupied is a question for examination.

**bergrothi** WILLISTON, Kans. Univ. Quart., ii, 64.—Alaska.

**dimidiata** LOEW, Cent., vi, 2.—Huds. Bay Terr.

**fuscipennis** LOEW, Cent., vi, 3.—Ill.

**parrii** KIRBY, see *Tipula*.

**sordida** LOEW, Cent., iv, 42.—L. Winnipeg.

### HOLORUSIA.

LOEW, Cent., iv, 1, 1863.

OSTEN SACKEN, Stud. Tipul., i, 183, 1886, quotes Loew in translation.

BERGROTH, Ent. Tidskr., ix, 140, 1888, asserts that this genus is not sufficiently distinct from *Tipula*, and can at best be regarded as a subgenus.

The acceptance of this view would make *rubiginosa* preoccupied; he therefore proposes to change its name to *grandis*.

**rubiginosa** LOEW, Cent., iv, 1.—Cal.

COMSTOCK and KELLOGG, Elements of Insect Anatomy, chap. iv, on larva. Northern Idaho—J. M. A.

### LONGURIO.

LOEW, Cent., viii, 2, 1869.

OSTEN SACKEN, Stud. Tipul., i, 183, 1886, says looks like an ordinary *Tipula*.

**testaceus** LOEW, Cent., viii, 2.—Mass.

JOHNSON, Ent. News., ix, 229, oc. in Philadelphia.

OSTEN SACKEN, Stud. Tipul., i, 183, note on type.

N. J.—Smith Cat.

### TIPULA.

LINNÉ, Fauna Suecica, 2d edit., 430, 1761. (The name occurs in the first edition of Syst. Nat., in 1735.)

FABRICIUS, Syst. Antl., 22, 1805.

MEIGEN, Syst. Besch., i, 169, 1818.

- MACQUART, Hist. Nat. Dipt., i, 80, 1834.  
 ZETTERSTEDT, Dipt. Scand., x, 3911, 1851.  
 SCHINER, Fauna Austr., ii, 509, 1864.  
 LOEW, Besch. Europ. Dipt., iii, 5-7, on the genital organs of the male.  
 FORBES, Ill. Rept., 1888, 78, pl. vi, f. 4, larvæ in sod, called "meadow maggots" and "leather-jackets"; life hist. of *Tipula bicornis* LOEW MS., etc.  
 HART, Bull. Ill. State Lab. Nat. Hist., iv, 208, mentions larva of *Tipula bicornis* again.
- abdominalis** SAY, Jour. Acad. Sci. Phil., iii, 18; Compl. Works, ii, 45 (*Ctenophora*).—Pa.  
 WIEDEMANN, Auss. Zw., i, 37 (id.).  
 WALKER, List, i, 65 (*albilatus*) [O. S.]—"North America?"  
 NEEDHAM, Bull. 47, N. Y. State Mus., 575, pl. xxv, f. 2, describes and figures larva, which occurs in ponds in the Adirondacks; the same figure is printed on the cover of Ent. News for 1902.
- abluta** DOANE, Jour. N. Y. Ent. Soc., ix, 122.—Colo.  
**acuta** DOANE, Jour. N. Y. Ent. Soc., ix, 116.—Palo Alto, Cal.  
**æqualis** DOANE, Jour. N. Y. Ent. Soc., ix, 108.—Wash., Cal., several places.  
**affinis** BELLARDI, see *Pachyrhina*.  
**albocaudata** DOANE, Jour. N. Y. Ent. Soc., ix, 123.—Wawawai and Pullman, Wash.  
**albobincta** DOANE, Jour. N. Y. Ent. Soc., ix, 110.—Col.  
**albofascia** DOANE, Jour. N. Y. Ent. Soc., ix, 126.—Corvallis, Ore.  
**albonotata** DOANE, Jour. N. Y. Ent. Soc., ix, 120.—Battle Creek, Mich.  
**albovittata** DOANE, Jour. N. Y. Ent. Soc., ix, 119.—Pullman, Wash.  
**angustipennis** LOEW, Cent., iv, 19.—Mass., Winnipeg.  
 ? WALKER, List, i, 70 (*glomerata*).—N. A. [O. S., with a doubt.]  
 Montreal—Chagnon.
- angulata** LOEW, Cent., v, 22.—Mass.  
 White Mts., N. H.—Slosson.
- annulicornis** SAY, Jour. Acad. Sci. Phil., vi, 151; Compl. Works, ii, 350.—Ind.  
**apicalis** LOEW, Cent., iv, 2.—N. Y.  
**appendiculata** LOEW, Cent., iv, 20.—Saskatchewan R., Canada.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 402, oc. in Alaska.  
**arctica** CURTIS, Ross's Expedition, LXXVII, pl. A, f. 15.—Arctic America.  
 HOLMGREN, Ins. Nordgroenl., 105, oc. in Greenland.  
 O. FABRICIUS, Fauna Groenl., 156 (*ricosa* LINN., an erroneous identification).—Greenland. [Schiödte.]  
 ZETTERSTEDT, Ins. Lapp., 841; Dipt. Scand., x, 3934 (*nodulicornis*).—N. Europe. [Schiödte.]  
 STAEGER, Groenl. Antl., 355 (id.).  
 OSTEN SACKEN, Cat., 37 and note 40, p. 222, synonymy.
- armata** DOANE, Jour. N. Y. Ent. Soc., ix, 119.—Seattle, Wash.  
**associans** WALKER, Trans. Ent. Soc., n. ser., v, 333.—Mex.  
**atra** LINNÉ, reported from Greenland by O. Fabricius, Fauna Groenl., is a mistaken identification; see O. S. Cat., 39, and Lundbeck, Dipt. Groenl., ii, 309.
- australis** DOANE, Jour. N. Y. Ent. Soc., ix, 104.—Ga., Tex.  
**balioptera** LOEW, Cent., iv, 15.—English R., Canada.  
**barbata** DOANE, Jour. N. Y. Ent. Soc., ix, 105.—Col.  
**beatula** OSTEN SACKEN, West. Dipt., 209.—Marin Co., Cal.



- bella** LOEW, Cent., IV, 29.—Conn., D. C. Osten Sacken gives Mass., N. Y., Canada. N. J.—Smith Cat.; Montreal—Chagnon.
- besselsi** OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., Dec. 6, 1878.—Polaris Bay, lat. 82 degrees.  
COQUILLET, Proc. Wash. Acad. Sci., II, 402, oc. at Muir Inlet, Alaska.
- bicornis** LOEW MS. has been referred to in several publications, but not yet described. I note the following:  
FORBES, Ill. Ent. Rept., 1888, 78, larval stages; Ill.  
WEBSTER, Bull. Ohio Expt. Station, Tech. Ser., I, No. 3, extended account of manner of oviposition, with figures; Ohio.  
DOANE, Jour. N. Y. Ent. Soc., IX, 113, notes from specimens sent him by Professor Forbes.  
Beulah, N. M.—Skinner.
- bisetosa** DOANE, Jour. N. Y. Ent. Soc., IX, 111.—Pullman, Wash.; Collins, Ida.
- bituberculata** DOANE, Jour. N. Y. Ent. Soc., IX, 101.—Cal.
- borealis** WALKER, List, I, 66.—Nova Scotia.
- calcarata** DOANE, Jour. N. Y. Ent. Soc., IX, 107.—Mt. Rainier, Wash.
- caloptera** LOEW, Cent., IV, 30.—Red R. of the North; Mass. (Loew gives R. I., but I take Osten Sacken's change to be a correction).  
N. J.—Smith Cat.
- calva** DOANE, Jour. N. Y. Ent. Soc., IX, 114.—Battle Creek, Mich.
- canadensis** LOEW, Cent., V, 19.—Huds. Bay Terr.
- carinata** DOANE, Jour. N. Y. Ent. Soc., IX, 103.—Pullman, Wash.
- centralis** LOEW, Cent., V, 21.—Huds. Bay Terr.  
White Mts., N. H.—Slosson.
- cervicula** DOANE, Jour. N. Y. Ent. Soc., IX, 100.—Mt. Rainier, Wash.
- cincta** LOEW, Cent., IV, 24.—D. C. O. S. gives White Mts., N. H., as does Mrs. Slosson; N. J.—Smith Cat.  
Province of Quebec—Fyles.
- cincticornis** DOANE, Jour. N. Y. Ent. Soc., IX, 110.—Pa.
- cineracea** COQUILLET, Proc. Wash. Acad. Sci., II, 404.—Alaska, several places.
- clara** DOANE, Jour. N. Y. Ent. Soc., IX, 107.—Wawawai and Pullman, Wash.
- cognata** DOANE, Jour. N. Y. Ent. Soc., IX, 123.—Seattle and Olympia, Wash.; Moscow, Idaho.
- concinna** DOANE, Jour. N. Y. Ent. Soc., IX, 115.—Olympia, Wash.
- contaminata** DOANE, Jour. N. Y. Ent. Soc., IX, 121.—Col.
- costalis** SAY, Jour. Acad. Sci. Phil., III, 23; Compl. Works, II, 48.—Pa., Md.  
WIEDEMANN, AUSS. ZW., I, 51.  
WEBSTER, Bull. 26, Div. of Ent., 1892, oc. in meadow;—injurious to sod; mode of ovipositing.—Ind.  
Quebec—Wulp; Fla.—Johnson; N. J.—Smith Cat.; Montreal—Chagnon.
- craverii** BELLARDI, see *obliquefasciata*.
- cunctans** SAY, Jour. Acad. Sci. Phil., III, 23; Compl. Works, II, 48.—Pa.  
WIEDEMANN, AUSS. ZW., I, 45.  
LOEW, Cent., IV, 25 (*casta*).—Pa.  
OSTEN SACKEN, Cat., 222, note 41, syn.  
N. J.—Smith Cat.
- cuspidata** DOANE, Jour. N. Y. Ent. Soc., IX, 111.—Pa.; Battle Creek, Mich.
- decora** DOANE, Jour. N. Y. Ent. Soc., IX, 125.—Montreal, Canada.
- dejecta** WALKER, Dipt. Saund., 442.—U. S.  
Atl. States—O. S. N. J.—Smith Cat.; Montreal—Chagnon.
- diluta** DOANE, Jour. N. Y. Ent. Soc., IX, 117.—Col.
- discolor** LOEW, Cent., IV, 12.—Mass.

- disjuncta* WALKER, Dipt. Saund., 442.—U. S.  
*dispellens* WALKER, see *Brachyprcma*.  
*dorsimacula* WALKER, List, 1, 69.—Nova Scotia.  
*dorsolineata* DOANE, Jour. N. Y. Ent. Soc., IX, 98.—Keyport and Pullman, Wash.  
*duplex* WALKER, List, 1, 66.—Nova Scotia.  
*edwardsii* BELLARDI, Saggio, 1, 8, pl. 1, f. 2.—Mex.  
 SCHINER, Novara, 35, may be same as *obliquefasciata* Macq.  
*eluta* LOEW, Cent., IV, 27.—D. C.  
 HART, Bull. State Lab. Nat. Hist., IV, 210, desc. and figs. of larva, which generally burrows in wet sand of river bank.—Ill.  
 Quebec—Wulp.  
*fallax* LOEW, Cent., IV, 10.—Cal.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 402, oc. in Alaska.  
 Beulah, N. M.—Skinner.  
*fasciata* LOEW, Cent., IV, 6.—Sharon Spr., N. Y. O. S. gives N. J., as does Smith.  
*filipes* WALKER, List, 1, 65.—St. John's Bluff, Fla.  
 Florida, several places—Johnson.  
*flavicans* FABRICIUS, Syst. Antl., 24 (*flavescens*, corrected in erratis).—N. A.  
 WIEDEMANN, Dipt. Exot., 25; Auss. Zw., I, 48.—N. A.  
 NEEDHAM, Bull. 68, N. Y. State Mus., 280, pl. x, f. 3, pupa.—Lake Forest, Ill.  
 U. S. and Canada—O. S. Montreal—Chagnon.  
*fragilis* LOEW, Cent., IV, 7.—Me.  
 White Mts., N. H.—Slosson.  
*fraterna* LOEW, Cent., IV, 14.—D. C.  
*frigida* WALKER, List, 1, 68.—Nova Scotia.  
 White Mts., N. H.—Slosson.  
*fuliginosa* SAY, Jour. Acad. Sci. Phil., III, 18; Compl. Works, II, 44 (*Ctenophora*).  
 —Mo.  
 WIEDEMANN, Auss. Zw., I, 40 (id.).  
 Middle and North. States—O. S.; N. J.—Smith Cat.  
*fumosa* DOANE, Jour. N. Y. Ent. Soc., IX, 99.—Columbus, Ohio.  
*gelida* COQUILLET, Proc. Wash. Acad. Sci., II, 404.—Metlakahtla, Alaska.  
*graphica* DOANE, Jour. N. Y. Ent. Soc., IX, 124.—Palo Alto, Cal.  
*grandis* BERGROTH, see *Holorusia rubiginosa*.  
*grata* LOEW, Cent., IV, 11.—D. C. N. Y.—O. S.  
*hebes* LOEW, Cent., IV, 18.—Conn., Ill., Me.  
 N. J.—Smith Cat.; Montreal—Chagnon.  
*helvociuncta* DOANE, Jour. N. Y. Ent. Soc., IX, 101.—Mt. Rainier, Wash.  
*hirsuta* DOANE, Jour. N. Y. Ent. Soc., IX, 113.—Battle Creek, Mich.  
*illustris* DOANE, Jour. N. Y. Ent. Soc., IX, 97.—St. Anthony, Ida.; Olympia and Yakima, Wash.; Battle Creek, Mich.  
*impudica* DOANE, Jour. N. Y. Ent. Soc., IX, 104.—Eastern Wash.  
*incisa* DOANE, Jour. N. Y. Ent. Soc., IX, 118.—Wawawai and Pullman, Wash.  
*inermis* DOANE, Jour. N. Y. Ent. Soc., IX, 112.—Battle Creek, Mich.; White Mts., N. H.; N. C.  
*infuscata* LOEW, Cent., IV, 26.—N. Y.  
 D. C.—O. S.  
*ignobilis* LOEW, Cent., IV, 9.—D. C.  
 White Mts., N. H.—O. S.  
*lamellata* DOANE, Jour. N. Y. Ent. Soc., IX, 105.—Pullman, Wash.  
*latipennis* LOEW, Cent., V, 20.—White Mts., N. H.  
 Canada—O. S.

- leucophæa** DOANE, Jour. N. Y. Ent. Soc., IX, 117.—Col.  
**longipennis** MACQUART, see *Megistocera*.  
**longiventris** LOEW, Cent., IV, 5.—Ill.  
 Maine and L. Winnipeg—O. S. N. J.—Smith Cat.  
**lucida** DOANE, Jour. N. Y. Ent. Soc., IX, 126.—Moscow and Collins, Idaho.  
**macrolabis** LOEW, Cent., V, 17.—Huds. Bay Terr.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 402, oc. in Alaska and White Mts., N. H.  
**maculipennis** SAY, Long's Exped., App., 359 (*maculatipennis*); Compl. Works, I, 243 (id.).—N. W. Terr.  
 WIEDEMANN, Auss. Zw., I, 46, name emended.  
 WALKER, List, I, 67, oc. in Nova Scotia.  
 Northern States—O. S.  
**megaura** DOANE, Jour. N. Y. Ent. Soc., IX, 112.—Battle Creek, Mich.  
**microcephala** VAN DER WULP, Tijdschr. v. Ent., XXIV, 150, pl. XV, f. 4.—Guadeloupe.  
 ? **monilifera** LOEW, Linn. Ent., V, 404, pl. II, f. 26, 27.—Brazil.  
 ? OSTEN SACKEN, Biologia, Dipt., I, 13, oc. in Costa Rica; identity not certain.  
 ? WILLISTON, Biologia, Dipt., Suppl., 227, oc. in Tabasco, Mex.; identity not certain.  
**monoptera** LINNÉ, of O. Fabricius, Fauna Groenl., was an error of determination; see O. S. Cat., 39, and Lundbeck, Dipt. Groenl., II, 309.  
**nebulosa** BELLARDI, see *Epiphragma*.  
**nodulicornis** ZETTERSTEDT, see *arctica*.  
**obliquefasciata** MACQUART, Dipt. Exot., Suppl., I, 15, pl. I, f. 10.—New Grenada, S. A.  
 BELLARDI, Saggio, I, 7, pl. I, f. I (*craverii*).—Mex.  
 SCHINER, Novara, 35, syn., etc.  
 OSTEN SACKEN, Cat., 39, notes; Biologia, Dipt., I, 15, doubtfully recognized from Mexico (*craverii*).  
 WILLISTON, Biologia, Dipt., Suppl., 227, doubtfully recognized from Mex. (*craverii*). Compare also *edwardsii* and *pubera*.  
**pallida** LOEW, Cent., IV, 16.—Mass.  
**parrii** KIRBY, Suppl. to Capt. Parry's First Voyage, 1824 (Ctenophora).—Arctic America.  
 OSTEN SACKEN, Cat., 40, refers to *Stygeropsis*; Stud. Tipul., I, 183, note.  
 LUNDBECK, Dipt. Groenl., I, 264, oc. in Greenland and gen. ref.  
**pennicornis** LINNÉ, of O. Fabricius, Fauna Groenl., is a mistaken identification; see Lundbeck, Dipt. Groenl., II, 309.  
**platymera** WALKER, Dipt. Saund., 441.—Canada.  
**præcisa** LOEW, Cent., X, 2.—Cal.  
**pratorum** KIRBY, Fauna Boreali-Amer., Ins., 310; republished in Canad. Ent., XIII, 164.—Canada.  
**pubera** LOEW, Cent., V, 16.—Cal. Marin and Sonoma Cos.—O. S. O. S., Cat., 39, says very like *obliquefasciata* Macq.  
**puncticornis** MACQUART, Dipt. Exot., Suppl., IV, 15, pl. I, f. 16.—N. A.  
**quadrimaculata** BELLARDI, Saggio, I, 9, pl. I, f. 3.—Mex.  
**resurgens** WALKER, List, I, 67.—Newfoundland.  
**retorta** VAN DER WULP, Tijdschr. v. Ent., XXIV, 199, pl. XV, f. 3.—Quebec.  
**retusa** DOANE, Jour. N. Y. Ent. Soc., IX, 109.—Wash., several places.  
**rostellata** DOANE, Jour. N. Y. Ent. Soc., IX, 100.—Col.  
**septentrionalis** LOEW, Cent., IV, 4.—Labrador.

- COQUILLET*, Proc. Wash. Acad. Sci., II, 402, oc. in Alaska; female has rudimentary wings; occurs also in White Mts., N. H.
- serrulata* LOEW, Cent., v, 18.—Ft. Resolution, Huds. Bay Terr.
- serta* LOEW, Cent., IV, 14.—L. Winnipeg; Mass.  
Montreal—Chagnon.
- simplex* DOANE, Jour. N. Y. Ent. Soc., IX, 103.—Palo Alto, Cal.
- simulata* WALKER, Dipt. Saund., 441.—Canada.  
White Mts., N. H.—Slosson.
- speciosa* LOEW, Cent., IV, 22.—Ill.  
D. C.—O. S.; N. J.—Smith Cat.
- spectabilis* DOANE, Jour. N. Y. Ent. Soc., IX, 120.—Collins, Idaho.
- spernax* OSTEN SACKEN, West. Dipt., 210.—Sierra Nevada, Cal.  
COQUILLET, Proc. Wash. Acad. Sci., II, 405, oc. at Metlakahtla, Alaska.  
Northern Ida.—J. M. A.
- splendens* DOANE, Jour. N. Y. Ent. Soc., IX, 107.—Olympia, Wash.
- stalactoides* DOANE, Jour. N. Y. Ent. Soc., IX, 102.—Unalaska, Alaska.
- strepsis* LOEW, Cent., IV, 28.—N. Y.  
White Mts., N. H.—O. S.; N. J.—Smith Cat.; Axton, N. Y.—M. & H.
- streptocera* DOANE, Jour. N. Y. Ent. Soc., IX, 113.—Collins, Ida.; Olympia and Tokeland, Wash.
- strigata* COQUILLET, Proc. Wash. Acad. Sci., II, 402.—Metlakahtla, Sitka and Yakutat, Alaska.
- subcinerea* DOANE, Jour. N. Y. Ent. Soc., IX, 118.—Col.
- subfasciata* LOEW, Cent., IV, 13.—English R., Canada.
- subinfuscata* WILLISTON, Trans. Ent. Soc. Lond., 1896, 295, pl. x, f. 69.—St Vincent, W. I.
- submaculata* LOEW, Cent., IV, 23.—Mass.  
N. Y.—O. S.; N. J.—Smith Cat.
- subtenuicornis* DOANE, Jour. N. Y. Ent. Soc., IX, 125.—Seattle, Wash.
- subtilis* DOANE, Jour. N. Y. Ent. Soc., IX, 106.—Cal.
- sulphurea* DOANE, Jour. N. Y. Ent. Soc., IX, 99.—Battle Creek, Mich.
- suspecta* LOEW, Cent., IV, 8.—D. C.  
White Mts., N. H.—Slosson.
- tenebrosa* COQUILLET, Proc. Wash. Acad. Sci., II, 403.—Berg Bay and Muir Inlet, Alaska.
- tephrocephala* LOEW, Cent., v, 23.—White Mts., N. H.  
N. J.—O. S. and Smith Cat.
- ternaria* LOEW, Cent., v, 15.—Huds. Bay Terr.
- tessellata* LOEW, Cent., IV, 3.—Labrador.
- translucida* DOANE, Jour. N. Y. Ent. Soc., IX, 109.—Pa.
- tricolor* FABRICIUS, Ent. Syst., IV, 235; Syst. Antl., 26.—N. A.  
WIEDEMANN, Dipt. Exot., 22; Auss. Zw., I, 44.—Ga.  
Atlantic States—O. S.; N. J.—Smith Cat.
- triplex* WALKER, List, I, 66.—Nova Scotia.
- tristis* DOANE, Jour. N. Y. Ent. Soc., IX, 102.—Palo Alto, Cal.
- trivittata* SAY, Jour. Acad. Sci. Phil., III, 26; Compl. Works, II, 50.—Pa.  
WIEDEMANN, Auss. Zw., I, 42.—Pa.  
Atlantic States—O. S.; N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- truncorum* MEIGEN, Syst. Besch., VI, 287.—Europe.  
SCHUMMEL, Besch. Schles. Tipul., 51.  
ZETTERSTEDT, Dipt. Scand., X, 3926.  
SCHINER, Fauna Austr., II, 511.

GERSTAECKER, Zweite Deutsche nordophlfahrt, Leipzig, 1874, oc. in Greenland.

*umbrosa* LOEW, Cent., iv, 31.—La.

*unicincta* DOANE, Jour. N. Y. Ent. Soc., ix, 115.—Moscow and Collins, Ida.; Pullman and Keyport, Wash.

*usitata* DOANE, Jour. N. Y. Ent. Soc., ix, 124.—Tokeland, Wash.; Corvallis, Ore.

*valida* LOEW, Cent., iv, 21.—Mass., Ill.

N. Y.—O. S.; N. J.—Smith Cat.

*varia* DOANE, Jour. N. Y. Ent. Soc., ix, 122.—Olympia and Seattle, Wash.

*versicolor* LOEW, Cent., iv, 17.—Ill.

*virgatula* WILLISTON, Biologia, Dipt., Dipt., Suppl., 228.—Morelos, Mex.

*virgo* OSTEN SACKEN, Biologia, Dipt., i, 14.—Durango, Mex.

*vitrea* VAN DER WULP, Tijdschr. v. Ent., xxiv, 150, pl. xv, f. 5.—Quebec.

## DIXIDÆ.

### DIXA.

MEIGEN, Syst. Besch., i, 216, 1818.

MACQUART, Hist. Nat. Dipt., i, 116, 1834.

ZETTERSTEDT, Dipt. Scand., x, 4048, 1851.

SCHINER, Fauna Austr., ii, 641, 1864.

JOHANNSEN, Bull. 68, N. Y. State Mus., 429, 1903, table of species.

MEINERT, De Eucephale Myggelarver, 1886, 452, full discussion of transformations in European species.

*centralis* LOEW, Cent., iii, 3.—N. Y.

? WALKER, List, i, 85 (nova) [O. S., with a doubt].—Martin Falls, Canada.

*clavata* LOEW, Cent., viii, 1.—Mass.

*clavulus* WILLISTON, Trans. Ent. Soc. Lond., 1896, 298, pl. x, f. 73.—St. Vincent, W. I.

JOHANNSEN, Bull. 68, N. Y. State Mus., 429 (*modesta*); syn. in Ent. News, xiv, 302.—N. Y.

*fusca* LOEW, Cent., iii, 5.—N. Y.

*marginata* LOEW, Lent., iii, 1.—D. C.

*notata* LOEW, Cent., iii, 4.—Md.

N. J.—Smith Cat.

*terna* LOEW, Cent., iii, 2.—N. Y.

? WALKER, List, i, 85 (recens) [O.S., with a doubt].—N. Y. Factory, Hudson B. Terr.

*venosa* LOEW, Cent., x, 1.—Tex.

## PSYCHODIDÆ.

TOWNSEND, Trans. Amer. Ent. Soc., xix, 149, 1892, table of N. A. genera.

KINCAID, Ent. News, x, 30, 1899, table of genera.

KELLOGG, Ent. News, x, 46, 1899, desc. of an aquatic larva, and references to literature of immature stages.

### PERICOMA.

WALKER, Ins. Brit., iii, 256, 1856.

SCHINER, Fauna Austr., ii, 632, 1864.

*albitarsis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 284, pl. ix, f. 52.—St. Vincent, W. I.

*bipunctata* KINCAID, Ent. News, x, 34, f. 8.—Seattle, Wash.; Santa Cruz Mts., Cal.

- COQUILLETT, Proc. Wash. Acad. Sci., II, 397, oc. in Alaska.  
Beulah, N. M.—Skinner.
- californica* KINCAID, Ent. News, XII, 195.—Congress Springs, Cal.  
KELLOGG, Ent. News, XII, 46, figures larva and pupa, found in streams near  
Stanford University, Cal. (as *californiensis* KINCAID).
- furcata* KINCAID, Ent. News, X, 34, f. 13.—Pullman, Wash.
- ocellaris* MEIGEN, Klassif., 43, 1804 (*Trichoptera*); Syst. Besch., I, 105 (*Psychoda*). Europe.
- SCHINER, Fauna Austr., II, 633.
- KINCAID, Ent. News, XII, 194, describes var. *americana* from Maine.
- olympia* KINCAID, Ent. News, VIII, 144 (*Psychoda*); X, 31, f. 3.—Olympia, Wash.
- sitchana* KINCAID, Ent. News, X, 33.—Sitka, Alaska.
- tridactyla* KINCAID, Ent. News, X, 32, f. 2.—Seattle, Wash.
- triloba* KINCAID, Ent. News, X, 33, f. 6.—Seattle, Wash.
- truncata* KINCAID, Ent. News, X, 35, f. 10.—Palo Alto, Cal.
- variegata* KINCAID, Ent. News, X, 33, f. 7.—Seattle, Wash.

## PSYCHODA.

- LATREILLE, Précis, 152, 1796; Hist. Nat. Crust. et Ins., XIV, 293, 1804.
- MEIGEN, Syst. Besch., I, 103, 1818.
- MACQUART, Hist. Nat. Dipt., I, 164, 1834.
- ZETTERSTEDT, Dipt. Scand., IX, 3701, 1850.
- SCHINER, Fauna Austr., II, 635, 1864.
- KINCAID, Ent. News, VIII, 145, 1897, anatomy, etc.
- BANKS, Canad. Ent., XXVI, 330, 1894, table of species; loc. cit., XXXIII, 273, 1901, table of eastern species.
- WILLISTON, Dipt. St. Vincent, in Trans. Ent. Soc. Lond., 1896, 283, table of St. Vincent spp.
- albipuncta* WILLISTON, Ent. News, IV, 113.—Cuba.
- albitarsis* BANKS, Canad. Ent., XXVII, 324.—Ithaca, N. Y.
- alternata* SAY, Long's Exped., 358; Compl. Works, I, 242.—Pa.  
WIEDEMANN, Auss. Zw., I, 23.
- WILLISTON, Ent. News, IV, 113, part desc.—Conn., Mich., S. D., Tenn., Kans.
- BANKS, Canad. Ent., XXVI, 330 (N. Y.); XXXIII, 124, states that Eaton has admitted the synonymy of *sexpunctata* HAL., a later European species (see Schiner, Fauna Austr., II, 636); oc. in N. Y. and Va.  
White Mts.—Slosson; St. Vincent, with a doubt—Will; Pullman, Wash.—Kincaid.
- angustipennis* WILLISTON, Dipt. St. Vincent, 284, pl. IX, f. 51.—St. Vincent, W. I.
- antennalis* Dipt. St. Vincent, 283.—St. Vincent, W. I.
- bicolor* BANKS, Canad. Ent., XXVI, 333.—Sea Cliff, N. Y.
- cinerea* BANKS, Canad. Ent., XXVI, 331.—Sea Cliff, N. Y.  
KINCAID, Ent. News, VIII, 143 (*pacifica*).—Cal., Ore., Wash., Alaska to Pribylof Ids.  
COQUILLETT, Proc. Wash. Acad. Sci., II, 397, oc. in Br. Col. (*pacifica*).  
KINCAID, Ent. News, XII, 193, synonymy.  
D. C., Va.—Banks.
- degenera* WALKER, List, I, 33.—Martin Falls, Canada.
- elegans* KINCAID, Ent. News, VIII, 144.—Seattle, Wash.
- marginalis* BANKS, Canad. Ent., XXVI, 333.—Sea Cliff, N. Y.  
JOHNSON, Ent. News, X, 220, oc. at Riverton, N. J.



- minuta* BANKS, Canad. Ent., xxvi, 331.—Sea Cliff, N. Y. Also occurs in N. M.—Banks.  
ALDRICH, 21st Rept. Geol. Indiana, 1896, 188, oc. in a cavern. Ind.  
HOWARD, Canad. Ent., xxxiii, 43, oc. in Va.; bred from cowdung.  
White Mts., N. H.—Slosson.
- nigra* BANKS, Canad. Ent., xxvi, 331.—Sea Cliff, N. Y. Also reported from Va.—Banks.
- nitida* BANKS, Canad. Ent., xxxiii, 275.—D. C.
- opposita* BANKS, Canad. Ent., xxxiii, 274.—D. C.
- pallens* WILLISTON, Dipt. St. Vincent, 283, pl. ix, f. 50.—St. Vincent, W. I.
- punctatella* TOWNSEND, Annals and Mag. Nat. Hist., xix, 19.—Vera Cruz.
- schizura* KINCAID, Ent. News, x, 32, f. 9.—Seattle Wash.
- sigma* KINCAID, Ent. News, x, f. 1.—Olympia, Wash.
- signata* BANKS, Canad. Ent., xxxiii, 274.—D. C.
- slossoni* WILLISTON, Ent. News, iv, 114.—Watkins Glen, N. Y.  
BANKS, Canad. Ent., xxvi, 324, male.—N. Y.
- superba* BANKS, Canad. Ent., xxvi, 332 (Sea Cliff, N. Y.); xxxiii, 275, oc. in D. C., "on the bark of large trees."

## SYCORAX.

- CURTIS, Brit. Entomol., 745, 1839.  
SCHINER, Fauna Austr., ii, 631, 1864.  
KINCAID, Ent. News, x, 30, part. desc.
- lanceolata* KINCAID, Ent. News, x, 35, f. 11, 12.—Palo Alto and Santa Cruz Mts., Cal.; Almota, Wash.

## TRICHOMYIA.

- CURTIS, Brit. Ent., 745, 1839.  
SCHINER, Fauna Austr., ii, 631, 1864.
- cirrata* COQUILLET, Jour. N. Y. Ent. Soc., x, 137.—Frontera in Tabasco, Mex.

## CHIRONOMIDÆ.

## STENOXENUS.

- COQUILLET, Ent. News, x, 60, 1899.
- johnsoni* COQUILLET, loc. cit., fig.—Delaware Water Gap, N. J.  
*Note.*—Mr. Coquillett has founded a new family upon this species, which he calls Stenoxenidæ. As but a single female specimen with the antennæ broken off has as yet come to light, and it is admittedly related to *Ceratopogon*, it would seem decidedly premature to recognize this family.

## TERSESTHES.

- TOWNSEND, Psyche, Jan., 1893, 371.
- torrens* TOWNSEND, loc. cit., plate.—Socorro Co., N. M.; the females suck blood.

## CERATOPOGON.

- MEIGEN, Illig. Mag., ii, 261, 1803; Syst. Besch., i, 70, 1818.  
ZETTERSTEDT, Dipt. Scand., ix, 3629, 1850.  
WINNERTZ, Linnæa Ent., vi, 1851, pp. 1-80; this is the classic monograph of the European species.  
SCHINER, Fauna Austr., ii, 574, 1864.

- MIK, Wien, Ent. Zeitung, 1888, 183, and 1894, 23, life history of European species.
- WILLISTON, Dipt. St. Vincent, in Trans. Ent. Soc. Lond., 1896, 276, table of species from St. Vincent.
- COQUILLET, Proc. U. S. N. M., XXIII, 599, table of new spp.
- HOWARD, Proc. Wash. Acad. Sci., II, 559, notes on larval habits; one species reared from human excrement.
- LUGGER, 2d Rept. Ent. Minn., 1896, 171, fig., notes on, attacking man.
- MEINERT, Eucephale Myggelarver, 464, pl. IV, f. 128-137, an excellent study of the transformations of *C. circumdatum*, a European species.
- albarius** COQUILLET, Proc. Acad. Nat. Sci., 1895, 308.—Fla.  
N. J.—Smith Cat.
- albiventris** LOEW, Cent., I, 7.—Ga.  
N. J.—Smith Cat.
- ancorus** COQUILLET, Proc. U. S. N. M., XXV, 87.—Biscayne Bay, Fla.
- antennalis** COQUILLET, Proc. U. S. N. M., XXIII, 606.—D. C.
- arcticus** COQUILLET, Proc. Wash. Acad. Sci., II, 396.—Popoff Id., Alaska.
- argentatus** LOEW, Cent., I, 5.—D. C.  
N. J.—Smith Cat.; Welaka, Fla.—Johnson.
- barberi** COQUILLET, Proc. U. S. N. M., XXIII, 601.—Chesapeake Beach, Md.
- basalis** WALKER, List, I, 27.—Trenton Falls, N. Y.
- bellus** COQUILLET, Proc. U. S. N. M., XXV, 87.—D. C.
- biguttatus** COQUILLET, Proc. U. S. N. M., XXIII, 604.—D. C.
- bimaculatus** LOEW, Cent., I, 6.—D. C.
- brumalis** LONG, Biol. Bull., 1902, 3; larva, pupa and adult. I have not seen this paper, and am unable to give the locality.
- cilipes** COQUILLET, Proc. Wash. Acad. Sci., II, 397.—Muir Inlet, Glacier Bay, Alaska.
- cinctus** COQUILLET, Proc. U. S. N. M., XXIII, 605.—Lake Worth and Biscayne Bay, Fla.; bites human beings.
- cockerelli** COQUILLET, Proc. U. S. N. M., XXIII, 603.—Custer Co., Col.
- decor** WILLISTON, Dipt. St. Vincent, 281, pl. IX, f. 45.—St. Vincent, W. I.
- diversus** COQUILLET, Proc. U. S. N. M., XXIII, 607.—Riverton, N. J.
- dimidiatus** ADAMS, Kans. Univ. Sci. Bull., II, 27.—Grand Canon, Ariz.
- elegans** COQUILLET, Proc. U. S. N. M., XXIII, 599.—Riverton, N. J.
- eriphorus** WILLISTON, Dipt. St. Vincent, 279, pl. IX, f. 40.—St. Vincent, W. I.
- exilis** COQUILLET, Proc. U. S. N. M., XXV, 86.—D. C.
- expolitus** COQUILLET, Proc. U. S. N. M., XXIII, 600.—Riverton, N. J.
- femoratus** MEIGEN, Klassif., II, 28, 1804; Syst. Besch., I, 83.—Europe.  
FABRICIUS, Syst. Antl., 45, 1805 (*Chironomus*).  
LATREILLE, Gen. Crust., IV, 250.  
MACQUART, Hist. Nat. Dipt., I, 67.  
STAEGER, Kröyer's Nat. Tidsskr., II, 1839, 598.  
ZETTERSTEDT, Dipt. Scand., IX, 3665.  
WINNERTZ, Mon., 68.  
SCHINER, Fauna Austr., II, 584.  
COQUILLET, Proc. Wash. Acad. Sci., II, 396, oc. in N. A.—Popoff Id., Alaska.
- festivus** LOEW, Cent., I, 13.—Pa.  
N. J.—Smith Cat.
- fimbriatus** COQUILLET, Proc. U. S. N. M., XXIII, 601.—D. C.
- flavipes** MEIGEN, Syst. Besch., I, 82; loc. cit., I, 81 (*hortulanus*).—Europe.

- WINNERTZ, Mon., 58. SCHINER, Fauna Austr., II, 585.  
N. J.—Smith Cat.
- flavus** WILLISTON, Dipt. St. Vincent, 280, pl. IX, f. 42.—St. Vincent, W. I.
- fuscus** COQUILLET, Proc. U. S. N. M., XXIII, 605.—D. C., N. J., N. H., Me.
- genualis** LOEW, Cent., VI, 1.—Cuba.
- glaber** COQUILLET, Proc. U. S. N. M., XXV, 85.—Biscayne Bay, Fla.
- griseus** COQUILLET, Proc. U. S. N. M., XXIII, 602.—D. C., Fla.
- guttipennis** COQUILLET, Proc. U. S. N. M., XXIII, 603.—Medina, Ohio.
- hirtulus** COQUILLET, Proc. Wash. Acad. Sci., II, 396.—Virgin Bay, Prince William Sound, Alaska.
- hollensis** MELANDER and BRUES, Biol. Bull., V, 13, 1903.—Woods Holl, Mass.
- inermis** COQUILLET, Proc. U. S. N. M., XXV, 86.—Yavapai Co., Ariz.
- johnsoni** COQUILLET, Proc. U. S. N. M., XXIII, 600.—Riverton, N. J.
- lacteipennis** ZETTERSTEDT, Ins. Lapp., 810; Dipt. Scand., IX, 3639.—Europe.  
WINNERTZ, Mon., 49. SCHINER, Fauna Austr., II, 584.  
LUNDBECK, Dipt. Groenlandica, I, 270, oc. in Greenland.
- levis** COQUILLET, Proc. U. S. N. M., XXIII, 604.—Marlboro, N. J.
- lineatus** MEIGEN, Syst. Besch., I, 80.—Europe.  
WINNERTZ, Mon., 63. STAEGER, Dipt. Dan., 595.  
ZETTERSTEDT, Dipt. Scand., IX, 3655.  
SCHINER, Fauna Austr., II, 587.  
LOEW, Silliman's Jour., oc. in N. A.  
N. J.—Smith Cat.
- lituratus** WILLISTON, Dipt. St. Vincent, 281.—St. Vincent, W. I.
- longicornis** WILLISTON, Dipt. St. Vincent, 280, pl. IX, f. 43.—St. Vincent, W. I.
- longipennis** LOEW, Cent., I, 10.—Pa.  
N. J.—Smith Cat.
- lotus** WILLISTON, Dipt. St. Vincent, 282, pl. IX, f. 47.—St. Vincent, W. I.
- maculithorax** WILLISTON, Dipt. St. Vincent, 277, pl. IX, f. 36.—St. Vincent, W. I.
- melleus** COQUILLET, Proc. U. S. N. M., XXIII, 604.—Lake Worth, Fla.
- mundus** COQUILLET, see *smithii*.
- mutabilis** COQUILLET, Proc. U. S. N. M., XXIII, 602.—D. C., Fla.
- nebulosus** COQUILLET, Proc. U. S. N. M., XXIII, 606.—Riverton, N. J.
- nocivum** HARRIS, Ins. Inj. Vag., 602 (*Simulium*). Mass. 3 lines desc. Gen. ref. in O. S. Cat., 14.
- obscurus** WALKER, List, I, 26.—Martin Falls, Canada.
- opacus** LOEW, Cent., I, 9.—D. C.
- pachymerus** WILLISTON, Biologia. Dipt., Suppl., 224.—Vera Cruz, Mex.
- parvus** WALKER, List, I, 26.—Martin Falls, Canada.
- pergandei** COQUILLET, Proc. U. S. N. M., XXIII, 602.—D. C.
- phlebotomus** WILLISTON, Dipt. St. Vincent, 281, pl. IX, f. 46.—St. Vincent, W. I.
- pilosulus** COQUILLET, Proc. U. S. N. M., XXV, 87.—D. C.
- pilebeus** LOEW, Cent., I, 11.—Pa.  
N. J.—Smith Cat.
- politus** COQUILLET, Proc. U. S. N. M., XXIII, 606.—Cambridge, Mass.
- propinquus** WILLISTON, Dipt. St. Vincent, 279, pl. IX, f. 41.—St. Vincent, W. I.
- pulvereus** COQUILLET, Proc. U. S. N. M., XXIII, 600.—Riverton, N. J., and D. C.
- punctipennis** WILLISTON, Dipt. St. Vincent, 278, pl. IX, f. 39.—St. Vincent, W. I.  
COQUILLET, Proc. U. S. N. M., XXII, 250, oc. in Porto Rico.
- pygmæus** WILLISTON, Dipt. St. Vincent, 278, pl. IX, f. 37.—St. Vincent, W. I.
- rufus** LOEW, Cent., I, 12.—Pa.  
N. J.—Smith Cat.

- sanguisuga** COQUILLET, Proc. U. S. N. M., xxiii, 604.—Marlboro, Md.; bites human beings.
- scutellatus** MEIGEN, Syst. Besch., vi, 262, 1830.—Europe.  
WINNERTZ, Mon., 44.  
SCHINER, Fauna Austr., ii, 582.  
LUNDBECK, Dipt. Groenlandica, i, 270, oc. in Greenland.
- scutellatus** SAY, Jour. Acad. Sci. Phil., vi, 150, 1829; Compl. Works, ii, 349.—Ind.
- schwarzii** COQUILLET, Proc. U. S. N. M., xxiii, 605.—Sharpsburg, Tex.
- sequax** WILLISTON, Dipt. St. Vincent, 282, pl. ix, f. 48.—St. Vincent, W. I.  
COQUILLET, Proc. U. S. N. M., xxii, 250, oc. in Porto Rico.
- setulosus** LOEW, Cent., i, 8.—D. C.  
N. J.—Smith Cat.
- smithii** COQUILLET, Proc. U. S. N. M., xxiii, 600.—Riverton, N. J. Mentioned in Smith's Cat. as *C. mundus*, a manuscript name (Coquillett in litt.).
- sordidellus** ZETTERSTEDT, Ins. Lapp., 820; Dipt. Scand., ix, 3640.—N. Europe.  
STAEGER, Groenl. Antliater, oc. in Greenland.  
O. FABRICIUS, Fauna Groenlandica (*Culex pulicans*—misprint for *pulicaris*). [Schiödte.]
- specularis** COQUILLET, Proc. U. S. N. M., xxiii, 601.—Pa., D. C., Col.  
HOWARD, Canad. Ent., xxxiii, 43, oc. in Va.; bred from cowdung.  
LONG, Biol. Bull., 1902, 7; larva, pupa and adult.
- squamipes** COQUILLET, Proc. U. S. N. M., xxv, 88.—Las Vegas Hot Springs, N. M.
- stellifer** COQUILLET, Proc. U. S. N. M., xxiii, 604.—D. C.
- stenammatis** LONG, Biol. Bull., 1902, 10.
- stigmalis** COQUILLET, Proc. U. S. N. M., xxv, 86.—Las Vegas Hot Springs, N. M.
- subasper** COQUILLET, Proc. U. S. N. M., 603.—Marlboro, Md., and Mesilla Park, N. M.
- texanus** LONG, Biol. Bull., 1902, 10; larva, pupa and adult.—Texas.
- thersites** WILLISTON, Dipt. St. Vincent, 280, pl. ix, f. 44.—St. Vincent, W. I.
- tibialis** MEIGEN, Syst. Besch., i, 82.—Europe.  
WINNERTZ, Mon., 65. SCHINER, Fauna Austr., ii, 586.  
N. J.—Smith Cat.
- transiens** WALKER, List, i, 25.—Martin Falls, Canada.  
N. J.—Smith Cat.
- trivialis** LOEW, Cent., i, 4.—D. C.  
N. J.—Smith Cat.
- varicolor** COQUILLET, Ent. News, xiii, 84.—Bellport, Long Id., N. Y.
- variipennis** COQUILLET, Proc. U. S. N. M., xxiii, 602.—N. J., Va., and Mexico City.
- venustus** WILLISTON, Dipt. St. Vincent, 278, pl. ix, f. 38.—St. Vincent, W. I.
- viridis** COQUILLET, Proc. U. S. N. M., xxiii, 607.—Riverton, N. J.
- websteri** COQUILLET, Proc. U. S. N. M., xxiii, 603.—Ashwood, La.
- wheeleri** LONG, Biol. Bull., 1902, 12; larva and pupa only.

#### HETEROMYIA.

- SAY, N. A. Ent., ii, 1825; Compl. Works, i, 79, pl. xxv.  
OSTEN SACKEN, note in Say's Compl. Works, i, 80; Cat., 23, observation on validity.
- clavata** WILLISTON, Biologia, Dipt. Suppl., 225.—Vera Cruz, Mex.
- fasciata** SAY, Amer. Ent., ii; Complete Works, i, 80, pl. xxxv.—No locality. Atl. States (O. S.); N. J. (Smith Cat.).
- prattii** COQUILLET, Proc. U. S. N. M., xxv, 88.—St. Elmo, Va.

## CORYNONEURA.

WINNERTZ, Ent. Zeit. v. Stett., VII, 12, 1846.

SCHINER, Fauna Austriaca, II, 594, 1864.

**atra** WINNERTZ, Ent. Zeit. v. Stett., XIII, 50.—Europe.

SCHINER, Fauna Austr., II, 594.

LUNDBECK, Dipt. Groenl., I, 270, oc. in Greenland.

**celeripes** WINNERTZ, Ent. Zeit. v. Stett., XIII, 50.—Europe.

SCHINER, Fauna Austr., II, 594.

LUNDBECK, Dipt. Groenl., I, 271, oc. in Greenland.

## CHIRONOMUS.

MEIGEN, Illig. Mag., II, 260, 1803; Syst. Besch., I, 19, 1818.

ZETTERSTEDT, Dipt. Scand., IX, 3475, 1850.

SCHINER, Fauna Austr., II, 595, 1864.

WILLISTON, Dipt. St. Vincent, 273, 1896, table of St. Vincent spp.

MEINERT, Eucephale Myggelarver, 435, 1886, gives the older literature of the transformations, with notes on same; also an excellent account of the different stages of *Ch. venustus* and *motillator*, European species.

JOHANNSEN, Bull. 68, N. Y. State Mus., 433, 1903, describes and figures a larva of an undet. species which is an important food for trout in the Adirondacks, N. Y.

OSBORN, Bull. 32, Iowa Experiment Station, 405-407, figures an undet. species occurring in water tanks and reservoirs.

**albistria** WALKER, List, I, 17.—Martin Falls, Canada.

**anonymus** WILLISTON, Dipt. St. Vincent, 274.—St. Vincent, W. I.

**anticus** WALKER, List, I, 21.—Ga.

**aterrimus** STAEGER, nec Meigen, see *ursinus*.

**atomarius** ZETTERSTEDT, see *Orthocladius*.

**atratus** ZETTERSTEDT, see *Metriocnemus*.

**atrimanus** COQUILLET, Proc. U. S. N. M., xxv, 94.—Kansas City, Mo.

**attenuatus** WALKER, List, I, 20.—Martin Falls, Canada.

White Mts., N. H.—Slosson; but the original description is meaningless.

**basalis** STAEGER, Groenl. Antl., 351.—Greenland.

HOLMGREN, Ins. Nordgroenl., 105.

LUNDBECK, Dipt. Groenl., I, 279, oc.

**bimacula** WALKER, List, I, 15.—Martin Falls, Canada.

**borealis** CURTIS, Insects of Ross's Voyage, LXXVII.—Arctic America.

**brachialis** COQUILLET, Proc. U. S. N. M., xxiii, 607.—Westville, N. J.

**brevitibialis** ZETTERSTEDT, Dipt. Scand., IX, 3537.—N. Europe.

SCHINER, Fauna Austr., II, 605.

LUNDBECK, Dipt. Groenl., I, 273, oc. in Greenland.

**brunneus** WALKER, List, I, 21.—Martin Falls, Canada.

N. J.—Smith Cat.; White Mts., N. H.—Mrs. Slosson; Beulah, N. M.—Skinner. In spite of these identifications, I consider the description quite unrecognizable.

**byssinus**, see *Camptocladius*.

**chloris** MEIGEN, Syst. Besch., I, 28.—Europe.

STAEGER, Dipt. Dan., 1840, 564.

ZETTERSTEDT, Dipt. Scand., IX, 3511. SCHINER, Fauna Austr., II, 604.

VAN DER WULP, Tijdschr. v. Ent., sec. ser., II, 126, oc. in N. A.—Wis.

**claripennis** LUNDBECK, see *Orthocladius*.

**confinis** WALKER, List, I, 15.—Martin Falls, Canada.

**crassicollis** WALKER, List, I, 18.—Martin Falls, Canada.

- cristatus** FABRICIUS, Syst. Ant., 39.—N. Y.  
 WIEDEMANN, Auss. Zw., I, 14.  
 MACQUART, Hist. Nat. Dipt., I, 50.  
 N. J.—Smith Cat.; Montreal—Chagnon.
- debilipennis** LUNDBECK, see *Metriocnemus*.
- devinctus** SAY, Jour. Acad. Sci. Phil., VI, 150; Compl. Works, II, 349.—Ind.
- difficilis** LUNDBECK, see *Orthocladius*.
- dispar** MEIGEN, Syst. Besch., VI, 247.—Europe.  
 ZETTERSTEDT, Dipt. Scand., IX, 3506; loc. cit., 3509 (*lucidus*).  
 STAEGER, Kröyer's Tidsskr., II, 569.  
 SCHINER, Fauna Austr., II, 604.  
 N. J.—Smith Cat.
- dorsalis** MEIGEN, Syst. Besch., I, 25.—Europe.  
 SCHINER, Fauna Austr., II, 605.  
 MIALI and HAMMOND, Trans. Linn. Soc. Lond., ser. 2, v, pl. XXIX-XXXI, 1893.  
 Identified from Market Lake, Idaho—Johannsen *in litt*.
- extremus** HOLMGREN, see *Camptocladius*.
- fascipennis** ZETTERSTEDT, Ins. Lapp., 813; Dipt. Scand., IX, 3505.—N. Europe.  
 SCHINER, Fauna Austr., II, 599.  
 N. J.—Smith Cat.; Montreal—Chagnon.
- festivus** SAY, Jour. Acad. Sci. Phil., III, 13; Compl. Works, II, 41.—Ill.  
 WIEDEMANN, Analecta Ent., 10; Auss. Zw., I, 16.  
 White Mts., N. H.—Slosson.
- fimbriatus** WALKER, List, I, 20.—Martin Falls, Canada.
- flavicingula** WALKER, List, I, 20.—Martin Falls, Canada.
- frigidus** ZETTERSTEDT, of Staeger, see *Orthocladius pubitarsis*.
- fuscipes** MEIGEN, see *Metriocnemus*.
- geminatus** SAY, see *Cricotopus*.
- graminicola** LUNDBECK, see *Camptocladius*.
- halteralis** COQUILLET, Ent. News, XII, 17.—D. C.  
 HOWARD, Proc. Acad. Sci. Wash., II, 559, adult collected on excrement.
- hyperboreus** STAEGER, Groenl. Antl., 349 (in part).—Greenland.  
 SCHIÖDTE, Rink's Greenland, Suppl., 67 (*polaris*) [Lundbeck].
- incomptus** ZETTERSTEDT, see *Metriocnemus*.
- innocuus** WILLISTON, Dipt. St. Vincent, 274.—St. Vincent, W. I.
- intermedius** STAEGER, Kröyer's Tidsskr., II, 559.—Europe.  
 ZETTERSTEDT, Dipt. Scand., IX, 3484.  
 OSTEN SACKEN, Cat., 20, oc. in N. W. of N. A., and note.
- jucundus** WALKER, List, I, 16.—Ga.  
 N. J.—Smith Cat.
- junci** MEIGEN, see *Tanytarsus*.
- lasiomerus** WALKER, List, I, 19.—Martin Falls, Canada.
- lasiopus** WALKER, List, I, 19.—Martin Falls, Canada.
- lineatus** SAY, Jour. Acad. Sci. Phil., III, 14; Compl. Works, II, 42.—Pa.  
 WIEDEMANN, Auss. Zw., I, 17 (name unnecessarily changed to *lineola*).  
 N. J.—Smith Cat.; Montreal—Chagnon (both *lineola*).
- lobiferus** SAY, Jour. Acad. Sci. Phil., III, 12; Compl. Works, II, 41.—Pa.  
 WIEDEMANN, Auss. Zw., I, 16.  
 MACQUART, Hist. Nat. Dipt., I, 50.
- longimanus** WILLISTON, Dipt. St. Vincent, 274, pl. IX, f. 33.—St. Vincent, W. I.
- lugubris** WILLISTON, Dipt. St. Vincent, 274.—St. Vincent, W. I.
- minimus** MEIG., see *Camptocladius*.



- minutus** ZETTERSTEDT, see *Orthocladius*.
- modestus** SAY, Jour. Acad. Sci. Phil., III, 13; Compl. Works, II, 41.—Pa.  
WIEDEMANN, Auss. Zw., I, 18.  
N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.  
White Mts., N. H.—Slosson.
- nigritibia** WALKER, List, I, 16.—Martin Falls, Canada.
- nitidulus** COQUILLET, Proc. U. S. N. M., XXIII, 608.—Riverton, N. J.
- niveipennis** FABRICIUS, Syst. Antl., 42.—Europe.  
MEIGEN, Syst. Besch., VI, 254 (*pilicornis*).  
ZETTERSTEDT, Dipt. Scand., IX, 3566. SCHINER, Fauna Austr., II, 593.  
JOHNSON, Proc. Acad. Nat. Sci. Phil., 1895, 320, oc. at Charlotte Harbor,  
Fla.
- nivoriundus** FITCH, see *Orthocladius*.
- oceanicus** PACKARD, Proc. Essex. Inst., VI, 42, figs. larva, etc.—Salem, Mass.
- octopunctatus** LOEW, Wien. Ent. Monatschr., V, 33.—Cuba.
- palliatu**s COQUILLET, Proc. U. S. N. M., XXV, 95.—D. C.
- parvus** LUNDBECK, see *Camptocladius*.
- pedellus** LINNÉ, Fauna Suec., No. 1759 (var. of *Tipula littoralis*).—Europe.  
DEGEER, Ins., VI, 378, pl. XIX, f. 12, 13 (*Tipula*).  
FABRICIUS, Ent. Syst., IV, 247; Syst. Antl., 45 (both *Chir. cantans*).  
MEIGEN, Syst. Besch., I, 23. STAEGE, Dipt. Dan., 564.  
ZETTERSTEDT, Ins. Lapp., 814; Dipt. Scand., IX, 3535.  
VAN DER WULP, Tijdsch. v. Ent., II, 126, oc. in N. A.  
N. J.—Smith Cat.; Montreal—Chagnon.
- pedestris** MEIGEN, Syst. Besch., VI, 246.—Europe.  
SCHINER, Fauna Austr., II, 606.  
N. J.—Smith Cat.
- pellucidus** WALKER, List, I, 21.—Martin Falls, Canada.
- picipes** MEIG., see *Metriocnemus fuscipes*.
- plumosus** LINNÉ, Fauna Suec., 434; Syst. Nat., II, 974 (*Tipula*).—Europe.  
FABRICIUS, Ent. Syst., IV, 242 (*Tipula*); Syst. Antl., 37.  
GEOFFROY, Ins., II, 560.  
GOEDART, Ins., III, pl. X.  
MEIGEN, Klassif., II, pl. I, f. 19; Syst. Besch., I, 20.  
MACQUART, Hist. Nat. Dipt., I, 48.  
STAEGE, Dipt. Dan., 557.  
ZETTERSTEDT, Ins. Lapp., 809; Dipt. Scand., IX, 3481.  
SCHINER, Fauna Austr., II, 601.  
OSTEN SACKEN, Cat., 21, oc. in N. A. (Mackenzie Riv., Canada.)  
RILEY, Rept. Dept. of Ag., 1886, oc. in N. Y.
- polaris** KIRBY, Suppl. to Parry's First Voyage; CURTIS, Ins. of Ross's Voyage,  
LXXVII, pl. A, f. 2 and 14.—Arctic America; Greenland. (Unrecogniz-  
able—Lundbeck.)
- pubitarsis** ZETTERSTEDT, see *Orthocladius*.
- pulchripennis** COQUILLET, Proc. U. S. N. M., XXV, 94.—Franconia, N. H.
- pumilio** HOLMGREN, see *Camptocladius*.
- redeuns** WALKER, Dipt. Saund., 422.—U. S.  
COQUILLET, Proc. U. S. N. M., XXII, 250, oc. in Porto Rico.
- riparius** MEIGEN, Syst. Besch., I, 23.—Europe.  
STAEGE, Groenl. Antliater, 350 (*turpis* ZETT.), oc. in Greenland [Ldbk.].  
ZETTERSTEDT, Ins. Lapp., 810; Dipt. Scand., IX, 3489.  
SCHINER, Fauna Austr., II, 603.

- VAN DER WULP, Tijdschr. v. Ent., II, 126, oc. in N. A.—Wis.  
 LUNDBECK, Dipt. Groenl., I, 272, oc. in Greenland.  
 White Mts., N. H.—Slosson; Charlotte Harbor, Fla.—Johnson.
- scalænus** SCHANK, Fauna Boica, III, 2324, 1803.—Europe.  
 ZETTERSTEDT, Dipt. Scand., IX, 3501.  
 SCHINER, Fauna Austr., II, 600.  
 MRS. SLOSSON, Ent. News, XIII, 320, 1902, oc. in White Mts., N. H.
- spilopterus** WILLISTON, Trans. Ent. Soc. Lond., 1896, 273, pl. IX, f. 32.—St. Vincent, W. I.
- staegeri** LUNDBECK, Dipt. Groenl., I, 271.—Greenland.  
 STAEGER, Groenl. Antliater, 394 (*hyperboreus* var.).—Greenland.  
 ZETTERSTEDT, Ins. Lapp., 809 (*annularis*, the Greenland specimens); Dipt. Scand., IX, 3487 (*hyperboreus*).—Greenland.
- stercorarius** DEGEER, see *Orthocladius*.
- stigmaterus** SAY, Jour. Acad. Sci. Phil., III, 15; Compl. Works, II, 42.—U. S.  
 WIEDEMANN, Auss. Zw., I, 15 (name changed unnecessarily to *glaucuruse*).  
 Atlantic States—O. S.
- sylvestris** FABRICIUS, see *Cricotopus*.
- tæniapennis** COQUILLET, Proc. U. S. N. M., XXIII, 607.—Mass and N. J.  
 Province of Quebec—Fyles.
- tæniotus** SAY, Jour. Acad. Sci. Phil., VI, 149; Compl. Works, II, 349.—Ind.
- tendens** FABRICIUS, Ent. Syst., IV, 243 (*Tipula*); Syst. Antl., 39.—Europe.  
 MEIGEN, Classification, I, 33 (*Ceratopogon*); Syst. Besch., I, 34.  
 ZETTERSTEDT, Dipt. Scand., IX, 3525.  
 SCHINER, Fauna Austr., II, 605.  
 N. J.—Smith Cat.; Montreal—Chagnon.
- tentans** FABRICIUS, Syst. Antl., 38.—Europe.  
 SCHINER, Fauna Austr., II, 603.  
 Identified from S. D., Ida. and Utah—Johannsen in litt.
- tenuis** MEIGEN, see *Tanytarsus*.
- tremulus** LINNÉ, see *Cricotopus*.
- trichomerus** WALKER, List, I, 21.—Martin Falls, Canada.
- tricinctus** MEIGEN, see *Cricotopus*.
- unicolor** WALKER, List, I, 19.—Nova Scotia.
- ursinus** HOLMGREN, see *Metriocnemus*.
- variabilis** STAEGER, see *Orthocladius*.
- varipennis** COQUILLET, Proc. U. S. N. M., XXV, 94.—Las Vegas Hot Springs, N. M.
- velutinus** LUNDBECK, see *Camptocladius*.
- viridis** MACQUART, Hist. Nat. Dipt., I, 52.—Europe.  
 STAEGER, Dipt. Dan., 565.  
 ZETTERSTEDT, Ins. Lapp., 814 (*vulneratus*); Dipt. Scand., IX, 3531.  
 SCHINER, Fauna Austr., II, 605.  
 White Mts., N. H.—Slosson; Charlotte Harbor, Fla.—Johnson.

#### TELMATOGETON.

- SCHINER, Novara, 25, 1868, pl. II, f. 1.  
**alaskensis** COQUILLET, Proc. Wash. Acad. Sci., II, 395.—Yakutat, Alaska.  
 Newport, Ore.—J. M. A.

#### ORTHOCLADIUS.

- VAN DER WULP, Tijdschr. v. Ent., XVII, 132, 1874.  
**atomarius** ZETTERSTEDT, Dipt. Scand., IX, 3500 (*Chironomus*).—Europe.

- SCHINER, Fauna Austr., II, 609 (*id.*).  
 LUNDBECK, Dipt. Groenl., I, 283, oc. in Greenland (*id.*).  
**barbicornis** LINNÉ, Syst. Nat., 12th ed., II, 974 (*Tipula*).—Europe.  
 SCHINER, Fauna Austr., II, 612 (*Chironomus*).  
 Identified from U. S.—Johannsen in litt.  
**claripennis** LUNDBECK, Dipt. Groenl., I, 281 (*Chironomus*).—Greenland.  
**clepsydra** COQUILLET, Proc. U. S. N. M., XXV, 92.—Las Vegas Hot Springs, N. M.  
**debilis** WILLISTON, Trans. Ent. Soc. Lond., 1896, pl. IX, f. 34.—St. Vincent, W. I.  
**difficilis** LUNDBECK, Dipt. Groenl., I, 282 (*Chironomus*).—Greenland.  
**frigidus** ZETTERSTEDT, of Staeger, see *pubitarsis*.  
**minutus** ZETTERSTEDT, Dipt. Scand., IX, 3522 (*Chironomus*).—N. Europe.  
 LUNDBECK, Dipt. Groenl., I, 281, oc. in Greenland (*id.*).  
**nivoriundus** FITCH, see *Diamesa waltlii*.  
**par** COQUILLET, Proc. U. S. N. M., XXIII, 608.—Riverton, N. J.  
 Axton, N. Y.—M. & H.  
**platypus** COQUILLET, Proc. U. S. N. M., XXV, 95.—Flagstaff, Ariz.  
**politus** COQUILLET, Proc. U. S. N. M., XXV, 93.—D. C.  
**pubitarsis** ZETTERSTEDT, Ins. Lapp., 811; Dipt. Scand., IX, 3514 (*Chironomus*).—N. Europe.  
 STAEGER, Groenl. Antl., 351 (*Chironomus frigidus* ZETT.).—Greenland.  
 LUNDBECK, Dipt. Groenl., I, 280, oc. in Greenland; correction of Staeger, etc. (*Chironomus*).  
*Note.*—Holmgren also recognized a *Ch. frigidus* from Greenland, which I presume belongs here.  
**stercorarius** DEGEER, Mém. pour Serv. Hist. Nat. Ins., VI, 388, pl. XXII and XXIII (*Tipula*).—N. Europe; larva and pupa also included.  
 MEIGEN, Syst. Besch., I, 46 (*Chironomus*).  
 STAEGER, Dipt. Dan., 578 (*id.*).  
 ZETTERSTEDT, Ins. Lapp., 815; Dipt. Scand., IX, 3571 (*id.*).  
 SCHINER, Fauna Austr., II, 612 (*id.*).  
 HOLMGREN, Ins. Nordgroenl., 105, oc. in Greenland (*id.*).  
 LUNDBECK, Dipt. Groenl., I, 277, oc. in Greenland (*id.*).  
**variabilis** STAEGER, Dipt. Dan., 571 (*Chironomus*); Groenl. Antl., 351, oc. in Greenland (*id.*).—Denmark.  
 ZETTERSTEDT, Dipt. Scand., IX, 3519 (*id.*).  
 White Mts., N. H.—Slosson.

### CAMPTOCLADIUS.

- VAN DER WULF, Tijdschr. v. Ent., XVII, 133, 1874.  
**byssinus** SCHRANK, Fauna Boica, III, 2330 (*Tipula*).—Europe.  
 MEIGEN, Syst. Besch., I, 46 (*Chironomus*).  
 STAEGER, Dipt. Dan., 578; Groenl. Antl., 352 (*id.*).—Europe and Greenland.  
 ZETTERSTEDT, Ins. Lapp., 815; Dipt. Scand., IX, 3572 (*id.*).  
 SCHINER, Fauna Austr., II, 612 (*id.*).  
 LUNDBECK, Dipt. Groenl., I, 273, oc. in Greenland (*id.*).  
 HOWARD, Canad. Ent., XXXIII, 43, reared from cowdung.—Va. N. J.—Smith Cat.  
**extremus** HOLMGREN, Kongl. Vet. Akad., 1869, 40 (*Chironomus*).—Europe.  
 LUNDBECK, Dipt. Groenl., I, 176, oc. in Greenland (*id.*).  
**graminicola** LUNDBECK, Dipt. Groenl., I, 278 (*Chironomus*).—Greenland.

- minimus** MEIGEN, Syst. Besch., I, 47 (*Chironomus*).—Europe.  
 ZETTERSTEDT, Dipt. Scand., IX, 3573 (id.).  
 SCHINER, Fauna Austr., II, 612 (id.).  
 HOWARD, Canad. Ent., XXXIII, 43, bred from cowdung.—Va. N. J.—Smith Cat.
- parvus** LUNDBECK, Dipt. Groenl., Dipt., I, 275 (*Chironomus*).—Greenland.
- pumilio** HOLMGREN, Ins. Spetsb., 41; Ins. Nordgroenl., 105 (*Chironomus*).—Spitzbergen; Greenland.  
 LUNDBECK, Dipt. Groenl., I, 276, oc. in Greenland (id.).
- velutinus** LUNDBECK, Dipt. Groenl., I, 274 (*Chironomus*).—Greenland.

#### METRIOCNEMUS.

- VAN DER WULP, Tijdschr. v. Ent., XVII, 136, 1874.
- atratus** ZETTERSTEDT, Dipt. Scand., IX, 3590 (*Chironomus*).—N. Europe.  
 SCHINER, Fauna Austr., II, 608 (id.).  
 LUNDBECK, Dipt. Groenl., I, 285, oc. in Greenland (id.).
- debilipennis** LUNDBECK, Dipt. Groenl., I, 286 (*Chironomus*).—Greenland.
- fuscipes** MEIGEN, Syst. Besch., I, 49 (*Chironomus*); 52 (*Chir. picipes*).—Europe.  
 ZETTERSTEDT, Dipt. Scand., IX, 3578 (*Ch. fuscipes*).  
 SCHINER, Fauna Austr., II, 607 (id.).  
 LUNDBECK, Dipt. Groenl., I, 284, oc. in Greenland (id.).
- incomptus** ZETTERSTEDT, Ins. Lapp., 816 (*Chironomus*); Dipt. Scand., IX, 3586 (id.).—N. Europe.  
 SCHINER, Fauna Austr., II, 607 (id.).  
 LUNDBECK, Dipt. Groenl., I, 285, oc. in Greenland.
- ursinus** HOLMGREN, Kongl. vet. Akad., 1869, 39 (*Chironomus*).—Europe.  
 STAEGER, Groenl. Antl., 353 (*aterrimus* MEIG.), oc. in Greenland.  
 LUNDBECK, Dipt. Groenl., I, 284, oc. in Greenland, and cor. of Staeger.  
*Note.*—Whether the *aterrimus* of Mrs. Slosson's List, from the White Mts., is the same, I am unable to state.

#### CRICOTOPUS.

- VAN DER WULP, Tijdsch. v. Ent., XVII, 132, 1874.
- geminatus** SAY, Jour. Acad. Sci. Phil., III, 14; Compl. Works, II, 42 (*Chironomus*).—Pa.  
 N. J.—Smith Cat.; gen. ref. by Coquillett.
- sylvestris** FABRICIUS, Ent. Syst., IV, 252 (*Tipula*); Syst. Antl., 47 (*Chironomus*).—Europe.  
 SCHINER, Fauna Austr., II, 611 (id.).  
 Smith Cat., oc. in N. J., where the larvæ injure leaves of *Victoria regia*.  
 JOHNSON, Ent. News, XII, 30, note on same case.  
 PETTIT, Mich. Acad. Sci., 1900, 110, mentions a "*Chironomus* sp." devouring leaves of water lily (*Nymphaea odorata* and *advena*) at Lansing, Mich., and gives plate; it may be this species.
- tremulus** LINNÉ, Fauna Suecica, 1762 (*Tipula*).—Europe.  
 MEIGEN, Syst. Besch., I, 45 (*Chironomus*).  
 ZETTERSTEDT, Dipt. Scand., IX, 3562 (id.).  
 SCHINER, Fauna Austr., II, 611 (id.).  
 N. J.—Smith Cat.; gen. ref. by Coquillett.
- tricinctus** MEIGEN, Syst. Besch., I, 41 (*Chironomus*).—Europe.  
 MACQUART, Hist. Nat. Dipt., I, 56 (id.).  
 STAEGER, Dipt. Dan., 576 (id.).

ZETTERSTEDT, Dipt. Scand., IX, 3555 (id.).

SCHINER, Fauna Austr., II, 610 (id.).

OSTEN SACKEN, Cat., 21, oc. in N. A., on authority of Loew.

White Mts., N. H.—Slosson.

**varipes** COQUILLET, Proc. U. S. N. M., XXV, 93.—Great Falls, Md.

### TANYTARSUS.

VAN DER WULP, Tijdschr. v. Ent., XVII, 134, 1874.

**junci** MEIGEN, Syst. Besch., I, 50 (*Chironomus*).—Europe.

SCHINER, Fauna Austr., II, 597 (*vernus*). [Lundbeck.]

LUNDBECK, Dipt. Groenl., I, 283, oc. in Greenland (*Chironomus*).

**tenuis** MEIGEN, Syst. Besch., VI, 255 (*Chironomus*).—Europe.

STAEGER, Dipt. Dan., 581, 1840 (id.).

ZETTERSTEDT, Dipt. Scand., IX, 3581 (id.).

SCHINER, Fauna Austr., II, 598 (id.).

LUNDBECK, Dipt. Groenl., I, 284, oc. in Greenland (id.).

### EURYCNUMUS.

VAN DER WULP, Tijdschr. v. Ent., XVII, 135, 1874.

**scitulus** COQUILLET, Proc. U. S. N. M., XXIII, 608.—Riverton, N. J.

### DIAMESA.

MEIGEN, Syst. Besch., VII, 12, 1830.

ZETTERSTEDT, Dipt. Scand., IX, 3591, 1850.

SCHINER, Fauna Austr., II, 615, 1864.

JOHANNSEN, Bull. 68, N. Y. State Mus., 439, 1903.

**aberrata** LUNDBECK, Dipt. Groenl., I, 289.—Greenland.

STAEGER, Groenl. Antliater, oc. in Greenland (*waltlii* MEIGEN). [Ldbk.]

**chorea** LUNDBECK, Dipt. Groenl., I, 291.—Greenland.

**waltlii** MEIGEN, Syst. Besch., VII, 13.—Europe.

FITCH, Winter Insects of New York, in Amer. Quart. Jour. Agr. and Sci., v, 1846, 282 (*Chironomus nivoriundus*); reprinted in Lintner's Second N. Y. Rept., 242.—New York.

SCHINER, Fauna Austr., II, 615.

JOHANNSEN, Bull. 68, N. Y. State Mus., 439, pl. XLVIII, f. 9-13, larva, pupa and adult; syn.—New York.

*Note.*—The *Orthocladius nivoriundus* FITCH of Mrs. Slosson's White Mountain list is probably a different species; the one from New Jersey in the Smith Catalogue certainly is, according to Johannsen.

For the *Diamesa waltlii* of Staeger, see *aberrata*.

### THALASSOMYIA.

SCHINER, Verh. Zool.-Bot. Verein, VI, 216, 1856.

JOHANNSEN, Bull. 68, N. Y. State Mus., 436, 1903.

**obscura** JOHANNSEN, loc. cit., pl. I, f. 1-15, larva, pupa and adult.—Adirondacks, N. Y.

### TANYPUS.

MEIGEN, Illig. Mag., II, 261, 1803; Syst. Besch., I, 55, 1818.

ZETTERSTEDT, Dipt. Scand., IX, 3592, 1850.

SCHINER, Fauna Austr., II, 615, 1864.

**algens** COQUILLET, Proc. U. S. N. M., XXV, 90.—Popof Id., Alaska.

- annulatus** SAY, see *Monilis*.
- baltimoreus** MACQUART, Dipt. Exot., Suppl., v, 15.—Baltimore.  
N. J.—Smith Cat.
- barberi** COQUILLET, Proc. U. S. N. M., xxv, 90.—Las Vegas Hot Springs, N. M.
- bellus** LOEW, Cent., vii, 4.—D. C.
- bifasciatus** COQUILLET, Proc. U. S. N. M., xxiii, 609.—Riverton, N. J.; Boston, Mass.
- choreus** MEIGEN, Klassif., i, 23; loc. cit., 21 and 24 (*fasciatus* and *sylvaticus*) [SCHINER]; Syst. Besch., i, 62.—Europe.  
STAEGER, Dipt. Dan., 585.  
ZETTERSTEDT, Dipt. Scand., ix, 3609.  
SCHINER, Fauna Austr., ii, 617.  
LOEW, Silliman's Jour., oc. in N. A.
- concinnus** COQUILLET, Proc. Acad. Nat. Sci., 1895, 308.—Fla.  
White Mts., N. H.—Slosson.
- crassinervis** ZETTERSTEDT, Ins. Lapp., 817; Dipt. Scand., ix, 3599.—Europe.  
STAEGER, Groenl. Antl., 354, oc. in Greenland.  
LUNDBECK, Dipt. Groenl., i, 294, oc.
- decedens** WALKER, List, i, 22.—Martin Falls, Canada.  
White Mts., N. H.—Slosson; this is very doubtful, as Walker's desc. seems unrecognizable.
- discolor** COQUILLET, Proc. U. S. N. M., xxv, 89.—Franconia, N. H.
- dyari** COQUILLET, Ent. News, xiii, 85.—D. C.; Bellport, Long Id.; Cambridge, Mass.; and Detroit, Mich.
- flaveolus** WILLISTON, Dipt. St. Vincent, 275.—St. Vincent, W. I.
- flavicinctus** LOEW, Cent., i, 2.—Pa.
- futilis** VAN DER WULP, Tijdschr. v. Ent., x, 130.—Wis.
- guttularis** COQUILLET, Proc. U. S. N. M., xxv, 92.—Pullman, Wash.
- hirtipennis** LOEW, Cent., vii, 6.—Me.  
Province of Quebec—Fyles.
- humeralis** LOEW, Cent., vii, 2.—Cuba.
- indecisus** WILLISTON, Dipt. St. Vincent, 276, pl. ix, f. 35.—St. Vincent, W. I.
- johnseni** COQUILLET, xxiii, 609.—Riverton, N. J.
- melanops** MEIGEN, Syst. Besch., i, 65.—Europe.  
ZETTERSTEDT, Dipt. Scand., ix, 3621. SCHINER, Fauna Austr., ii, 621.  
N. J.—Smith Cat.
- monilis** LINNÉ, Fauna Suec., 1763 (*Tipula*).—Europe.  
DEGEER, Ins., vi, 394, pl. xxiv, f. 15-19 (*Tipula maculata*).  
FABRICIUS, Syst. Antl., 44 (*Chironomus*).  
MEIGEN, Syst. Besch., i, 60.  
SAY, Jour. Acad. Sci. Phil., iii, 15; Compl. Works, ii, 43 (*annulatus*).—Pa. [Johannsen in litt.]  
STAEGER, Dipt. Dan., 584.  
ZETTERSTEDT, Dipt. Scand., ix, 3613.  
VAN DER WULP, Tijdschr. v. Ent., x, 126, oc. in U. S.—Wis.  
OSTEN SACKEN, Cat., 22, doubts occurrence, or else *annulatus* SAY is the same.  
MEINERT, Die Eucephale Myggelarver 447, pl. iv, f. 101, transformations.—Europe.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- occidentalis** COQUILLET, Proc. U. S. N. M., xxv, 92.—Col.
- pallens** COQUILLET, Proc. U. S. N. M., xxv, 91.—Las Vegas Hot Springs, N. M.
- pictipennis** ZETTERSTEDT, Ins. Lapp., 818.



STAEGER, Groenl. Antliater, oc. in Greenland.

LUNDBECK, Dipt. Groenl., 1, 293, oc. in Greenland.

*pilosellus* LOEW, Cent., vi, 7.—D. C.

N. J.—Smith Cat.

*pinguis* LOEW, Cent., 1, 1.—N. Y.

*posticalis* LUNDBECK, Dipt. Groenl., 1, 295.—Greenland.

*pulchripennis* LUNDBECK, Dipt. Groenl., 1, 293.—Greenland.

*pusillus* LOEW, Cent., vii, 5.—D. C.

*scapularis* LOEW, Cent., vii, 1.—D. C. N. J.—Smith Cat.; Tick Id., Fla.—Johnson.

*stellatus* COQUILLET, Proc. U. S. N. M., xxv, 89.—Texas.

*thoracicus* LOEW, Cent., vii, 3.—D. C.

N. J.—Smith Cat.; Tick Id., Fla.—Johnson.

*tibialis* SAY, Jour. Acad. Sci. Phil., 1823, iii, 15; Compl. Works, ii, 43.—Pa.

WIEDEMANN, AUSS. ZW., 1, 20.

*tibialis* STAEGER, Groenl. Antl., 1845, 354.—Greenland.

LUNDBECK, Dipt. Groenl., 1, 294.—Greenland.

*tricolor* LOEW, Cent., 1, 3.—N. Y.

*turpis* ZETTERSTEDT, see *riparius*; Mrs. Slosson's White Mts. list contains this name.

*venustus* COQUILLET, Proc. U. S. N. M., xxv, 91.—Las Vegas Hot Springs, N. M.

#### EUTANYPUS.

COQUILLET, Dipt. of Commander Ids., 341, 1899.

*borealis* COQUILLET, loc. cit.—Bering Id.; Proc. Wash. Acad. Sci., ii, 396, oc. in Alaska, N. M., and N. H.

#### CHASMATONOTUS.

LOEW, Cent., v, 1, 1864.

*bimaculatus* OSTEN SACKEN, West. Dipt., 191.—N. Y. Canada.

*unimaculatus* LOEW, Cent., v, 1.—White Mts., N. H.

*univittatus* COQUILLET, Proc. Wash. Acad. Sci., ii, 395.—Sitka, Alaska.

#### OECACTA.

POEY, Memorias, etc., 1, 1851.

*furens* POEY, loc. cit., 236, pl. xxvii.—Cuba.

TOWNSEND, Jour. Inst. Jamaica, 1, 381, oc. in Jamaica; Annals and Mag. Nat. Hist., xix, 17, oc. in Mexico, on the gulf coast.

#### ERETMOPTERA.

KELLOGG, Biol. Bull., 1, 82, 1900.

*browni* KELLOGG, loc. cit., figs.—Monterey, Cal.

*Note.*—The family name Eretmopteridæ was proposed for this species by Professor Kellogg, but he has since informed me that the larval stages are essentially the same as in Chironomidæ, a family which already includes at least one genus with rudimentary wings; and I have his sanction in placing the species here.

#### CULICIDÆ.

The discovery that mosquitoes convey malaria, yellow fever, filariasis, and possibly still other diseases, from one human being to another, deserves to rank with the greatest achievements of science. The immediate result, very naturally, has been an immense increase of interest in this family of Diptera, so that new

work is at present being published very rapidly. Theobald's Monograph, noticed below, gives a bibliography up to Feb., 1903, including early articles on the relation of mosquitoes to malaria. I enumerate a few important publications.

*On Malaria, etc.*

- Riley, Amer. Nat., xvii, 549, May, 1883, mentions the theory of Dr. A. Kink, Columbia University, that mosquitoes cause malaria.  
 Nuttall, Dr. Geo. H., Johns Hopkins Hospital Reports, viii.  
 Finlay, Chas. J., M.D., Psyche, July, 1899.  
 Berkeley, Dr. W. N., N. Y. Medical Record, Dec. 23, 1899.  
 Woldert, Dr. Albert, Jour. Amer. Medical Assn., Feb. 10, 1900.  
 Bums, Dr. Wm. B., Memphis Medical Monthly, March, 1900.  
 Ross, Major Ronald, Nature, March 29, 1900.  
 Manson, Dr. Patrick, Popular Science Monthly, July, 1900.  
 Celli, "Malaria According to the New Researches," trans. by Eyre. Longmans, Green and Co. London, 1900.  
 Howard, "Mosquitoes." McClure, Phillips & Co. New York, 1901.  
 Howard, Yearbook of Dept. of Agriculture, 1901, 177-192; Farmers' Bulletin 155, Dept. of Agriculture.

*On Classification.*

- F. Lynch Arribalzaga, Revista Mus. de la Plata, I, 345-417, 4 pl., 1891; the Argentine species.  
 Ficalbi, Bull. Soc. Ent. Ital., 1892-1896, a series of articles revising the European species; he published another general work in vol. xxxi, 1899.  
 Lintner, 12th N. Y. Rept., 319-335, 1897, popular account.  
 Coquillett, Circular No. 40, n. ser., Div. of Ent.—a brief synopsis of the species known in the United States; published in a second edition, with a slight addition; also published in Bull. 25, n. ser., Div. of Ent.  
 Herrick, Bull. 74, Miss. Ex. Sta.  
 Garman, Bull. 96, Ky. Ex. Sta.  
 Luggler, 2d Rept. Ent. Minn., 182-195, with good figs.  
 Giles, Handb. of Gnats. John Bale Sons and Danielsson, Limited. London, 1900.

A second edition, entirely rewritten, was published in 1902; in its new form, the systematic part is mainly an abridgement of the following.

- Theobald, A Monograph of the Culicidæ. Printed by the British Museum, 1901-3.  
 Three volumes, with many figures and maps, and a fourth volume of plates, mostly colored. Contains a vast amount of information on distribution, habits in larval and mature stages, etc. The systematic part is based on the collections in the British Museum.  
 Johannsen, Bull. 68, N. Y. State Mus., 388-429, 1903, tables of genera of larvæ, pupæ and adults, etc.

*On Larvæ.*

- Dyar, Proc. Ent. Soc. Wash., v, 51 and 145, 1902 and 1903, analytical tables of the known larvæ from the United States.  
 Kellogg, Ent. News, x, 102, length of larval period.  
 Smith, Ent. News, xiii, 198, notes on hibernating stage in various species.  
 Morgan and Dupree, Bull. 40, n. ser., Div. of Ent., 88, notes on hibernation and development of several species.

See also recent smaller papers by Coquillett, Smith and Dyar, as mentioned under the various species.

*Note.*—The nomenclature adopted is generally that of Theobald.

## ANOPHELES.

MEIGEN, Syst. Besch., I, 10, 1818.

DESVOIDY, Mem. Soc. Hist. Nat. Paris, III, 410, 1827.

MACQUART, Hist. Nat. Dipt., I, 32, 1834.

ZETTERSTEDT, Dipt. Scand., IX, 3466, 1850.

SCHINER, Fauna Austr., II, 624, 1864.

MEINERT, De Eucephale Myggetarver, 302, 1886, on literature of transformations.

COQUILLET, Circ. No. 40, Div. of Ent., 4, table of species; Bull. 25, Div. of Ent., 21, same.

THEOBALD, Monogr. of Culicidæ, I, 115, 1901; III, 11, 1903, the latter in the restricted sense.

JOHANNSEN, Bull. 68, N. Y. St. Mus., 405, 1903.

**albimanus** WIEDEMANN, Auss. Zweifl., II, 13.—Hayti or San Domingo.

ROEDER, Stett. Ent. Zeit., 1885, 338, oc. in Porto Rico.

THEOBALD, Monogr. of Culicidæ, I, 122, note, not seen.

GILES, Handb. of Gnats, 2d ed., 294.

COQUILLET, Bull. 25, 21, note.

**annulimanus** VAN DER WULP, Tijdschr. v. Ent., x, 129, pl. III, f. 2.—Wis.

COQUILLET, Bull. 25, 21, suspects that this is the male of *Culex consobrinus*.

THEOBALD, Monogr. of Culicidæ, I, 213, quotes desc.; probably distinct.

GILES, Handb. of Gnats, 2d ed., 325.

JOHANNSEN, Bull. 68, N. Y. State Mus., 388-429, 1903, tables of genera of larva, pupa and adult, with much other matter of value.

**argyrotarsis** DESVOIDY, see *Cellia*.

**barberi** COQUILLET, Canad. Ent., XXXV, 310.—Plummer's Id., Md.

**crucians** WIEDEMANN, Auss. Zweifl., I, 12, 1828.—Pa. and New Orleans; supposed to have been a redescription of Say's type of *punctipennis*, with the name arbitrarily changed, but both Coquillett and Theobald consider it a distinct species.

COQUILLET, Circ. No. 40, Div. of Ent., 4.

THEOBALD, Monogr. of Culicidæ, I, 204, pl. v, f. 23.—U. S.

GILES, Handb. of Gnats, 2d ed., 324.

DYAR, Proc. Ent. Soc. Wash., v, 46, oc. at Bellpart, Long Id.

HOWARD, "Mosquitoes," 113, note.—D. C., Va., Ga., La.

**cubensis** AGRAMONTE, see *Cellia albipes*.

**eiseni** COQUILLET, Jour. N. Y. Ent. Soc., x, 192.—Aguna in Guatemala.

**hyemalis** FITCH (*Culex*), see *punctipennis*.

**ferruginosus** WIEDEMANN, see *walkeri*.

**grabhamii** THEOBALD, see *Cyclolepteron*.

**maculipennis** MEIGEN, Syst. Besch., I, 11, pl. I, f. 17, 1818.—Europe.

? MEIGEN, Klassif. Dipt., I, 5 (*Culex bifurcatus* LINN.).

SAY, Long's Exped., App., 356, 1824 (*quadrinaculatus*); Compl. Works, I, 241 (id.).—N. W. Terr.

WIEDEMANN, Auss. Zweifl., I, 13 (*quadrinaculatus*).

HALIDAY, Entom. Mag., I, 148.

MACQUART, Hist. Nat. Dipt., I, 32.

LOEW, Dipt. Beitr., I, 4 (*pictus* and *maculipennis*).

ZETTERSTEDT, Ins. Lapp., 808; Dipt. Scand., IX, 3468.

SCHINER, Fauna Austr., II, 625.

LOEW, in Silliman's Jour., XXXVII, 317, oc. in N. A.

MEINERT, Eucephale Myggetarver, 303, pl. I, f. 20-31, larval stages.—Europe.

- HOWARD, Bull. 25, 32-41, full biology, figs., etc. (*quadrinaculatus*).—N. H. to Fla. and Tex.
- LUGGER, 2d Rept. Ent. Minn., 1896, 195, note and excellent fig. (*quadrinaculatus*).—Minn.
- HOWARD, Bull. 25, syn. of *maculipennis*, on authority of Theobald.
- FICALBI, Bull. Soc. Ent. Ital., 1896, 228 and 1899, 90 (*claviger* FABR.).
- GRASSI, Reale Acad. d. Lincei, S. d. u. Zool. sulla Malaria, 77.
- OSTEN SACKEN, Ent. Mo. Mag., 2d ser., XI, 281, shows invalidity of *claviger* FABR.
- THEOBALD, Monogr. of Culicidæ, I, 191, pl. v, f. 17, full discussion; the principal agent in conveying malaria in Italy.—Europe and N. A. Ontario to New Orleans and west to Idaho.
- GILES, Handb. of Gnats, 2d ed., 327.
- HOWARD, "Mosquitoes," 93-108, life history.
- GARMAN, Bull. 96, Ky. Ex. Sta., 205, brief desc.—Ky.
- DYAR, Proc. Ent. Soc. Wash., v, 46 and 141, notes on larvæ.—Long Id. and N. H.
- JOHANNSEN, Bull. 68, N. Y. St. Mus., 409.
- nigripes** STAEGER, Kröyer's Tidskr., II, 552, 1839.—Europe.
- ? HALIDAY, Zool. Jour., XII (*plumbicus*).
- ZETTERSTEDT, Dipt. Scand., IX, 3467.
- LOEW, Dipt. Beitr., I, 4.
- SCHINER, Fauna Austr., II, 625.
- LOEW, in Silliman's Jour., XXXVII, oc. in N. A.
- MEINERT, Eucephale Myggelarver, 395, pl. I, f. 32-35, larval stages.—Europe.
- THEOBALD, Monogr. of Culicidæ, I, 201, pl. VI, f. 21.—Europe and N. A.
- GILES, Handb. of Gnats, 2d ed., 330.
- COQUILLET, Bull. 25, 21, note.
- pseudopunctipennis** THEOBALD, Monogr. of Culicidæ, II, 305.—Grenada, W. I.
- GILES, Handb. of Gnats, 2d ed., 323.
- punctipennis** SAY, Jour. Acad. Sci. Phil., III, 9; Compl. Works, II, 39 (*Culex*).—U. S.
- FITCH, Amer. Quart. Jour. Agr. and Sci., v, 274-284, May, 1847 (*Culex hycmalis*).—New York. This is reprinted in Lintner's 2d N. Y. Rept., 241.
- THEOBALD, Monogr. of Culicidæ, I, 189, pl. VI, f. 24 and pl. XXXVII, f. 145.—Lake Simcoe, Ont.
- GILES, Handb. of Gnats, 2d ed., 323, pl. x, f. 6.—N. A.
- DYAR, Proc. Ent. Soc. Wash., v, 46 and 140, notes on larvæ, etc.—N. H.
- GARMAN, Bull. 96, Ky. Ex. Sta., 204, fig.—Ky.
- HERRICK, Bull. 74, Miss. Ex. II-17, figs.; life hist. in Miss.
- HOWARD, "Mosquitoes," 113, note; Farmers' Bull. 155, Dept. Agr., figs.
- JOHANNSEN, Bull. 68, N. Y. St. Mus., 406, pl. XLII.—N. Y.
- quinquefasciatus** SAY, Jour. Acad. Sci. Phil., III, 10; Compl. Works, II, 39 (*Culex*).—Miss. R.
- WIEDEMANN, Auss. Zweifl., I, 12, redesc. as *An. ferruginosus*.—New Orleans.
- COQUILLET, Bull. 25, 21, notes.
- THEOBALD, Mon. of Culicidæ, I, 199, perhaps *walkeri* is the same.
- N. J.—Smith Cat.
- walkeri** THEOBALD, Monogr. of Culicidæ, I, 199, pl. v, f. 20.—Lake Simcoe, Ont.
- GILES, Handb. of Gnats, 2d ed., 329.
- See *quinquefasciatus*.

## CYCLOLEPPTERON.

THEOBALD, Monogr. of Culicidæ, II, 312, 1901; III, 12, 1903.

GILES, Handb. of Gnats, 2d ed., 331, 1902.

**grabhamii** THEOBALD, Monogr. of Culicidæ, I, 205 (*Anopheles*); II, 312, gen. ref. and larva.—Jamaica.

GILES, Handb. of Gnats, 2d ed., 332.

## ARRIBALZAGIA.

THEOBALD, Monogr. of Culicidæ, III, 13 and 81, 1903.

**maculipes** THEOBALD, Monogr. of Culicidæ, III, 81, pl. v, and figs.—Brazil and Trinidad, W. I.

## CELLIA.

THEOBALD, Jour. Trop. Med., v, 181, 1902; Monogr. of Culicidæ, III, 14 and 107, 1903.

**argyrotarsis** DESVOIDY, Mém. Soc. Hist. Nat. Paris, III, 411 (*Anopheles*).—Brazil. F. LYNCH ARRIBALZAGA, Revista d. Mus. de la Plata, I, 378, pl. IV, f. 2 (*Anopheles albitarsis*).—Argentina.

THEOBALD, Monogr. of Culicidæ, I, 123, pl. I, f. 1 (*Anopheles*); III, 110, gen. ref., etc.—Jamaica, St. Lucia, Antigua, Grenada, Brit. Guiana; St. Vincent.

GILES, Handb. of Gnats, 2d ed., 295 (*Anopheles*).

**albipes** THEOBALD, Monogr. of Culicidæ, I, 125, pl. I, f. 3 (*Anopheles argyrotarsis*, subsp. *albipes*); III, pl. VII, oc. in Lesser Antilles, habits, etc.—Jamaica, Br. Guiana.

GILES, Handb. Gnats, 2d ed., 300 (*Anopheles albipes*).

AGRAMONTE, El Progreso Medico, x, 460, Dec. 1900 (*Anopheles cubensis*).—Cuba [Giles].

## MEGARHINUS.

DESVOIDY, Mém. Soc. Nat. Hist. Paris, III, 412, 1827.

MACQUART, Dipt. Exot., I, 1, 1838.

THEOBALD, Monogr. of Culicidæ, I, 215, 218, and II, 351, 1901; table of species, remarks on larvæ, etc.

GILES, Handb. of Gnats, 2d ed., 265, 267, table of species, 1902.

**ferox** WIEDEMANN, Auss. Zweifl., I, 1.—Brazil.

WALKER, List, I, 1, oc. in Ga.

COQUILLET, Bull. 25, oc. in D. C.

THEOBALD, I, 237, says Walker's species was *portoricensis*.

**grandiosus** WILLISTON, Biologia, Dipt., I, 224.—Guerrero, Mex.

THEOBALD, Monogr. of Culicidæ, III, 113, quotes desc.

**hæmorrhoidalis** FABRICIUS, Ent. Syst., IV, 401 (*Culex*); Syst. Antl., 35 (id.).—S. A., Cayenne.

WIEDEMANN, Auss. Zweifl., I, 2; Dipt. Exot., I, 6 (*Culex*).

MACQUART, Dipt. Exot., I, 1, 32.

OSTEN SACKEN, Cat., oc. in Cuba.

WILLISTON, Biologia, Dipt., I, 224, oc. in Vera Cruz, Mex.

THEOBALD, Monogr. of Culicidæ, I, 222; III, 114.—Mex.; Guiana.

**longipes** THEOBALD, Monogr. of Culicidæ, I, 241, pl. IX, f. 34.—Mex.

GILES, Handb. of Gnats, 2d ed., 277.

**portoricensis** ROEDER, Stett. Ent. Zeit., 1885, 337.—Porto Rico.

WALKER, List, I, 1, oc. in Ga. (*ferox* Wd.). [Theobald.]

WILLISTON, Trans. Ent. Soc. Lond., 1896, 271, oc. in St. Vincent.

- THEOBALD, Monogr. of Culicidæ, I, 232, pl. VIII, f. 32; III, 119, notes.—San Domingo, Grenada, Para.  
 GILES, Handb. of Gnats, 2d ed., 275.  
 HOWARD, Bull. 25, 47, oc. at Benoit, Miss.  
**rutilus** COQUILLET, see *Toxorhynchites*.

### TOXORHYCHITES.

- THEOBALD, Monogr. of Culicidæ, I, 244, 1901.  
**rutilus** COQUILLET, Canad. Ent., 1896, 43 (*Megarhinus*).—N. C., Ga., Fla.  
 HOWARD, Bull. 25, n. ser., Div. Ent., 46, f. 21 (id.); "Mosquitoes," 154, fig.  
 THEOBALD, Monogr. of Culicidæ, I, 244, quotes orig. desc. with note (*Megarhinus*); III, 124, gen. ref. by Coquillett.  
 GILES, Handb. of Gnats, 2d ed., 275, quotes orig. desc.

### JANTHINOSOMA.

- F. LYNCH ARRIBALZAGA, Revista d. Mus. de la Plata, I, 394, 1891.  
 THEOBALD, Monogr. of Culicidæ, I, 253, 1901, modified.  
 GILES, Handb. of Gnats, 2d ed., 337, 1902; table of species, 338.  
 COQUILLET, in Howard's "Mosquitoes," 234 (*Conchyliastes* THEOB., which was a Ms. name).  
**discrucians** WALKER, Dipt. Saund., 430 (*Culex*).—S. A.  
 THEOBALD, Monogr. of Culicidæ, III, 126, figs.—Trinidad.  
**lutzii** THEOBALD, Monogr. of Culicidæ, I, 257, pl. XII, f. 46; III, 128, oc.—Brazil, Trinidad.  
 GILES, Handb. of Gnats, 2d ed., 340.  
**musica** SAY, Jour. Acad. Sci. Phil., v, 149; Compl. Works, II, 348 (*Culex*).—Ind.  
 ? BELLARDI, Saggio, I, 5 (*Culex mexicanus*).—Mexico.  
 THEOBALD, Monogr. of Culicidæ, I, 255, pl. XI, f. 44; III, 124.—Brazil, Trinidad.  
 GILES, Handb. of Gnats, 2d ed., 340.  
 MORGAN, Bull. 37, n. ser., Div. of Ent., figs., habits (*Conchyliastes*).—La. Miss.—Herrick; Lansing, Mich.—Pettit.  
**posticata** WIEDEMANN, Auss. Zweifl., I, 9, and Dipt. Exot., 43 (*Culex*).—Mex.  
 THEOBALD, Monogr. of Culicidæ, I, 253, pl. XII, f. 45; III, 125, notes.—St. Lucia, W. I.  
 GILES, Handb. of Gnats, 2d ed., 341.  
 HOWARD, Bull. 25, 30, oc.—D. C., Va., Pa., Tex.

### PSOROPHORA.

- DESVOIDY, Mém. Soc. Hist. Nat. Paris, III, 412, 1827.  
 THEOBALD, Monogr. of Culicidæ, I, 259, 261, 45; II, 352,—table of species, larvæ, etc., 1901.  
 GILES, Handb. of Gnats, 2d ed., 343, 1902.  
 JOHANNSEN, Bull. 68, N. Y. St. Mus., 410, 1903.  
**ciliata** FABRICIUS, Ent. Syst., IV, 401 (*Culex*); Syst. Antl., 38 (id.).—West Indies.  
 WIEDEMANN, Dipt. Exot., 7 (*Culex molestus*); Auss. Zweifl., I, 3 (*Culex*).  
 ? WIEDEMANN, Dipt. Exot., I, 7. Query by Theobald.  
 DESVOIDY, Mém. Soc. Hist. Nat. Paris, III, 413 (*boscii* and *ciliata*).  
 MACQUART, Dipt. Exot., Suppl., IV, II, pl. I, f. I.  
 WALKER, Dipt. Saund., 427 and 431 (*Culex conterrens* and *perterrens*).—U. S. and S. A.



- F. LYNCH ARRIBALZAGA, Revista d. Museo de la Plata, I, 382, pl. IV, f. 3.—Argentina.
- HOWARD, Canad. Ent., xxxii, 353, larva and pupa desc. and fig.; "Mosquitoes," 144-152, figs., life hist., etc.; Bull. 25, 45, fig., etc.—Mass. to Fla. and Cal.
- COQUILLET, Bull. 4, 23, oc.; Circ. 40, notes; Bull. 25, 22, notes.
- THEOBALD, Monogr. of Culicidæ, I, 261, pl. x, f. 37; III, 130, notes.
- GILES, Handb. of Gnats, 2d ed., 345.
- H. F. HARRIS, Ent. News, xiv, 232, eggs desc.
- GARMAN, Ky. Ex. Sta. Bull. 96, 215, oc. in Ky.
- JOHANNSEN, Bull. 68, N. Y. St. Mus., 411.
- N. J.—Smith Cat.; Fla.—Johnson; Miss.—Herrick.
- howardii** COQUILLET, Canad. Ent., xxxiii, 258. —Hartsville, S. C.
- THEOBALD, Monogr. of Culicidæ, III, 131, quotes desc.
- JOHANNSEN, Bull. 68, N. Y. State Mus., 410, no desc.
- scintillans** WALKER, List, I, 1 (*Sabcthes*).—Para, S. A.
- THEOBALD, Monogr. of Culicidæ, I, 265, redesc.; III, 130, oc. in Trinidad.

## STEGOMYIA.

- THEOBALD, Monogr. of Culicidæ, I, 283, 1901, table of species, etc.
- GILES, Handb. of Gnats, 2d ed., 368, 1902, table of species, etc.
- fasciata** FABRICIUS, Syst. Antl., 36 (*Culex*).—W. Indies.
- MEIGEN, Syst. Besch., I, 3 (*Culex calopus*).—Europe.
- WIEDEMANN, Auss. Zweifl., I, 8, 10 (*Culex fasciata* and *taniopus*).—W. I. and Savannah, Ga.
- DESVOIDY, Mém. Soc. Hist. Nat. Paris, III, 408 (*Culex frater*).—W. I.
- MACQUART, Dipt. Exot., Suppl., I, 8 (*Culex annulitarsis*).—Isle de France.
- WALKER, List, I, 3, 4 (*Culex viridifrons*, *excitans*, *formosus*, *incxorabilis*). No. loc.; Sierra Leone; Ga. Also Dipt. Saund., 430 (*C. agitans*) from Para and Jour. Linn. Soc., IV, 91 (*C. impatibilis*), and v, 229 (*C. zonatipes*).
- SKUSE, Proc. Linn. Soc. New South Wales, III, 1740 (*C. bancroftii*).—N. Australia.
- FICALBI, Bull. Soc. Ent. Ital., 1889 (*C. elegans*), and 1896, 251 (*C. elegans* and *calopus* MEIG.).—Italy.
- F. LYNCH ARRIBALZAGA, Revista d. Museo de la Plata, I, 402, pl. III, f. 1 (*C. mosquito* DESV.).—Argentina.
- GILES, Jour. Trop. Med., 1899, 64 (*C. rossii*).
- HOWARD, "Mosquitoes," 121-140, life hist. and account of its relation to yellow fever; Bull. 25, 30, oc. in Ga., La., Tex. and W. I.
- WALTER REED, surgeon, and JAS. CARROLL, A. AGRAMONTE, and JESSE W. LAZEAR, assistant surgeons, in Phil. Med. Jour., Oct., 1900, preliminary paper on etiology of yellow fever, tracing it to the bite of this mosquito. This paper is noticed in Science, n. ser., XII, 692, Nov. 2, 1900.
- THEOBALD, Monogr. of Culicidæ, I, 289, pl. XIII, f. 49, 50.—S. Europe, E. and W. Africa; India to Japan and Australia; S. U. S. to Argentina. The Yellow Fever Mosquito; also conveys filariasis.
- THEOBALD, Mon., III, 141, additional notes.
- GARMAN, Bull. 96, Ky. Ex. Sta., 210, fig., etc.—Ky.
- var. **mosquito** DESVOIDY, Mém. Soc. Hist. Nat. Paris, III, 407 (*Culex mosquito*).—Cuba.
- GUÉRIN et PERCHERON, Gen., &c. Dipt., pl. II, f. 1 (id.).

- THEOBALD, Monogr. of Culicidæ, I, 295, pl. XIII, f. 50 (var. of *fasciata*).—  
St. Lucia, Jamaica, Calcutta.
- var. *luciensis* THEOBALD, Monogr. of Culicidæ, I, 297.—St. Lucia, W. I., and  
Demerara.
- sexlineata* THEOBALD, Monogr. of Culicidæ, I, 308.—Trinidad, W. I.  
GILES, Handb. of Gnats, 2d ed., 377.
- ? *signifer* COQUILLET, Canad. Ent., XXVIII, 43 (*Culex*).—D. C.  
THEOBALD, Monogr. of Culicidæ, I, 322, gen. ref., with a doubt, and note.  
GILES, Handb. of Gnats, 2d ed., 379, note.
- SMITH, Ent. News, XIII, 299, pl. xv, f. 1, larval structure.—N. J.  
DYAR, Jour. N. Y. Ent. Soc., XI, 26, pl. III, f. 2, larva (*Culex*).—N. J.  
Va.—Howard.
- tarsalis* COQUILLET, see *Culex*.

#### THEOBALDIA.

- NEVEU-LEMAIRE, Compt. Rend. Séances Soc. Biol., 29 Nov., 1902.
- THEOBALD, Monogr. of Culicidæ, III, 148, 1903.
- annulata* SCHRANK, Beiträge zur Naturgesch., 97, 1776 (*Culex*); Ins. Austr.,  
984 (id.).—Europe.
- FABRICIUS, Syst. Antl., 35 (id.).
- MEIGEN, Klassif. 2; Syst. Besch., I, 4 (id.).
- STEPHENS, Zool. Jour., I, 1825 (*Culex affinis*).
- STAEGER, Dipt. Dan., 1840, 554 (id.).
- ZETTERSTEDT, Ins. Lapp., 806; Dipt. Scand., IX, 3460 (id.).
- SCHINER, Fauna Austr., II, 626 (id.).
- OSTEN SACKEN, Cat., 18, oc. on Mackenzie R., Canada.
- MEINERT, Eucephale Myggelarver, 376, pl. I, f. 1-16, larval stages (*Culex*).  
Europe.
- OSTEN SACKEN, Biologia, Dipt., I, 5, oc. in Mex. (*Culex*).
- THEOBALD, Monogr. of Culicidæ, I, 331, pl. xv, f. 58 (id.); III, 148, gen. ref.,  
etc.
- GILES, Handb. of Gnats, 2d ed., 391, note.
- COQUILLET, Circ. No. 40; Bull. 25, 20, note.
- HOWARD, "Mosquitoes," 80, oc. Mass. to Nebr., N. M., Cal. to Br. Col.  
(*Culex*).
- LUDLOW, Jour. N. Y. Ent. Soc., X, 131, oc. at Ft. Baker, Cal. (*Culex*).
- incidens* THOMSON, Eugen. Resa, 443 (*Culex*).—Cal.
- THEOBALD, Canad. Ent., XXXV, 311, notes.—Pecos, N. M. Also Monogr.,  
III, 151, pl. X and figs.—Moscow, Idaho; Corvallis, Ore.  
Seattle and Pullman, Wash.—J. M. A.

#### LUTZIA.

- THEOBALD, Monogr. of Culicidæ, III, 155, 1903.
- bigoti* BELLARDI, Saggio, App., 3, f. 1 (*Culex*).—Mex.
- THEOBALD, Monogr. of Culicidæ, I, 343, pl. XVI, f. 62 (*Culex*, provisionally).  
—Rio de Janeiro.
- GILES, Handb. of Gnats, 2d ed., 390, pl. xv, f. 6-11 (*Culex*).
- THEOBALD, Mon., III, 155, fig.—Brazil.

#### CULEX.

- LINNÉ, Fauna Suecica, 464, no. 1890, 1761.
- MEIGEN, Illig. Mag., II, 260, 1803; Syst. Besch., I, I, 1818.

- DESVOIDY, Mem. Soc. Hist. Nat. Paris, III, 403, 1827.  
 ZETTERSTEDT, Dipt. Scand., IX, 3453, 1850.  
 SCHINER, Fauna Austr., II, 625, 1864.  
 MEINERT, Eucephale Myggelarver, in Vidensk. Selsk., 6 Række. Naturvidensk og Mathem., Afd. III, 4, 1886, p. 375; literature of transformations, etc.  
 COQUILLET, Div. of Ent. Bull. 4, n. ser., 1896, list of species with localities; Circ. no. 40, sec. ser., Div. of Ent., 5, table of species; Bull. 25, n. ser., 1900, table of species, 19.  
 THEOBALD, Monogr. of Culicidæ, I, 326, 1901.  
 GILES, Handb. of Gnats, 2d ed., 386, 1902.  
 DYAR, Proc. Ent. Soc. Wash., V, 51, 1902, and 145, 1903, tables of species based on larvæ.  
 JOHANNSEN, Bull. 68, N. Y. St. Mus., 411, 1903, table of known species of larvæ, etc.
- affinis** ADAMS, Kans. Univ. Sci. Bull., II, 25.—Ariz.  
 COQUILLET, Canad. Ent., XXXV, 261, makes a syn. of *tarsalis* COQ.; but I am assured by Adams that this is an error.
- annulatus** SCHRANK, see *Theobaldia*.
- apicalis** ADAMS, Kans. Univ. Sci. Bull., II, 26.—Ariz.
- atratus** THEOBALD, see *Melanoconion*.
- atropalpus** COQUILLET, Canad. Ent., 1902, 292.—Va., Md., Pa., N. H.  
 SMITH, Ent. News, XIII, 301, pl. xv, f. 9, larva.—Me.  
 DYAR, Jour. N. Y. Ent. Soc., X, 195, pl. XVI, f. 2, larva; Proc. Ent. Soc. Wash., V, 144, notes on larvæ; Ent. News, XIV, 180, eggs and larvæ.—N. H. and Md.
- aurifer** COQUILLET, Canad. Ent., XXXV, 225.—Centre Harbor, N. H.; Lahaway, N. J.
- bigoti** BELLARDI, see *Lutzia*.
- bimaculatus** COQUILLET, Proc. U. S. N. M., XXV, 84.—Brownsville, Tex.  
 DYAR, Jour. N. Y. Ent. Soc., XI, 27, pl. III, f. 3, larva.—Baton Rouge, La.
- canadensis** THEOBALD, Monogr. of Culicidæ, II, 3, pl. XXI, f. 82, 83.—L. Simcoe, Ont.  
 GILES, Handb. of Gnats, 2d ed., 422.  
 SMITH, Ent. News, XIII, 267 and 299, pl. xv, f. 2, larva, etc.—Lahaway, N. J.  
 DYAR, Jour. N. Y. Ent. Soc., X, 194, pl. XVI, f. 1, larval stages; Proc. Ent. Soc. Wash., V, 140, 141, notes on larvæ.—Common in N. H.
- cantator** COQUILLET, Canad. Ent., XXXV, 255.—Summit, N. J.
- cantans** MEIGEN, Syst. Besch., I, 6.—Europe.  
 ZETTERSTEDT, Ins. Lapp., 806; Dipt. Scand., IX, 3461.  
 WALKER, List, I, 4 (*stimulans*); Ins. Brit., III, 246.—Nova Scotia.  
 SCHINER, Fauna Austr., II, 627.  
 FICALBI, Bull. Soc. Ent. Ital., 1896, 258.  
 HOWARD, Bull. 25, 31, oc. New Eng., Md., Mich., to Col., N. M., and Mex. (*stimulans*); "Mosquitoes," 81, oc. (id.).  
 THEOBALD, Monogr. of Culicidæ, I, 401, pl. XX, f. 78; III, 197, notes.—Europe generally; L. Simcoe, Ont.; Manitoba; India.  
 GILES, Handb. of Gnats, 2d ed., 416.  
 SMITH, Ent. News, XIII, pl. xv, f. 3, larval structure.—N. J.  
 DYAR, Proc. Ent. Soc. Wash., V, 47 and 141, notes.—Long Id. and N. H.  
 JOHANNSEN, Bull. 68, N. Y. St. Mus., 419, pl. XLV, larva, pupa and adult.—Ithaca, N. Y.

*confinis* F. LYNCH A., see *Taniorhynchus*.

*confirmatus* F. LYNCH ARRIBALZAGA, Revista d. Mus. de la Plata, I, 388.—Argentina.

THEOBALD, Monogr. of Culicidæ, II, 42 and 355, pl. XXIV, f. 94; III, 191, note.—Jamaica and Brazil.

GILES, Handb. of Gnats, 2d ed., 443.

*consobrinus* DESVOIDY, Mém. Soc. Hist. Nat. Paris, III, 408.—Pa.

ALDRICH, Canad. Ent., XXXV, 208 and 264, synonymy.

COQUILLET, l. c., 218, same. See also *Culex inornatus*.

*cubensis* BIGOT, in Sagra's Cuba, 786.—Cuba.

*curriei* COQUILLET, see *Grabhamia*.

*cyanescens* COQUILLET, Jour. N. Y. Ent. Soc., X, 137.—Brownsville, Tex.

*discolor* COQUILLET, Canad. Ent., XXXV, 256.—Delair, N. J.

*dyari* COQUILLET, Jour. N. Y. Ent. Soc., X, 192.—Center Harbor, N. H.

DYAR, Jour. N. Y. Ent. Soc., X, 199, pl. XVIII, f. 2, larva; Proc. Ent. Soc. Wash., V, 143, notes.—N. H.

*excitans* WALKER, see *Stegomyia fasciata*.

*excrucians* WALKER, Dipt. Saund., 439.—Nova Scotia.

OSTEN SACKEN, Cat., Note 20.

HOWARD, Bull. 25, oc. at Ithaca, N. Y.

COQUILLET, Circ. 40, mention.

*fatigans* WIEDEMANN, Auss. Zweifl., I, 10 and II (*fatigans* and *æstuans*; perhaps also *pungens*, p. 9).—East Indies; Brazil; New Orleans.

MEIGEN, Syst. Besch., VII, I (*pallipes*).—Europe.

BIGOT, Annales, 1858 (*anxifer*).

F. LYNCH ARRIBALZAGA, Revista d. Mus. de la Plata, I, 398 (*Heteronycha dolosa*).—Argentina.

HOWARD, Bull. 4, 10-17, figs. and biol. (*pungens*); Bull. 25, 22-28, figs. and biol. (id.).—N. H. to Mex. and W. I.; common.

HOWARD, "Mosquitoes," 66-76, life history (*pungens*).—Ottawa, Can., to Nicaragua.

? LUGGER, 2d Minn. Rept., 185-194, 1896, figs. all stages (*pungens*).—Minn.

THEOBALD, Monogr. of Culicidæ, II, 151, pl. XXIX, f. 114 and 115.—Mass. to Argentina; Africa, Spain and Portugal, India and Australia. Conveys filariasis and a blood disease of birds; for the former, see Ross, Trans. Linn. Soc., sec. ser., II, 367-388; for the latter, see Ross, Ind. Med. Gazette, Dec., 1898 and Jan., 1899.

GILES, Handb. of Gnats, 2d ed., 438.

THEOBALD, Mon., III, 225, additional notes.

SMITH, Ent. News, XIII, 302, pl. XV, f. 14, larval structure; 14th Rept. N. J. Ag. Coll. Ex. Sta., 1902, 559-561, breeding habits (*pungens*).—N. J.

*flavipes* MACQUART, Dipt. Exot., I, 1, 35.—Chili.

BLANCHARD, Hist. fis. y. polít. de Chile, Zool., VII, 332.—Chili.

PHILIPPI, Aufzähl. d. Chil. Dipt., 595 (*flavipes* and *serotinus*).—Chili.

KOLLAR, Bras. vorz. läst. Ins., 187, f. 13 (*molestus*).—Brazil. [F. L. Arrib.]

F. LYNCH ARRIBALZAGA, Revista d. Mus. de la Plata, I, 58, pl. IV, f. 2.—Buenos Aires.

THEOBALD, Monogr. of Culicidæ, II, 149; III, 224, notes.—Amazon; Br. Guiana and Trinidad.

*fletcheri* COQUILLET, Proc. U. S. N. M., XXV, 84.—Carnduff, Assiniboia, Canada.

*frater* DESVOIDY, see *Stegomyia fasciata*.

- hirsuteron** THEOBALD, Monogr. of Culicidæ, II, 98.—Woodstock, Va.  
GILES, Handb. of Gnats, 2d ed., 451 (*hirsuteros*).
- impatiens** WALKER, see *inornatus*.
- impiger** WALKER, see *nigripes*.
- implacabilis** WALKER, see *nigripes*.
- incidens** THOMSON, see *Theobaldia*.
- inflictus** THEOBALD, Monogr. of Culicidæ, II, 115.—Grenada, W. I.  
GILES, Handb. of Gnats, 2d ed., 462.
- inornatus** WILLISTON, Dipt. of Death Val. Exped., 253.—Argus Mts., Cal.  
? WALKER, List, I, 5 (*impatiens*); Lord's "Naturalist," etc., II, 337, reprinted in Science Gossip, 1867, 79 (*pinguis*).—Martin Falls, Canada; Vancouver Id. Syn. by Theobald, with a doubt, as the type of *impatiens* does not entirely agree, and that of *pinguis* cannot be found.  
COQUILLET, Bull. 4, n. ser., Div. of Ent., makes this a synonym of *consobrinus* DESV.  
HOWARD, Bull. 25, 20, oc. from New England to S. Cal. and Saskatchewan R. (*consobrinus*).  
COQUILLET, Proc. Wash. Acad. Sci., II, 395, oc. in Alaska (id.).  
THEOBALD, Monogr. of Culicidæ, II, 78 (id.).—Col.  
GILES, Handb. of Gnats, 2d ed., 445 (id.).  
THEOBALD, Canad. Ent., XXXV, 312, oc. at Pecos, N. M.  
DYAR, Jour. N. Y. Ent. Soc., XI, 24, pl. II, f. 4, larva (id.).  
Province of Quebec—Fyles.  
See also references under *consobrinus*.
- jamaicensis** THEOBALD, see *Grabhamia*.
- janitor** THEOBALD, Monogr. of Culicidæ, III, 183, pl. x, and figs.—Kingston, Jamaica.
- kelloggii** THEOBALD, see *tarsalis*.
- melanurus** COQUILLET, Jour. N. Y. Ent. Soc., x, 193.—Center Harbor, N. H.  
DYAR, Jour. N. Y. Ent. Soc., x, 198, pl. XVII, f. I, larva; Proc. Ent. Soc. Wash., v, 143, notes on larva.—N. H.
- mexicanus** BELLARDI, see *Janthinosoma musica*.
- mosquito** DESVOIDY, see *Stegomyia fasciata*.
- musicus** SAY, see *Janthinosoma*.
- nanus** COQUILLET, Canad. Ent., XXXV, 256.—Key West, Fla.
- nemorosus** MEIGEN, Syst. Besch., I, 4, 6 (*nemorosus*, *maculatus* and *sylvaticus*).—Europe.  
? MEIGEN, Klassif., 3, 4 (*reptans* and *fasciatus*); Syst. Besch., VII, 1 *sticticus*).—Europe. [Syn. by Theob., with doubt.]  
ZETTERSTEDT, Ins. Lapp., 806; Dipt. Scand., IX, 3457.  
SCHINER, Fauna Austr., II, 628.  
WALKER, List, I, 7 (*provocans*).—Nova Scotia.  
CURTIS, Brit. Ent., 537 (*guttatus*).  
FICALBI, Nota sulla Zanz. Ital., no. IX, 1896 (*salinus*).—Italy.  
MEINERT, Eucephale Myggelarver, 377, pl. I, f. 17-19, larval stages.—Europe.  
THEOBALD, Monogr. of Culicidæ, II, 80, pl. XXV, f. 97, 98; III, 179, note.—Europe and Toronto, Can.  
GILES, Handb. of Gnats, 2d ed., 436.  
? DYAR, Proc. Ent. Soc. Wash., v, 140, 141, oc. in N. H. (*reptans*).  
? Beulah, N. M.—Skinner (id.).
- nigripalpus** THEOBALD, Monogr. of Culicidæ, II, 322; III, 221, oc.—St. Lucia; Barbadoes.  
GILES, Handb. of Gnats, 2d ed., 468 (*nigripalpis*).

- nigripes** ZETTERSTEDT, Ins. Lapp., 807; Dipt. Scand., IX, 3458.—Europe.  
 O. FABRICIUS, Fauna Groenl., 209 (*pipiens*).—Greenland [Ldbk.].  
 STAEGER, Dipt. Dan., 1840, 553; Groenl. Antl., 349, oc.—Denmark and Greenland.  
 HOLMGREN, Ins. Spetsb.; Ins. Nordgroenl., 104, oc.—Spitzbergen and Greenland.  
 PALLAS, in Curtis' Ins. Capt. Ross' Voy., LXXVI (*caspius*). [Schiodte.]  
 WALKER, List, I, 7 (*impiger* and *implacabilis*).—Martin Falls, Canada.  
 COQUILLET, Bull. 25, not seen.  
 HOWARD, Bull. 25, 29, breeding in privy vaults in Alexandria, Va.; "Mosquitoes," 80 (both *impiger*).—City of Mexico to Saskatchewan R., and U. S. generally.  
 THEOBALD, Monogr. of Culicidæ, II, 93; III, 193, note (doubts the more southern oc.).  
 GILES, Handb. of Gnats, 2d ed., 444.  
 LUNDBECK, Dipt. Groenl., I, 296; Entom. Unters. i West-Groenl., Heft 7, pl. VII, f. 14.—Greenland.  
 Adirondack Mts., N. Y.—McGillivray and Houghton (*impiger*); Beulah, N. M.—Skinner (id.).
- nigritulus** ZETTERSTEDT, Dipt. Scand., IX, 3459.—Lapland.  
 THEOBALD, Monogr. of Culicidæ, II, 140.—Scandinavia and England.  
 SMITH, Ent. News, XIII, 303, pl. XV, f. 16, larval structure, habits, etc.—Elizabeth, N. J.  
 DYAR, Jour. N. Y. Ent. Soc., XI, 24, pl. II, f. 3, larva.—N. J.
- palos** THEOBALD, Monogr. of Culicidæ, III, 194, figs.—St. Vincent and Barbadoes, W. I.
- particeps** ADAMS, Kans. Univ. Sci. Bull., II, 26.—Ariz.
- penafeli** WILLISTON, La Naturaleza, VII, 326, 1887.—Mexico.  
*Note*.—I find this in Kertész's catalogue; it seems never to have been noticed elsewhere.
- perturbans** WALKER, see *Tæniorhynchus*.
- pinguis** WALKER, in Lord's "Naturalist," etc., II, 337; reprinted in Science Gossip, 1867, 69.—Vancouver Id.  
*Note*.—Theobald states that the type cannot be found; Coquillett would call this the same as *inornatus*, q. v.
- pipiens** LINNÉ, Fauna Suecica, 464, no. 1890; Syst. Nat., 12th ed. (the latter *ciliaris*, *vulgaris* and *alpinus*).—Europe.  
 DEGEER, Mém. Hist. Nat. Ins., VI, 316 (*communis*).  
 FABRICIUS, Spec. Ins., II, 469; Ent. Syst., IV, 400; Syst. Antl., 33.  
 SCHRANK, Ins. Austr., 481; Fauna Boica, III, 2585.  
 MEIGEN, Klassif., 5; Syst. Beschr., I, 7 (*pipiens* and *rufus*).  
 ZETTERSTEDT, Ins. Lapp., 807; Dipt. Scand., IX, 3455.  
 SCHINER, Fauna Austr., II, 628 (*pipiens* and *ciliaris*).  
 BIGOT, Bull. Soc. Ent. France, IX, 122 (*agilis*).  
 FICALBI, Rev. Sist. Culic. Europ., 276 (*phytophagus*).  
 VAN DER WULP, Dipt. Neerland., 328, 329 (*pipiens* and *ciliaris*).  
 BERGROTH, Wien. Ent. Zeit., VIII, 295, oc. in British Columbia.  
 THEOBALD, Monogr. of Culicidæ, II, 132, pl. XXIX, f. 113, syn., etc.—Europe generally; Malta; Algeria; N. A.  
 GILES, Handb. of Gnats, 2d ed., 437.  
 HERRICK, Bull. 74, Miss. Ex. Sta., 7-11, life hist. in Miss.  
 DYAR, Jour. N. Y. Ent. Soc., X, 198, pl. XVII, f. 3, larva; Proc. Ent. Soc. Wash., v. 48 and 144, notes.—Durham, N. H.



- JOHANNSEN, Bull. 68, N. Y. St. Mus., 419, pl. XLIII, larva, pupa and adult.  
—Saranac Inn., N. Y.
- posticatus** WIEDEMANN, see *Janthinosoma*.
- provocans** WALKER, see *nemorosus*.
- punctor** KIRBY, Fauna Bor.-Amer., Ins., 309; republ. in Canad. Ent., XIII, 164.—  
Martin Falls, Canada.  
THEOBALD, Monogr. of Culicidæ, II, 75, types redesc.  
GILES, Handb. of Gnats, 2d ed., 435.
- pungens** WIEDEMANN, see *fatigans*.
- quadrivittatus** COQUILLET, Canad. Ent., XXXIV, 293.—Chacula, Guatemala.
- reptans** MEIGEN, see *nemorosus*.
- restuans** THEOBALD, Monogr. of Culicidæ, II, 142.—Toronto, Can.  
GILES, Handb. of Gnats, 2d ed., 429.  
SMITH, Ent. News, XIII, pl. xv, f. 15, larval habits and structure.—N. J.  
DYAR, Jour. N. Y. Ent. Soc., x, 199, pl. XVIII, f. 3, larva and pupa; Proc.  
Ent. Soc. Wash., v, 144, note on larva, etc.; Ent. News, XIV, 41, larva,  
etc.—N. H.  
JOHANNSEN, Bull. 68, N. Y. St. Mus., 417, pl. XLII, larva, pupa and adult.  
—Saranac Inn, N. Y.
- rubidus** DESVOIDY, Mém. Soc. Hist. Nat. Paris, III, 404, 1827.—Carolina.  
THEOBALD, Monogr. of Culicidæ, II, 171, transl. of orig. desc. and notes;  
not seen.  
GILES, Handb. of Gnats, 2d ed., 471, same quoted.
- scholasticus** THEOBALD, Monogr. of Culicidæ, II, 120; III, 224, notes.—Grenada, St.  
Vincent, and St. Lucia, W. I.  
GILES, Handb. of Gnats, 2d ed., 459.
- secutor** THEOBALD, Monogr. of Culicidæ, II, 321; III, 183, notes on habits.—  
Jamaica.  
GILES, Handb. of Gnats, 2d ed., 406.
- serratus** THEOBALD, Monogr. of Culicidæ, II, 45, pl. XXIV, f. 95; III, 191, notes.—  
Brazil, Guiana, Trinidad.  
GILES, Handb. of Gnats, 2d ed., 457, pl. XVI, f. 18.  
SMITH, Ent. News, XIV, 309, pl. xv, larva and adult.—N. J.
- signifer** COQUILLET, see *Stegomyia*.
- similis** THEOBALD, Monogr. of Culicidæ, III, 207. —Jamaica.
- sollicitans** WALKER, see *Grabhamia*.
- spencerii** THEOBALD, see *Grabhamia*.
- squamiger** COQUILLET, Proc. U. S. N. M., XXV, 85.—Palo Alto and San Lorenzo.  
Cal.
- stimulans** WALKER, see *cantans*.
- stylvestris** THEOBALD, Monogr. of Culicidæ, I, 406, pl. XXXV, f. 138.—L. Simcoe  
and Kent Co., Ont.; Stony Mt., Manitoba.  
GILES, Handb. of Gnats, 2d ed., 417.  
SMITH, Ent. News, XIII, 301, pl. xv, f. 10, larval habits and structure;  
doubtfully identified.—N. J.  
DYAR, Jour. N. Y. Ent. Soc., x, 196, pl. XVI, f. 3, larval stages; Proc. Ent.  
Soc. Wash., v, 47, larva (*cantans*); v, 142, cor. and notes.—Long. Id.  
JOHANNSEN, Bull. 68, N. Y. St. Mus., 421, larva, pupa and adult.—Ithaca,  
N. Y.
- tæniatus** WIEDEMANN, see *Stegomyia fasciata*.
- tæniorhynchus** WIEDEMANN, Dipt. Exot., 43; Auss. Zweifl., I, 8.—Mex., Pa.  
SAY, Jour. Acad. Sci. Phil., III, 11; Compl. Works, II, 40 (*damnosus*—  
Wiedemann's Dipt. Exot. is prior) [Wied.].

- THEOBALD, Monogr. of Culicidæ, I, 350, pl. xvii, f. 68; III, 158, notes.—Fla. and Mex. to Brazil.
- SMITH, Ent. News, XIII, 300, pl. xv, f. 5, larval structure.—N. J.
- DYAR, Proc. Ent. Soc. Wash., v, 48, oc. Long. Id.; Jour. N. Y. Ent. Soc., XI, pl. II, f. I, larva.—N. J.
- tarsalis** COQUILLET, Canad. Ent., XXVIII, 44; XXXV, 261, syn.—Argus Mts. and Folsom, Cal.
- WILLISTON, Dipt. of Death Val. Exped., 253 (*Culex* n. sp.).—Argus Mts., Cal.
- GILES, Handb. of Gnats, 1900, 281 (*willistonii*); merely a name for Williston's species.
- THEOBALD, Canad. Ent., XXXV, 211 and 311, larva figured (*kelloggii*).—Cal.; Pecos, N. M.
- THEOBALD, Monogr. of Culicidæ, II, 23, notes.
- GILES, Handb. of Gnats, 2d ed., 379, note.
- Miss.—Herrick; Corvallis, Ore.—Howard.
- Note*.—Coquillett also makes *affinis* Adams a synonym of this, but Adams writes me that this is certainly incorrect.
- territanus** WALKER, Ins. Saund., 428.—U. S.
- THEOBALD, Monogr. of Culicidæ, II, III, type redesc.
- GILES, Handb. of Gnats, 2d ed., 455, same.
- DYAR, Proc. Wash. Ent. Soc., v, 48, 142, larvæ, habits, etc.; Jour. N. Y. Ent. Soc., IX, 178, pl. x, f. 2, larva.—Bellport, L. I., and Center Harbor, N. H.
- SMITH, Ent. News, XIII, 302, pl. xv, f. 13, larval habits and structure.—N. J. The adult probably does not bite—Dyar.
- testaceus** VAN DER WULP, Tijdsch. v. Ent., 1869, 128, pl. III, f. I.—Wis.
- THEOBALD, Monogr. of Culicidæ, I, 409.—L. Simcoe, Ont.
- GILES, Handb. of Gnats, 2d ed., 418.
- triseriatus** SAY, Jour. Acad. Sci. Phil., III, 12; Compl. Works, II, 40.—Pa.
- WIEDEMANN, Auss. Zweifl., I, 11.
- HOWARD, Bull. 25, 31, oc. in N. H., Pa., Md., D. C., Va., Conn., N. J.
- SMITH, Ent. News, XIII, 301, pl. xv, f. 8, note on larval habits and structure.—N. J.
- DYAR, Proc. Ent. Soc. Wash., v, 140, 143, 152, notes; Jour. N. Y. Ent. Soc., XI, 25, pl. II, f. I, larva.—N. H. and N. Y.
- JOHANNSEN, Bull. 68, N. Y. St. Mus., 423, pl. XLVI, larva, pupa and adult.—Ithaca, N. Y.
- trivittatus** COQUILLET, Jour. N. Y. Ent. Soc., x, 193.—Chester, N. Y.
- varipalpus** COQUILLET, Canad. Ent., XXXIV, 1902, 292.—Williams, Ariz.
- walkeri** THEOBALD, see *Howardina*.
- willistonii** GILES, see *tarsalis*.

#### MELANOCONION.

- THEOBALD, Monogr. of Culicidæ, III, 238, 1903.
- atratus** THEOBALD, Monogr. of Culicidæ, II, 55, pl. XXXIV, f. 125 (*Culex*); III, 238, notes on larva and pupa, etc.—Jamaica and Trinidad; S. A. and W. I.
- GILES, Handb. of Gnats, 2d ed., 238, notes.
- spissipes** THEOBALD, Monogr. of Culicidæ, III, 242, fig.—Trinidad, W. I.

#### GRABHAMIA.

- THEOBALD, Monogr. of Culicidæ, III, 243, 1903.
- curriei** COQUILLET, Canad. Ent., XXXIII, 259 (*Culex*).—N. D., Col., Ida., Cal.

- THEOBALD, *Canad. Ent.*, XXXV, 211, 312, notes, and oc.—Pecos, N. M.
- jamaicensis** THEOBALD, *Monogr. of Culicidæ*, I, 345, pl. XVI, f. 16 (*Culex*); III, 244, male, figs.—Jamaica.
- GILES, *Handb. of Gnats*, 2d ed., 394, pl. xv, f. 5 (*Culex*).
- pygmæa** THEOBALD, *Monogr. of Culicidæ*, III, 245, pl. XI.—Antigua and Jamaica.
- sollicitans** WALKER, *Dipt. Saund.*, 427 (*Culex*).—U. S.
- ? HOWARD, *Bull.* 25, 28, fig. and notes (*Culex teniorhynchus*); "Mosquitoes," 82, oc. (id.); *Farmers' Bull.* 155, fig. (id.).—Mass. to Fla. and Jamaica; Galapagos Ids. I mention these references with a query on account of Theobald, *Mon.* I, 351, and II, 178.
- THEOBALD, *Monogr. of Culicidæ*, I, 368, pl. XVI, f. 64; II, 178, note; III, 247, fig. and habits.—N. J. to Fla. and Jamaica.
- GILES, *Handb. of Gnats*, 2d ed., 398 (*Culex*).
- SMITH, *Special Bull. T. of N. J. Ex. Sta.*, 1902, 10 pp., biol., etc.; *Rept. of Ent. for 1902*, 515-556, studies of breeding-places, etc.; *Science*, 1902, 391-394, habits; *Ent. News*, XIII, 300, pl. xv, f. 4, larval structure (all *Culex*).—N. J.; the Salt Marsh Mosquito.
- DYAR, *Proc. Ent. Soc. Wash.*, v, 47, notes on habits (*Culex*); *Jour. N. Y. Ent. Soc.*, x, 197, pl. XVII, f. 2, larva (id.).—N. J. and Long Id.
- spencerii** THEOBALD, *Monogr. of Culicidæ*, II, 99, pl. XXVI, f. 104 (*Culex*).—Stony Point and St. Boniface, Manitoba.
- GILES, *Handb. of Gnats*, 2d ed., 431 (*Culex*).
- var. **idahoensis** THEOBALD, *Monogr. of Culicidæ*, III, 250.—Market Lake, Idaho.
- vittata** THEOBALD, *Canad. Ent.*, XXXV, 313, fig. and desc. of larva.—Pecos, N. M.

## TÆNIORHYNCHUS.

- F. LYNCH ARRIBALZAGA, *Revista d. Mus. de la Plata*, I, 389, 1891.
- THEOBALD, *Monogr. of Culicidæ*, II, 190, 1901, modified; table of species.
- GILES, *Handb. of Gnats*, 2d ed., 358, 1902; table of species.
- confinis** F. LYNCH ARRIBALZAGA, *Revista d. Mus. de la Plata*, I, 391.—Chaco in Argentina.
- THEOBALD, *Monogr. of Culicidæ*, I, 382; III, 259, figs.—Argentina; Guiana and Trinidad.
- GILES, *Handb. of Gnats*, 2d ed., 401.
- DYAR, *Jour. N. Y. Ent. Soc.*, IX, 179, pl. x, f. 3, 1901, larva.—Cabin John Bridge, Md.
- SMITH, *Ent. News*, XIII, 300, pl. xv, f. 7, larval habits and str.—N. J.
- HERRICK, *Bull.* 74, *Miss. Ex. Sta.*, 17, larva in sewage in Miss.
- fasciolatus** F. LYNCH ARRIBALZAGA, *Revista d. Mus. de la Plata*, I, 392, 1891.—Argentina.
- THEOBALD, *Monogr. of Culicidæ*, II, 192, pl. XXXI, f. 121; III, 269, oc. and note.—Brazil; Guiana and Trinidad.
- perturbans** WALKER, *Dipt. Saund.*, 428 (*Culex*).—U. S.
- THEOBALD, *Monogr. of Culicidæ*, II, 201, type redesc.
- GILES, *Handb. of Gnats*, 2d ed., 366.
- ? HOWARD, *Bull.* 25, 30, oc. in Md., D. C., Va., Fla., Tex., Porto Rico, Cuba. It is not quite clear that this is the same species.
- ? SMITH, *Ent. News*, XIII, 300, pl. xv, f. 6, larval structure (*Culex*); doubtfully ident.—N. J.
- DYAR, *Proc. Ent. Soc. Wash.*, v, 144, oc. in N. H. (*Culex*).
- richardii** FICALBI, *Bull. Soc. Ent. Ital.*, 1896, 261.—Italy.

THEOBALD, Monogr. of Culicidæ, II, 194, pl. XXXI, f. 122.—England and Toronto, Canada.

GILES, Handb. of Gnats, 2d ed., 364, mentions oc. in Palestine.

#### MANSONIA.

BLANCHARD, Compt. Rend. Soc. Biol., No. 37, LIII, 1901, 1046.

THEOBALD, Monogr. of Culicidæ, II, 173, 1901 (*Panoplites*); III, 269, 1903, syn.

**titillans** WALKER, List, I, 5 (*Culex*).—Brazil.

F. LYNCH ARRIBALZAGA, Revista d. Mus. de la Plata, I, 390 (*Taniorhynchus taniorhynchus* WIED.).—Argentina.

THEOBALD, Monogr. of Culicidæ, II, 175, pl. XXX, f. 117, and pl. B (*Panoplites*); III, 273, oc.—Rio Janeiro and Br. Guiana; Trinidad, Antigua and Jamaica.

#### JOBLOTIA.

BLANCHARD, Compt. Rend. Soc. Biol., No. 37, LIII, 1043, 1901.

THEOBALD, Monogr. of Culicidæ, II, 283, 1901 (*Trichoprosopon*).

GILES, Handb. of Gnats, 2d ed., 367, 1902 (id.).

**niveipes** THEOBALD, Monogr. of Culicidæ, II, 285, pl. XXXV, f. 131 (*Trichoprosopon*); III, 334, figs., larvæ.—Trinidad; Brazil.

GILES, Handb. of Gnats, 2d ed., 367 (*Trichoprosopon*).

#### DEINOCERITES.

THEOBALD, Monogr. of Culicidæ, II, 215 and 343, 1901 (*Deinocerites* and *Brachiomyia*); III, 275, 1903, combined.

GILES, Handb. of Gnats, 2d ed., 472, 473 (*Deinokerides* and *Brachiomyia*), 1902.

**cancer** THEOBALD, Monogr. of Culicidæ, II, 215, pl. XXXII, f. 125, and pl. D; III, 276, figs. and extended notice—larva and pupa; breeds in crab-holes near seashore.—Jamaica, St. Lucia; St. Vincent, Barbadoes, Br. Guiana.

GILES, Handb. of Gnats, 2d ed., 472, figs.

**magna** THEOBALD, Monogr. of Culicidæ, II, 344 (*Brachiomyia*).—St. Lucia, W. I.

#### ÆDES.

MEIGEN, Syst. Besch., I, 13, 1818.

DESVOIDY, Mém. Soc. Hist. Nat. Paris, III, 403, 1827.

MACQUART, Hist. Nat. Dipt., I, 37, 1834.

ZETTERSTEDT, Dipt. Scand., IX, 3469, 1850.

SCHINER, Fauna Austr., II, 630, 1864.

THEOBALD, Monogr. of Culicidæ, II, 224, 1901; III, 286, 1903, table of species and of related genera.

GILES, Handb. of Gnats, 2d ed., 480, 1902.

JOHANNSEN, Bull. 68, N. Y. St. Mus., 424, 1903, tables of species by adults and larvæ.

**fuscus** OSTEN SACKEN, West. Dipt., 191.—Cambridge, Mass.

HOWARD, "Mosquitoes," 153, fig.

THEOBALD, Monogr. of Culicidæ, II, 226, pl. XXXII, f. 126; III, 286, notes.—High Park, Toronto.

GILES, Handb. of Gnats, 2d ed., 481.

DYAR, Proc. Ent. Soc. Wash., v, 145, larva, etc.; Jour. N. Y. Ent. Soc., x, 197, pl. XVII, f. 1, larva.—N. H.

- JOHANNSEN, Bull. 68, N. Y. St. Mus., 425, compiled desc. of larva.
- nigricorpus** THEOBALD, Monogr. of Culicidæ, II, 231.—Lower Amazon.
- GILES, Handb. of Gnats, 2d ed., 482, oc. in St. Lucia, W. I.
- pertinans** WILLISTON, see *Wyomyia*.
- perturbans** WILLISTON, Trans. Ent. Soc. Lond., 1896, 271, pl. VIII, f. 30.—St. Vincent, W. I.
- THEOBALD, Monogr. of Culicidæ, II, 235, quoted; *Wyomyia grayii* may be the same.
- GILES, Handb. of Gnats, 2d ed., 484.
- sapphirina** OSTEN SACKEN, see *Uranotænia*.
- smithii** COQUILLET, Canad. Ent., XXXIII, 260, 1901.—Lahaway, N. J.
- SMITH, Ent. News, XII, 189, note on habits—reared from water standing in pitcher plants (*fuscus*); XII, 254, notes and spec. ref.; Jour. N. Y. Ent. Soc., X, 10, biology—larvæ found only in pitcher plants, and can winter there.—N. J.
- DYAR, Jour. N. Y. Ent. Soc., IX, 178, figs., larva desc.
- JOHANNSEN, Bull. 68, N. Y. St. Mus., 425, pl. XLVII, f. 1-6, larva and pupa.—N. J.
- THEOBALD, Monogr. of Culicidæ, III, 295, quotes desc., and refers doubtfully to his new genus *Verrallina*, same page.

#### HOWARDINA.

- THEOBALD, Monogr. of Culicidæ, III, 287, 1903.
- walkeri** THEOBALD, Monogr. of Culicidæ, I, 424 (*Stegomyia*?); III, 288, fig.—Jamaica.

#### URANOTÆNIA.

- F. LYNCH ARRIBALZAGA, Revista d. Mus. de la Plata, I, 405, 1891.
- THEOBALD, Monogr. of Culicidæ, II, 241, 1901.
- GILES, Handb. of Gnats, 2d ed., 485, 1902.
- JOHANNSEN, Bull. 68, N. Y. St. Mus., 427, 1903.
- apicalis** THEOBALD, Monogr. of Culicidæ, III, 298, pl. XIV.—Antigua, W. I.
- lowii** THEOBALD, Monogr. of Culicidæ, II, 339; III, 301, notes.—St. Lucia; Trinidad, St. Vincent, and Para.
- GILES, Handb. of Gnats, 2d ed., 492.
- pulcherrima** F. LYNCH ARRIBALZAGA, Revista d. Mus. de la Plata, I, 407, pl. IV, f. 4.—Buenos Aires.
- THEOBALD, Monogr. of Culicidæ, II, 244, pl. XXXII, f. 128, and text figs.; III, 303, note.—Brazil; Antigua, W. I.
- sapphirina** OSTEN SACKEN, Trans. Amer. Ent. Soc., II, 47 (*Ædes*).—N. Y., D. C. HOWARD, Bull. 25, 47, fig. (*Ædes*).
- SMITH, Ent. News, XII, 153, under name of *Culex pungens*, reared from water contained in pitcher plants; see also p. 189, same vol.—N. J.
- THEOBALD, Monogr. of Culicidæ, II, 249.—D. C., Brooklyn, Ithaca, N. Y.
- GILES, Handb. of Gnats, 2d ed., 492.
- DYAR, Proc. Ent. Soc. Wash., V, 49 and 145, larvæ, etc.; Jour. N. Y. Ent. Soc., IX, 179, pl. XI, f. 1-4, life hist.—N. H. and Bellport, L. I.: in marshy pool.
- JOHANNSEN, Bull. 68, N. Y. St. Mus., 427, pl. XLVI, f. 8-15.
- socialis** THEOBALD, Monogr. of Culicidæ, II, 340.—Jamaica.
- GILES, Handb. of Gnats, 2d ed., 494.

**ÆDEOMYIA.**

- THEOBALD, Monogr. of Culicidæ, II, 218, 1901.  
 GILES, Handb. of Gnats, 2d ed., 478, 1902 (*Ædomyia*).  
**squamipennis** F. LYNCH ARRIBALZAGA, El Nat. Arg., I, 151, 1878 (*Ædes*); Revista d. Mus. de la Plata, I, 404, pl. III, f. 8 (id.).—Buenos Aires.  
 THEOBALD, Monogr. of Culicidæ, II, 219, pl. XXXI, f. 124, and pl. E; III, 307, oc.—Br. Guiana, Brazil, Trinidad, India.  
 GILES, Handb. of Gnats, 2d ed., 478, oc. in W. I.

**HÆMAGOGUS.**

- WILLISTON, Trans. Ent. Soc. Lond., 1896, 271.  
 THEOBALD, Monogr. of Culicidæ, II, 238, 1901.  
 GILES, Handb. of Gnats, 2d ed., 485, 1902.  
**cyaneus** FABRICIUS, Syst. Antl., 35 (*Culex*).—S. A.  
 WIEDEMANN, Dipt. Exot., 8 (*Culex*); Auss. Zweifl., I, 6 (id.).  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 272, pl. IX, f. 31 (*splendens*).—St. Vincent, W. I.  
 THEOBALD, Monogr. of Culicidæ, II, 239, pl. XXXII, f. 127; III, 308, notes.—Brazil; Br. Guiana and Trinidad.

**WYEOMYIA.**

- THEOBALD, Monogr. of Culicidæ, II, 67, 1901; table of species, p. 268.  
 GILES, Handb. of Gnats, 2d ed., 495, 1902.  
**grayii** THEOBALD, Monogr. of Culicidæ, II, 269, pl. XXXVI, f. 144; III, 311, notes.—St. Lucia, Grenada; Barbadoes.  
 GILES, Handb. of Gnats, 2d ed., 498.  
**pertinans** WILLISTON, Trans. Ent. Soc. Lond., 1896, 271, pl. VIII, f. 29 (*Ædes*).—St. Vincent, W. I.  
 THEOBALD, Monogr. of Culicidæ, II, 272.  
 GILES, Handb. of Gnats, 2d ed., 483, 498.

**PHONIOMYIA.**

- THEOBALD, Monogr. of Culicidæ, III, 311, 1903.  
**longirostris** THEOBALD, Monogr. of Culicidæ, II, 275 and 277, pl. XXXI, f. 123 (*Wyeomyia longirostris* and *trinidadensis*); III, 311, figs.—Rio Janeiro and Trinidad.

**DENDROMYIA.**

- THEOBALD, Monogr. of Culicidæ, III, 313, 1903.  
**luteoventralis** THEOBALD, Monogr. of Culicidæ, II, 348 (*Wyeomyia*); III, 318, fig.—Brazil, Br. Guiana and Trinidad.

**CORETHRA.**

- MEIGEN, Illig. Mag., II, 260, 1803; Syst. Besch., I, 14, 1818.  
 LOEW, Stett. Ent. Zeit., 1844, 121, divided the genus, erroneously assigning to this, the typical part of *Corethra*, the name *Mochlonyx*.  
 ZETTERSTEDT, Dipt. Scand., IX, 3470, 1850, in Meigen's sense.  
 SCHINER, Fauna Austr., II, 622, 1864 (*Mochlonyx*).  
 MEINERT, Overs. Kon. Danske Vid. Selsk. Forh., 1883, I, relations of *Corethra* and *Mochlonyx*; Eucephale Myggelarver, 422, 1886, biology of a European species, *culiciformis*.  
 ROEDER, Ent. Nachricht., 1885, 217, syn. of *Mochlonyx*.



THEOBALD, Mon. of Culicidæ, II, 303, 1901 (*Mochlonyx*).

GILES, Handb. of Gnats, 2d ed., 500, 1902 (id.).

COQUILLET, Canad. Ent., XXXV, 189, 1903, discussion of synonymy.

**albipes** JOHANNSEN, see *Sayomyia*.

**appendiculata** HERRICK, see *Sayomyia*.

**brakeleyi** COQUILLET, see *Corethrella*.

**cinctipes** COQUILLET, Canad. Ent., XXXV, 190.—Franconia, N. H.; Mt. Vernon, Va.

**plumicornis** FABRICIUS, see *Sayomyia*.

**punctipennis** SAY, see *Sayomyia*.

**trivittata** LOEW, see *Sayomyia punctipennis*.

### SAYOMYIA.

COQUILLET, Canad. Ent., XXXV, 190, 1903, new name.

LOEW, Stett. Ent. Zeit., 1844, 121 (*Corethra* MEIGEN, restricted, but this was a mistake, as he placed the type of *Corethra* in his *Mochlonyx*).

SCHINER, Fauna Austr., II, 623, 1864 (*Corethra*).

THEOBALD, Monogr. of Culicidæ, II, 288, 1901 (id.).

GILES, Handb. of Gnats, 2d ed., 500, 1902 (id.).

JOHANNSEN, Bull. 68, N. Y. St. Mus., 392, 1903, table of species, etc. (*Corethra*).

**albipes** JOHANNSEN, Bull. 68, N. Y. State Mus., 399 (*Corethra*).—Ithaca, N. Y.

**appendiculata** HERRICK, Geol. and Nat. Hist. Surv. Minnesota, 1884, 10, pl. 5, larva only, vaguely described (*Corethra*).—Lake of the Isles, Minn.

JOHANNSEN, Bull. 68, N. Y. St. Mus., 394, quotes part of desc. (id.).

**plumicornis** FABRICIUS, Ent. Syst., IV, 246 (*Tipula*); Syst. Antl., 42 (*Chironomus*).—Europe.

MEIGEN, Klassif., I, 8, pl. I, f. 12 (*Corethra lateralis*); 34 (*Ceratopogon plumicornis*); Syst. Besch., I, 15 (*Corethra*).

SCHINER, Fauna Austr., II, 624, syn., etc. (*Corethra*).

THEOBALD, Monogr. of Culicidæ, II, 299 (id.).—Europe.

GILES, Handb. of Gnats, 2d ed., 503 (id.).

JOHANNSEN, Bull. 68, N. Y. St. Mus., 395, pl. XXXIX, var. *americana*; larva and pupa also desc. and fig. (id.).—N. J., Ill., N. Y., Minn.

MEINERT, Die Eucephale Myggelarver, 398–421, pl. II, f. 35–56, full and delightful account of biology, with history of its study by old writers (*Corethra*).—Europe.

White Mts., N. H.—Mrs. Slosson's List (id.).

**punctipennis** SAY, Jour. Acad. Sci. Phil., III, 16; Compl. Works, II, 43 (*Corethra*).—Pa.

WIEDEMANN, Auss. Zweifl., I, 14 (id.).

LOEW, Cent., II, I (*Corethra trivittata*).—Me.

ROEDER, Stett. Ent. Zeit., 1885, 338, oc. in Porto Rico (id.).

THEOBALD, Mon. Culicidæ, II, 296 (id.).

GILES, Handb. of Gnats, 2d ed., 502 (id.).

DYAR, Jour. N. Y. Ent. Soc., x, 201, pl. XIX, f. 2, larva in detail (*Corethra trivittata*).

JOHANNSEN, Bull. 68, N. Y. St. Mus., 397, quotes Say's and Loew's desc.; pl. XXXIX, f. II, larva (*Corethra*).—Ithaca, N. Y.

Yukon R. Alaska—O. S. Cat.; N. J.—Smith Cat.

## PELOREMPIS.

JOHANNSEN, Bull. 68, N. Y. St. Mus., 402, 1903 (Aug. 11).

UNDERWOOD, Science, Aug. 7, 1903, mentioned as *Eucorethra*, an undescribed genus of Coquillett.

COQUILLET, Canad. Ent., Oct., 1903, 272 (*Eucorethra* UNDERWOOD). [Joh. *in litt.*]

*americana* JOHANNSEN, Bull. 68, N. Y. St. Mus., 403, pl. xli, larva and pupa desc. and fig.—Saranac Inn, N. Y.

UNDERWOOD, Science, Aug. 7, 1903, notes on habits (mentioned as *Eucorethra underwoodi*, an unpublished species of Coquillett).—Me. [Joh.]

COQUILLET, Canad. Ent., xxxv, 1903, 272 (*Eucorethra underwoodi* UNDERWOOD—sic).—Kaslo, B. C., and woods of Maine.

## CORETHRELLA.

COQUILLET, Jour. N. Y. Ent. Soc., x, 191, 1902.

JOHANNSEN, Bull. 68, N. Y. St. Mus., 399, 1903.

*brakeleyi* COQUILLET, Ent. News, xiii, 85 (*Corethra*); Jour. N. Y. Ent. Soc., x, 192, note.—Lahaway, N. J.

SMITH, Canad. Ent., xxxiv, 139, notes on larval stages (*Corethra*).—N. J.

DYAR, Jour. N. Y. Ent. Soc., x, 200, pl. xix, f. 1, larva (*Corethra*).

JOHANNSEN, Bull. 68, N. Y. St. Mus., 399, pl. xl, larva, pupa and adult.—N. J.

## MYCETOPHILIDÆ.

## MYCETOBIA.

MEIGEN, Syst. Besch., i, 229, 1818.

ZETTERSTEDT, Dipt. Scand., x, 4069, 1851.

WINNERTZ, Mon., 666, 1863.

SCHINER, Fauna Austr., ii, 426, 1864.

*divergens* WALKER, Dipt. Saund., 418.—United States.

OSTEN SACKEN, Cat., 1878, p. 8, could not find the type in the British Museum.

*marginalis* ADAMS, Kans. Univ. Sci. Bull., ii, 21.—Atherton, Mo.

## DITOMYIA.

WINNERTZ, Stett. Ent. Zeit., vii, 15, 1846; Mon., 668, 1863.

SCHINER, Fauna Austr., ii, 427, 1864.

*euzona* LOEW, Cent., ix, 1.—N. Y.

## PLESIASTINA.

WINNERTZ, Stett. Ent. Zeit., vii, 15, 1846; Mon., 670, 1863.

SCHINER, Fauna Austr., ii, 428, 1864.

*annulata* MEIGEN, Syst. Besch., vi, 294 (*Mycetobia*).—Europe.

ZETTERSTEDT, Dipt. Scand., ix, 3447 (*Ceroplatus flavus*); x, 4072 (*Mycetobia*).

WALKER, List, i, 88 (*Symmerus ferrugineus*).

WINNERTZ, Mon. Pilzm., 670.

SCHINER, Fauna Austr., ii, 429.

SMITH, Cat. Ins. N. J., oc. in N. A.

*bifasciata* WILLISTON, Biologia, Dipt., Suppl., 217, pl. iv, f. 1.—Guerrero, Mex.

*lauta* LOEW, Cent., ix, 3.—N. Y.

*tristis* LOEW, Cent., ix, 2.—D. C.

## ASINDULUM.

LATREILLE, Hist. Nat. Crust. et. Ins., XIV, 290, 1804.

WINNERTZ, Mon., 705, 1863.

SCHINER, Fauna Austr., II, 440, 1864.

*coxale* LOEW, Cent., IX, 4.—Huds. B. Terr.

*montanum* ROEDER, Wien. Ent. Zeit., VI, 116.—Wh. Mts.; N. H.

N. J.—Smith Cat.; Wh. Mts.—Slosson List.

## CEROPLATUS.

BOSC, Actes Soc. d'Hist. nat. de Paris, I, 1, 42, 1792.

WINNERTZ, Mon., 684, 1863.

SCHINER, Fauna, II, 433, 1864.

*apicalis* ADAMS, Kans. Univ. Sci. Bull., II, 22.—Douglass Co., Kans.

*bellulus* WILLISTON, Biologia, Dipt., Suppl., 219, pl. IV, f. 3.—Tabasco, Mex.

*carbonarius* BOSC, Nouv. Dict. d'Hist. Nat., 1st ed., IV, 543; 2d ed., V, 585, pl. B, 21, f. 4.—Carolina.

FABRICIUS, Syst. Antl., 16.

WIEDEMANN, AUSS. ZW., I, 61 (*Platyura*).

DUFOUR, Ann. des Sci. nat., 2d ser., XI, 202.

MACQUART, Dipt. Exot., I, 1, 77, pl. XI, f. 1.—All give Carolina as the locality.

*clausus* COQUILLET, Proc., U. S. N. M., XXIII, 594.—N. H.; N. J.

Wh. Mts.—Slosson List.

*fasciola* COQUILLET. See *Platyura*.

*longimanus* WILLISTON, Dipt. St. Vincent, 258, pl. VIII, f. 12.—St. Vincent, W. I.

## PLATYURA.

MEIGEN, Illig. Mag., II, 264, 1803; Syst. Besch., I, 231, 1818.

ZETTERSTEDT, Dipt. Scand., X, 4076, 1851.

WINNERTZ, Mon., 689, 1863.

SCHINER, Fauna Austr., II, 435, 1864.

WILLISTON, Dipt. St. Vincent, 256, 1896, table of W. Indian species.

*clausa* COQUILLET (of Smith's N. J. Cat.), see *Ceroplatus*.

*diluta* LOEW, Cent., IX, 9.—D. C. Also N. J.—Smith Cat.

*divaricata* LOEW, Cent., IX, 8.—Ga.

*elegans* COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 307.—Fla., N. C.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

*elegantula* WILLISTON, Biologia, Dipt., Suppl., 218, pl. IV, f. 2.—Gurrero, Mex.

*fasciola* COQUILLET, Ent. News, v, 126 (*Ceroplatus*).—Wash. Can. Ent., XXVIII, 200, refers to this genus.

*fascipennis* SAY, Long's Exped., Appendix, 360; Compl. Works, I, 244.—N. W. Terr.

WIEDEMANN, AUSS. ZW., I, 61.—N. W. Terr.

*fasciventris* WILLISTON, Dipt. St. Vincent, 258, pl. VIII, f. 11.—St. Vincent, W. I.

*gracilis* WILLISTON, Kans. Univ. Quart., II, 60.—Wash.

*ignobilis* WILLISTON, Dipt. St. Vincent, 257, pl. VIII, f. 9.—St. Vincent, W. I.

*inops* COQUILLET, Proc. U. S. N. M., XXIII, 594.—Del. Water Gap, N. J.

*lurida* COQUILLET, Can. Ent., XXVII, 199.—Wash.

*maudæ* COQUILLET, Can. Ent., XXVII, 199.—Wash.

*melasoma* LOEW, Cent., IX, 12.—D. C.

- mendica* LOEW, Cent., IX, 10.—N. Y.  
*mendosa* LOEW, Cent., IX, 11.—D. C., Tenn. Also N. J.—Smith Cat.  
*notabilis* WILLISTON, Kans. Univ. Quart., II, 59.—Wash.  
*parva* WILLISTON, Dipt. St. Vincent, 257.—St. Vincent, W. I.  
*pectoralis* COQUILLET, Can. Ent., XXVII, 199.—Nev.  
*pictipennis* WILLISTON, Dipt. St. Vincent, 257, pl. VIII, f. 10 (St. Vincent, W. I.);  
 Biologia, Diptera, Suppl., 218, oc. in Guerro, Mex.  
*pulchra* WILLISTON, Kans. Univ. Quart., II, 59.—Wash.  
*subterminalis* SAY, Jour. Acad. Sci. Phil., VI, 152; Compl. Works, II, 430.—Ind.  
*tæniata* WINNERTZ, Mon., 701.—Europe.  
 SCHINER, Fauna Austr., II, 438.  
 Identified from N. J. by Coquillett—Smith Cat.

## TETRAGONEURA.

- WINNERTZ, Stett. Ent. Zeit., 1846, 5; Mon., 764, 1863.  
 SCHINER, Fauna Austriaca, II, 451, 1864.  
 LOEW, Mon. N. A. Dipt., I, 14, oc. in N. A., 1862.  
*bicolor* COQUILLET, Proc. U. S. N. M., XXIII, 595.—Franconia, N. H.  
*nitida* ADAMS, Kans. Univ. Sci. Bull., II, 23—Atherton, Mo.  
*pippla* COQUILLET, Proc. U. S. N. M., XXIII, 595.—Montgomery Co., Pa.

## SCIOPHILA.

- MEIGEN, Syst. Besch., I, 245, 1818.  
 ZETTERSTEDT, Dipt. Scand., XI, 4096, 1852.  
 WINNERTZ, Mon., 707, 1863.  
 SCHINER, Fauna Austr., II, 441, 1864.  
*angulata* ADAMS, Kans. Univ. Sci. Bull., II, 22.—Manitou Park, Col.  
*appendiculata* LOEW, Cent., IX, 19.—N. Y.  
*bifasciata* SAY, Long's Exped., Appendix, 363; Compl. Works, I, 246.—N. W. Terr.  
 WIEDEMANN, Auss. Zw., I, 62.  
 "Perhaps a *Ncoempheria*." Loew, quoted by Osten Sacken, Cat., 9.  
 Wh. Mts., N. H.—Slosson.  
*biseriata* LOEW, Cent., IX, 20.—Red R. of the North.  
*diluta* WILLISTON, Dipt. St. Vincent, 263, pl. VIII, f. 17.—St. Vincent, W. I.  
*flavohirta* COQUILLET, Proc. U. S. N. M., XXIII, 596.—Franconia, N. H.  
*grisea* WALKER, see *Polylepta*.  
*hirticollis* SAY, Long's Exped., Appendix, 362; Compl. Works, I, 246.—N. W. Terr.  
 WIEDEMANN, Auss. Zw., I, 64.  
 Wh. Mts., N. H.—Slosson.  
*littoralis* SAY, Long's Exped., Appendix, 361; Compl. Works, I, 245.—Lake Superior.  
 WIEDEMANN, Auss. Zw., I, 64.  
 N. J.—Smith Cat.  
*nigricauda* ADAMS, Kans. Univ. Sci. Bull., II, 23.—Colorado City, Colo.  
*obliqua* SAY, Long's Exped., Appendix, 363; Compl. Works, I, 247.—N. W. Terr.  
 WIEDEMANN, Auss. Zw., I, 63.  
 Wh. Mts.—Mrs. Slosson.  
*obtruncata* LOEW, Cent., IX, 18.—D. C.  
*onusta* LOEW, Cent., IX, 17.—D. C.  
*popocatapetli* BELLARDI, Saggio, I, 11.—Mex., Mt. Popocatapetli.

- pulchra** JOHANNSEN, Ent. News, xiv, 14.—Axton, N. Y.  
**subcærulea** COQUILLET, Proc. U. S. N. M., xxiii, 595.—N. H., Pa., and Ottawa, Can.  
**tantilla** LOEW, Cent., ix, 21.—D. C.

## LASIOSOMA.

- WINNERTZ, Mon., 748, 1863.  
 SCHINER, Fauna Austr., ii, 448, 1864.  
**fasciata** SAY, Jour. Acad. Sci. Phil., iii, 26; Compl. Works, ii, 50 (*Sciophila*).  
 —Pa. and Md.  
 WIEDEMANN, Auss. Zw., i, 62 (id.).  
 OSTEN SACKEN, Cat., 10, gen. ref.  
 Beulah, N. M.—Skinner.  
**hirta** MEIGEN, Syst. Besch., i, 251 (196) (*Sciophila*).—Europe.  
 ZETTERSTEDT, Ins. Lapp., 860 (*Sciophila pilosula*); Dipt. Scand. xi, 4133 (*Sciophila*).  
 WINNERTZ, Mon., 749.  
 SCHINER, Fauna Austr., ii, 449.  
 LUNDBECK, Dipt. Groenlandica, 257, oc. in Greenland.  
**pallipes** SAY, Long's Exped., Appendix, 361; Compl. Works, i, 245 (*Sciophila*).  
 —N. W. Terr.  
 WIEDEMANN, Auss. Zw., i, 62 (id.).  
 OSTEN SACKEN, Cat., 10, gen. ref.  
**quadratura** LOEW, Cent., ix, 22.—Me.

## NEOEMPHERIA.

- OSTEN SACKEN, Cat., 9, change of name, 1878.  
 WINNERTZ, Mon. 738, 1863 (*Empheria*, preoc.)  
 SCHINER, Fauna Austr., ii, 446, 1864 (id.).  
**balioptera** LOEW, Cent., ix, 13.—Ill. Also N. J.—Smith Cat.  
**didyma** LOEW, Cent., vii, 9 (*Sciophila bimaculata*, preoc.); ix, 14, change of name and redescr.—English Riv., Canada.  
 N. J.—Smith Cat., and Montreal—Chagnon.  
**kincaidii** COQUILLET, Proc. Wash. Acad. Sci., ii, 391.—Popoff Id., Alaska.  
**maculipennis** WILLISTON, Dipt. St. Vincent, 262, pl. viii, f. 16.—St. Vincent, W. I.  
**nepticula** LOEW, Cent., ix, 15.—Ga. Also N. J.—Smith Cat.

## POLYLEPTA.

- WINNERTZ, Mon., 745, 1863.  
 SCHINER, Fauna Austr., ii, 447, 1864.  
**fragilis** LOEW, Cent., ix, 16.—Mass.  
**grisea** WALKER, List, i, 92 (*Sciophila*).—Huds. Bay Terr.  
 White Mts., N. H.—Slosson.  
**leptogaster** WINNERTZ, Mon., 746.—Europe.  
 SCHINER, Fauna Austr., ii, 448.  
 COQUILLET, Ent. News, Jan., 1902, oc. in White Mts., N. H.  
**tibialis** COQUILLET, Proc. U. S. N. M., xxiii, 596.—White Mts., N. H.  
 N. J.—Smith Cat.

## DIOMONUS.

- WALKER, List, i, 87, 1848.  
 TOWNSEND, Trans. Amer. Ent. Soc., xix, 155, 1892; notes—doubts validity.  
**nebulosus** WALKER, loc. cit.—Martin Falls, Canada.

## ACNEMIA.

- WINNERTZ, Mon., 798, 1863.  
 SCHINER, Fauna Austr., II, 461, 1864.  
*flaveola* COQUILLET, Proc. U. S. N. M., XXIII, 598.—Delaware Water Gap, N. J.  
 N. J.—Smith Cat.  
*psylla* LOEW, Cent., IX, 34.—Md.

## GNORISTE.

- MEIGEN, Syst. Besch., I, 243, 1818.  
 ZETTERSTEDT, Dipt. Scand., XI, 4091, 1852.  
 WINNERTZ, Mon., 777, 1863.  
 SCHINER, Fauna Austr., II, 455, 1864.  
*grønlandica* LUNDBECK, Dipt. Grønlandica, I, 259.—Greenland.  
*megarrhina* OSTEN SACKEN, West. Dipt., 193.—Yosemite, Cal.  
 N. J.—Smith Cat.

## PROBOLÆUS.

- WILLISTON, Dipt. St. Vincent, 261, 1896.  
*singularis* WILLISTON, loc. cit., pl. VIII, f. 15.—St. Vincent, W. I.

## SYNTEMNA.

- WINNERTZ, Mon., 767, 1863.  
 SCHINER, Fauna Austr., II, 452, 1864.  
*mutor* ADAMS, Kans. Univ. Sci. Bull., II, 24.—Atherton, Mo.  
*polyzona* LOEW, Cent., IX, 24.—Mid. States. Also N. J.—Smith Cat.

## ANACLINIA.

- WINNERTZ, Mon., 770, 1863.  
 SCHINER, Fauna Austr., II, 453, 1864.  
*nemoralis* MEIGEN, Syst. Besch., I, 265 (*Mycetophila*).—Europe.  
 WINNERTZ, Mon., 771.  
 SCHINER, Fauna Austr., II, 454.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 394, oc. at Sitka, Alaska.

## BOLETINA.

- STAEGER, Krøyer's Tidskr., III, 234, 1840.  
 WINNERTZ, Mon., 762, 1863.  
 SCHINER, Fauna Austr., II, 454, 1864.  
*abdominalis* ADAMS, Kans. Univ. Sci. Bull., II, 24.—Atherton, Mo.  
*artica* HOLMGREN, Ins. Nordgroenl., in Oefv. kongl. vetensk. Akad. Förh., 1872,  
 100.—North Greenland.  
 ?RÜBSAAMEN, Bibl. Zoolog., 1898, 104, notes, etc., with a doubt.—Green-  
 land.  
 LUNDBECK, Dipt. Groenl., I, 258, notes.  
*beringensis* COQUILLET, Dipt. of Commander Ids., 342 (*Ncoglyphoptera*).—  
 Bering Id. Gen. ref. corrected in Proc. U. S. N. M., XXIII, 599.  
*grønlandica* STAEGER, Groenl. Antliater, 17.—Greenland.  
 ZETTERSTEDT, Dipt. Scand., XI, 4154.  
 SCHIÖDTE, in Rink's Greenland, 68.  
 HOLMGREN, Ins. Nordgroenl., 105.  
 ZETTERSTEDT, Ins. Lapp., 862 (*Leia trivittata*, in part; from Greenl.)  
 LUNDBECK, Dipt. Groenl., I, 258.—Various parts of Greenland.



- inops** COQUILLET, Proc. Wash. Acad. Sci., II, 391.—Alaska.  
**sciarina** STAEGER, Kröyer's Tidskr., III, 336.—Europe.  
 ZETTERSTEDT, Ins. Lapp., 866 (*Mycetophila obscurella*); Dipt. Scand., XI, 4159.  
 SCHINER, Fauna Austr., II, 454.  
 RÜBSAAMEN, Bibl. Zool., 1898, 106, note, pl. VI, f. 27, 29.  
 LUNDBECK, Dipt. Groenl. I, 258, oc. in Greenland.  
 White Mts., N. H.—Slosson.  
**tricincta** LOEW, Cent., IX, 25.—Md., Wis. Also N. J.—Smith Cat.

**LEPTOMORPHUS.**

- CURTIS, Brit. Ent., 365, 1831.  
 WINNERTZ, Mon., 769, 1863.  
 SCHINER, Fauna Austr., II, 453, 1864.  
**hyalinus** COQUILLET, Proc. U. S. N. M., XXIII, 598.—White Mts., N. H.  
**parvulus** COQUILLET, loc. cit., 597.—Del. Water Gap, N. J.

**LEIA.**

- MEIGEN, Syst. Besch., I, 253, 1818.  
 ZETTERSTEDT, Dipt. Scand., XI, 4139, 1852.  
 WINNERTZ, Mon., 792, 1863.  
 SCHINER, Fauna Austr., II, 459, 1864.  
**abbreviata** LOEW, Cent., IX, 33.—Mid. States.  
**hopkinsii** COQUILLET, Can. Ent., XXVII, 200 (*Mycetophila*).—W. Va. Refers to *Leia* in Proc. U. S. N. M., XXIII, 599.  
**punctata** BELLARDI, Saggio, Appendix, 5, pl. III, f. 3.—Mex.  
**sororcula** LOEW, Cent., IX, 32.—N. Y. Also N. J.—Smith Cat.  
**unicolor** WALKER, List, I, 93.—Hudson's Bay Terr.

**EPICYPTA.**

- WINNERTZ, Mon., 909, 1863.  
 SCHINER, Fauna Austr., II, 482, 1864.  
**pulicaria** LOEW, Cent., IX, 41.—Pa.  
**punctum** STANNIUS, Observ. de Mycet. 16, f. 4, 1831.—Europe.  
 WINNERTZ, Mon., 910.  
 SCHINER, Fauna Austr., II, 483.  
 Occurs in N. J.—Smith Cat.

**DOCOSIA.**

- WINNERTZ, Mon., 802, 1863.  
 SCHINER, Fauna Austr., II, 462, 1864.  
**dichroa** LOEW, Cent., IX, 35.—D. C.  
**longicornis** COQUILLET, Proc. U. S. N. M., XXIII, 597.—White Mts., N. H.  
**obscura** COQUILLET, loc. cit., 597.—White Mts., N. H.  
**vittata** COQUILLET, loc. cit., 597.—Franconia, N. H.

**PTHINIA.**

- WINNERTZ, Mon., 779, 1863.  
 SCHINER, Fauna Austr., II, 456, 1864.  
**fraudulenta** WILLISTON, Dipt. St. Vincent, 263, pl. VIII, f. 18.—St. Vincent, W. I.  
**tanypus** LOEW, Cent., IX, 26.—N. Y.

## PHRONIA.

- WINNERTZ, Mon., 875, 1863.  
 SCHINER, Fauna Austr., II, 1864.  
*rustica* WINNERTZ, Mon., 875.—Europe.  
 SCHINER, Fauna Austr., II, 472.  
 LUNDBECK, Dipt. Groenl., I, 262, oc. in Greenland.

## ZYGOMYIA.

- WINNERTZ, Mon., 901, 1863.  
 SCHINER, Fauna Austr., II, 480, 1864.  
*ignobilis* LOEW, Cent., IX, 39.—Mid. States.  
*ornata* LOEW, Cent., IX, 40.—Pa.

## NEOGLAPHYROPTERA.

- OSTEN SACKEN, Catalogue, 1878, change of name.  
 WINNERTZ, Mon., 781, 1863 (*Glaphyroptera*, preoc.).  
 SCHINER, Fauna Austr., II, 456, 1864 (id.).  
*amabilis* WILLISTON, Biologia, Dipt., Suppl., 219.—Mexico, several places.  
*beringensis* COQUILLET, see *Boletina*.  
*bivittata* SAY, Jour. Acad. Sci. Phil., VI, 152; Compl. Works, II, 351 (*Leia*).—Indiana.  
 VAN DER WULP, Tijdschr. v. Ent., XI, 131, pl. III, f. 3, 4 (*lateralis*).—Wis. [Syn. by Loew, in O. S. Cat.]. Also N. J.—Smith Cat. I have seen the species from Kans., Ia., and Wis.  
*cincta* COQUILLET, Proc. Acad. Nat. Sci., 1895, 308.—Fla.  
*concinna* WILLISTON, Dipt. St. Vincent, 259.—St. Vincent, W. I.  
*cuneola* ADAMS, Kans. Univ. Sci. Bull., II, 25.—Colorado Spr., Colo.  
*decora* LOEW, Cent., IX, 28.—Ga.  
*lineola* ADAMS, Kans. Univ. Sci. Bull., II, 25.—Kern Co., Calif.  
*melæna* LOEW, Cent., IX, 27.—N. Y.  
*nitens* WILLISTON, Dipt. St. Vincent, 259, pl. VIII, f. 13.—St. Vincent, W. I.  
*oblectabilis* LOEW, Cent., IX, 31.—Mid. States.  
*opima* LOEW, Cent., IX, 29.—Conn. Also N. J.—Smith Cat.  
*striata* WILLISTON, Kans. Univ. Quart., II, 60.—Wash.  
*sublunata* LOEW, Cent., IX, 30.—N. Y.  
*varia* WALKER, List I, 93 (*Leia*).—Huds. Bay Terr.  
*ventralis* SAY, Long's Exped., Appendix, 364; Compl. Works, I, 247 (*Leia*).—N. W. Terr.  
 WIEDEMANN, Auss. Zw., I, 65 (id.). Also N. J.—Smith Cat. (*Leia*), and White Mts., N. H.—Slosson, the last referred to this genus by Coquillett.  
*winthemii* LEHMANN, Ins. Spec. Nonnullæ, etc., 18, 1822 (*Leia*).—Europe.  
 MEIGEN, Syst. Besch., VI, 296 (id.)  
 SAY, Long's Exped., Appendix, 365; Compl. Works, I, 248 (*Mycctophila maculipennis*).—N. W. Terr. [Loew, in O. S. Cat.].  
 WIEDEMANN, Auss., Zw., I, 66 (id.).  
 WALKER, List I, 93 (*Leia trifasciata*).—Huds. Bay Terr. [Loew, in O. S. Cat.]. Also White Mts., N. H.—Slosson.  
 WINNERTZ, Mon., 789. SCHINER, Fauna Austr., II, 457.

## ODONTOPODA.

- ALDRICH, 21st Report Geol. Ind., 1896, 187 (published 1897).  
*sayi* ALDRICH, loc. cit., 187, fig.—Marengo Cave, Ind.

## TRICHONTA.

- WINNERTZ, Mon., 847, 1863.  
 SCHINER, Fauna Austr., II, 469, 1864.  
**fœda** LOEW, Cent., IX, 38.—Mid. States.  
**obesa** WINNERTZ, Mon., 854.—Europe.  
 SCHINER, Fauna Austr., II, 469.  
 LUNDBECK, Dipt. Groenlandica, I, 261, oc. in Greenland.  
**perspicua** VAN DER WULP, Tijdschr. v. Ent., XXIV, 142.—Quebec.  
 N. J.—Smith Cat.  
**vulgaris** LOEW, Cent., IX, 37.—D. C.

## RHYMOSIA.

- WINNERTZ, Mon., 810, 1863.  
 SCHINER, Fauna Austr., II, 463, 1864.  
**filipes** LOEW, Cent., IX, 36.—Conn.

## ALLODIA.

- WINNERTZ, Mon., 826, 1863.  
 SCHINER, Fauna Austr., II, 466, 1864.  
**crassicornis** STANNIUS, Observ. de Mycetophil., 1831, 22 (*Mycetophila*).—Europe.  
 ZETTERSTEDT, Dipt. Scand., XI, 4223 (*Mycetophila spinicoxa*) [Schiner].  
 WINNERTZ, Mon., 828.  
 SCHINER, Fauna Austr., II, 467.  
 Oc. in N. A. reported by Loew in O. S. Cat.—Md., Pa.

## BRACHYCAMPTA.

- WINNERTZ, Mon., 833, 1863.  
 SCHINER, Fauna Austr., II, 468, 1864.  
**unicolor** LUNDBECK, Dipt. Groenlandica, I, 260.—Greenland.

## MYCOTHERA.

- WINNERTZ, Mon., 913, 1863.  
 SCHINER, Fauna Austr., II, 483, 1864.  
**paula** LOEW, Cent., IX, 42.—Mid. States.

## EXECHIA.

- WINNERTZ, Mon., 879, 1863.  
 SCHINER, Fauna Austr., II, 475, 1864.  
 **analis** COQUILLET, Proc. U. S. N. M., XXIII, 598.—Del. Water Gap, N. J.  
**fungorum** DEGEER, Ins., VI, 142 (*Tipula*).—Europe.  
 LATRELLE, Gen. Crust., IV, 264 (*Mycetophila fusca*) [Meigen].  
 MEIGEN, Syst. Besch., I, 266 (208) (id.).  
 MACQUART, Hist. Nat. Dipt., I, 134 (id.).  
 ZETTERSTEDT, Dipt. Scand., XI, 4235 (id.).  
 WINNERTZ, Mon., 886.  
 SCHINER, Fauna Austr., II, 478.  
 LUNDBECK, Dipt. Groenlandica, I, 262, oc. in Greenland.  
**interrupta** ZETTERSTEDT, Dipt. Scand., XI, 4240 (*Mycetophila*).—Europe.  
 WINNERTZ, Mon., 896.  
 SCHINER, Fauna Austr., II, 477.  
 LUNDBECK, Dipt. Groenlandica, I, 262, oc. in Greenland.

## MYCETOPHILA.

- MEIGEN, Illig. Mag., II, 263, 1803; Syst. Besch., I, 260, 1818.  
 ZETTERSTEDT, Dipt. Scand., X, 4170, 1852.  
 WINNERTZ, Mon., 915, 1863.  
 SCHINER, Fauna Austr., II, 484, 1864.
- bifasciata* WALKER, List I, 96.—Martin Falls, Canada.  
 White Mts., N. H.—Slosson.
- bipunctata* LOEW, Cent., IX, 44.—Wis. Also N. J.—Smith Cat.  
*contigua* WALKER, List I, 96.—Nova Scotia. Also N. J.—Smith Cat.  
*despecta* WALKER, List I, 101.—Martin Falls, Canada.  
*discoidea* SAY, Jour. Acad. Sci. Phil., VI, 153; Compl. Works, II, 351.—Indiana.  
*dolosa* WILLISTON, Dipt. St. Vincent, 264.—St. Vincent, W. I.  
*extincta* LOEW, Cent., IX, 43.—Mid. States.  
*fallax* LOEW, Cent., IX, 50.—Mid. States.  
*hopkinsii* COQUILLET, see *Leia*.
- ichneumonea* SAY, Jour. Acad. Sci. Phil., III, 16; Compl. Works, II, 43.—Pa.  
 WIEDEMANN, Auss. Zw., I, 67.  
 Beulah, N. M.—Skinner.
- inculta* LOEW, Cent., IX, 46.—Mid. States.  
*insipiens* WILLISTON, Dipt. St. Vincent, 264, pl. VIII, f. 19.—St. Vincent, W. I.  
*læta* WALKER, List I, 97.—Nova Scotia.  
*monochæta* LOEW, Cent., IX, 54.—D. C.  
*mutica* LOEW, Cent., IX, 45.—Mid. States.
- nodulosa* WILLISTON, Dipt. St. Vincent, 264, pl. VIII, f. 20.—St. Vincent, W. I.  
*nubila* SAY, Jour. Acad. Sci. Phil., VI, 153; Compl. Works, II, 351.—Ind.  
*obscura* WALKER, List I, 101.—Martin Falls, Canada. Also N. J.—Smith Cat.,  
 and White Mts., N. H.—Slosson.
- parva* WALKER, List I, 97.—Martin Falls, Canada.  
*pinguis* LOEW, see *Dynatosoma*.
- plebeja* WALKER, List I, 100.—Martin Falls, Canada.  
*polita* LOEW, Cent., IX, 53.—N. Y.  
*procera* LOEW, Cent., IX, 55.—N. Y.  
*propinqua* WALKER, List I, 96.—Nova Scotia.
- punctata* MEIGEN, Klassifikation, 91; Syst. Besch., I, 264 (the latter as *punctata*,  
*semicineta* and *cunctans*); VI, 30 (*trivialis*); VII, 43 (*unicolor*), 44 (*rufa*  
 MACQ.).—Europe. [Winnertz.]  
 FABRICIUS, Syst. Antl., 58 (*Sciara striata*). [Winnertz.]  
 ZETTERSTEDT, Dipt. Scand., XI, 4200.  
 WINNERTZ, Mon., 916.  
 SCHINER, Fauna Austr., II, 484.  
 LUNDBECK, Dipt. Groenl., I, 262, oc. in Greenland.  
 Axton, N. Y.—M. & H.; N. J.—Smith Cat.; White Mts., N. H.—Slosson;  
 Montreal—Chagnon.
- Note*.—The authorities all omit Meigen's description in his Klassifikation, thus giving Fabricius priority; Coquillett, however, gives me this reference, the work being inaccessible to me.
- quatuornotata* LOEW, Cent., IX, 52.—Md.  
*sericea* SAY, Long's Exped., Appendix, 365; Compl. Works, I, 248.—N. W. Terr.  
 WIEDEMANN, Auss. Zw., I, 66.  
*sigmoides* LOEW, Cent., IX, 51.—Mid. States. Also N. J.—Smith Cat.; White  
 Mts., N. H.—Slosson.  
*trichonota* LOEW, Cent., IX, 49.—D. C.  
*umbratica* ALDRICH, 21st Rept. Geol. Indiana, 1896, 186, fig.—Shiloh Cave, Ind.

## DYNATOSOMA.

WINNERTZ, Mon., 947, 1863.

SCHINER, Fauna Austr., II, 491, 1864.

COQUILLET, Can. Ent., XXVII, 201, 1895.

**fulvida** COQUILLET, Can. Ent., XXVII, 200.—Wash.  
Beulah, N. M.—Skinner.

**pinguis** LOEW, Cent., IX, 47 (*Mycetophila*).—English Riv., Br. Amer.  
White Mts., N. H.—Slosson (determined and referred to this genus by  
COQUILLET, as is the following species).

**scalaris** LOEW, Cent., IX, 48 (*Mycetophila*).—Mid. States.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

**thoracica** COQUILLET, Proc. U. S. N. M., XXIII, 598.—Ill. and White Mts., N. H.

## BOLITOPHILA.

MEIGEN, Syst. Besch., I, 220, 1818.

ZETTERSTEDT, Dipt. Scand., X, 4053, 1851.

WINNERTZ, Mon., 672, 1863.

SCHINER, Fauna Austr., II, 429, 1864.

**cinerea** MEIGEN, Syst. Besch., I, 221, pl. VIII, f. 1, 2.—Europe.

MACQUART, Hist. Nat. Dipt., I, 126.

ZETTERSTEDT, Dipt. Scand., X, 4057.

WINNERTZ, Mon., 674.

SCHINER, Fauna Austr., II, 430.

OSTEN SACKEN, Cat., 8, occurrence in N. A., authority of Loew.

**disjuncta** LOEW, in O. S. Cat., is a MS. species.

**fusca** MEIGEN, see *hybrida*.

**hybrida** MEIGEN, Klassifikation, I, 47 (*Macrocera*); Syst. Besch., I, 221, pl. VIII,  
f. 1, 2 (*fusca*).—Europe.

DUFOUR, Ann. d. Sc. Nat., 1839, 20 (*Macrocera*).

CURTIS, Brit. Ent., VIII, 581 (*Messala saundersii*).

WALKER, Ent. Mag., III, 179 (*maculipennis*).

WINNERTZ, Mon., 673.

SCHINER, Fauna Austr., II, 430.

White Mts.—Slosson (det. Coquillett.)

**montana** COQUILLET, Proc. U. S. N. M., XXIII, 593.—Mt. Wash, N. H.

## MACROCERA.

MEIGEN, Illig. Mag., II, 261, 1803; Syst. Besch., I, 222, 1818.

WINNERTZ, Mon., 675, 1864.

SCHINER, Fauna Austr., II, 430, 1864.

**clara** LOEW, Cent., IX, 6.—D. C. Also N. J.—Smith Cat.

**concinna** WILLISTON, Dipt. St. Vincent, 255, pl. VIII, f. 7.—St. Vincent, W. I.

WILLISTON, Biologia, Dipt., I, 217, oc. in Guerrero, Mex.

**diluta** ADAMS, Kans. Univ. Sci. Bull., II, 22.—Arizona.

**formosa** LOEW, Cent., IX, 8.—N. Y. Also N. J.—Smith Cat.

**hirsuta** LOEW, Cent., IX, 5.—D. C. Also N. J.—Smith Cat.

ALDRICH, 21st Rept. Geol. Indiana, 1896.—Truitt's Cave, Ind.

**immaculata** JOHNSON, Canad. Ent., 1902, 240.—Pa., N. Y.

**inconcinna** LOEW, Cent., IX, 7.—D. C. Also White Mts., N. H.—Slosson.

**nebulosa** COQUILLET, Proc. U. S. N. M., XXIII, 594.—N. H., N. J.

## DIADOCIDIA.

- RUTHE, Isis, XI, 1210, 1831.  
 WINNERTZ, Mon., 665, 1863.  
 SCHINER, Fauna Austr., II, 426, 1864.  
*borealis* COQUILLET, Proc. Wash. Acad. Sci., II, 390.—Lowe Inlet, Br. Col.  
*ferruginosa* MEIGEN, Syst. Besch., VI, 294 (*Mycetobia*).—Europe.  
 SCHINER, Fauna Austr., II, 426.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 390, oc. in White Mts., N. H.

## EPIDAPUS.

- HALIDAY, Ins. Brit., Dipt., I, 7, 1851.  
 SCHINER, Fauna Austr., II, 416, 1864.  
 WINNERTZ, Mon. Sciarinen, 182, 1867.  
*scabiei* HOPKINS, Proc. Ent. Soc. Wash., III, 149-159, full life hist., etc.; 20 figs.—  
 West Va.; larva causes a form of scab in potatoes.  
 HOPKINS, Special Bull. W. Va. Exp. Station, No. 2, 97-106, figs., life hist.,  
 etc. Both papers issued in 1895.  
 HOWARD, Ins. Life, VII, 279, oc. in Missouri.

## EUGNORISTE.

- COQUILLET, Proc. Ent. Soc. Wash., III, 321, 1896.  
 MIK, Wien. Ent. Zeitung, 1896, 300, doubts relation to *Gnoriste*; 1897, 39,  
 says is entirely different, and quotes Osten Sacken's opinion (*in litt.*)  
 that it is a *Sciara*.  
*occidentalis* COQUILLET, loc. cit.—Las Cruces, N. M.  
*Note.*—The species is common on golden-rod in fall at Moscow, Idaho;  
 I consider it a distinct genus of the Sciarinæ, not closely related to *Gnor-*  
*iste*.

## ZYGONEURA.

- MEIGEN, Syst. Besch., VI, 304, 1830.  
 SCHINER, Fauna Austr., II, 416, 1864.  
 WINNERTZ, Mon. Sciarinen, 186, 1867.  
*sciastica* WILLISTON, Dipt. St. Vincent, 286, pl. VIII, f. 24.—St. Vincent, W. I.  
*toxoneura* OSTEN SACKEN, Proc. Ent. Soc. Phil., 1862, 165 (*Sciara*).—D. C. Gen.  
 ref. in Cat., 13.

## TRICHOSIA.

- WINNERTZ, Mon. Sciarinen, 173, 1867.  
*hebes* LOEW, Cent., IX, 58.—N. Y.

## SCIARA.

- MEIGEN, Illig. Mag., II, 263, 1803; Syst. Besch., I, 276, 1818.  
 LATREILLE, Hist. nat. Crust. et Ins., XIV, 288 (*Molobrus*), 1804.  
 ZETTERSTEDT, Dipt. Scand., X, 3711, 1851.  
 SCHINER, Fauna Austr., II, 417, 1864.  
 WINNERTZ, Mon. Sciarinen, II, 1867: a classic monograph of the European  
 species of the subfamily.  
 WILLISTON, Dipt. St. Vincent, 265, table of St. Vincent species.  
 LINTNER, 10th N. Y. Rept., 387, 391, extended bibliographical notes.  
*Note.*—For the occurrence in this country of the march of masses of  
 larvæ, called "Heerwurm" in Germany, and "Snake-worm" in the United  
 States, see



GLOVER, Rept. Dept. Ag., 1872, 115; two cases in Va., with figs. of larva and fly.

RILEY and HOWARD, Insect Life, iv, 1891, 214.

WEBSTER, Science, Feb. 23, 1894, 109.

E. D. COPE, letter to Osten Sacken, published in Psyche, 1897, 75.

FELT, 16th N. Y. Rept., 992-994, 1901, at Franklin, N. Y.

For *Sciara* sp. infesting roots of grass, see FORBES, Ill. Report, 1883, 57, pl. iv, f. 5-9.

For occurrence of *Sciara* in caves, see ALDRICH, 21st Report Geol. Ind., 1896, 186; also below.

**abbreviata** WALKER, List 1, 109.—Martin Falls, Canada. Also N. J.—Smith Cat., and White Mts., N. H.—Slosson.

I consider Walker's three-line description quite unrecognizable.

**agraria** FELT, in Lintner's 12th N. Y. Report, 225, pl. vi, f. 5, 6, 10. N. Y.; collected in a mushroom cellar.

**alternata** RÜBSAAMEN, Bibl. Zool., xx, Lief. 4, 106.—Greenland.

**americana** WIEDEMANN, Auss. Zw., 1, 68.—Brazil.

SCHINER, Novara, II, Brazil and Columbia; would include *atra* Mcq. and *cognata* and *precipua* WALKER, all South American, in the synonymy.

OSTEN SACKEN, Biologia, Dipt., 1, 1, oc. in Mexico and Central America; remarks on the synonymy.

RILEY, Amer. Nat., 1881, 150 (The Yellow Fever Fly), biology.

WILLISTON, Biologia, Dipt., Suppl., 221, oc. in several places in Mex.

**aprilina** MEIGEN, Syst. Besch., 1, 285 (223).—Europe.

ZETTERSTEDT, Dipt. Scand., x, 3754.

SCHINER, Fauna Austr., 11, 424.

LUNDBECK, Dipt. Groenl., 1, 250, oc. in Greenland.

**atra** MACQUART, Dipt. Exot., 1, 1, 78.—Brazil.

BELLARDI, Ditt. Mess., 1, 12, oc. in Mexico.

See *americana*.

**atrata** SAY, Long's Exped., App., 366; Compl. Works, 1, 249.—N. W. Terr.

WIEDEMANN, Auss. Zw., 1, 70.

**attenuata** RÜBSAAMEN, Bibl. Zool., 1898, Heft xx, Lief. 4, 106.—Greenland.

LUNDBECK, Dipt. Groenl., 1, 242, pl. v, f. 1 (*latipennis*) [Lundbeck]. Greenland.

**biformis** LUNDBECK, Dipt. Groenl., 1, 256.—Greenland.

**borealis** RÜBSAAMEN, Bibl. Zool., 1898, Lief. 4, 109, pl. vi, f. 14.—Greenland.

COQUILLET, Proc. Wash. Sci., II, 392, oc. in Sitka, Alaska.

**caldaria** LINTNER, Lintner, 10th N. Y. Report, 397, figs.—Boise, Idaho; larvæ in greenhouse pots.

**cochleata** RÜBSAAMEN, Bibl. Zool., 1898, Lief. 4, 108, pl. vi, f. 22.—Greenland.

?RÜBSAAMEN, loc. cit., 107 (*marginata*) [Lundbeck, with ?] Greenland.

LUNDBECK, Dipt. Groenl., 1, 247, pl. v, f. 6 (*hemorrhoidalalis*) [Lundbeck].—Greenland.

**concinna** WILLISTON, Dipt. St. Vincent, 266.—St. Vincent, W. I.

**coprophila** LINTNER, 10th N. Y. Rept., 391.—New York. The Manure Fly; desc. of habits, etc.

**debilis** WILLISTON, Dipt. St. Vincent, 266, pl. viii, f. 22.—St. Vincent, W. I.

**delectata** WILLISTON, Dipt. St. Vincent, 267.—St. Vincent, W. I.

**dimidiata** SAY, Species of American Insects found by Jos. Barabino, sec. ed., 15; Compl. Works, 1, 308.—New Orleans, La.

**exigua** SAY, Long's Exped., App., 367; Compl. Works, 1, 249.—N. W. Terr.

WIEDEMANN, Auss. Zw., 1, 69.

- exilis* SAY, Jour. Acad. Sci. Phil., vi, 154; Compl. Works, ii, 352.—Ind.  
*expolita* COQUILLET, Proc. Wash. Acad. Sci., ii, 392.—Sitka, Alaska.  
*femorata* SAY, Jour. Acad. Sci. Phil., iii, 78; Compl. Works, ii, 70.—Pa.  
 WIEDEMANN, Auss. Zw., i, 70.  
*flavipes* PANZER, Fauna Germ., ciii, 15, 1806.—Europe.  
 MEIGEN, Syst. Besch., i, 283; vi, 306.  
 STAEGER, Dipt. Dan., 1840, 286; Groenl. Antl., 1845, 357, oc. in Greenland.  
 ZETTERSTEDT, Dipt. Scand., x, 3762.  
 SCHINER, Fauna Austr., ii, 424.  
 MACQUART, Hist. Nat. Dipt., i, 149.  
 WALKER, Dipt. Brit., iii, 55.  
 WINNERTZ, Mon. Sciarinen, 133.  
*forecipulata* LUNDBECK, Dipt. Groenl., i, 241.—Greenland.  
*fraterna* SAY, Long's Exped., App., 367; Compl. Works, i, 249.—N. W. Terr.  
 WIEDEMANN, Auss. Zw., i, 69.  
*fuliginosa* FITCH, 2d N. Y. Rept., 487 (*Molobrus*).—N. Y.  
 N. J.—Smith Cat.  
*fulvicauda* FELT, in Lintner's 12th N. Y. Rept., 227, pl. vi, f. 7, 13.—Reared from  
 decaying blackberry roots, New Jersey.  
*fumatella* LUNDBECK, Dipt. Groenl., i, 249.—Greenland.  
*germana* WILLISTON, Dipt. St. Vincent, 266, pl. viii, f. 21.—St. Vincent, W. I.  
*gigantea* MACQUART, Dipt. Exot., Suppl. i, 19.—Colombia.  
 BELLARDI, Saggio, i, 13, oc. in Mexico.  
 OSTEN SACKEN, Biologia, Dipt., i, 2, oc. in Guatemala and Costa Rica.  
*glacialis* RÜBSAAMEN, Bibl. Zool., 1898, Lief. 4, 109, pl. vi, f. 16.—Greenland.  
*glacialis* LUNDBECK, Dipt. Groenl., i, 254.—Greenland.  
 The one by Rüksaamen is prior.  
 See *humicola*.  
*grønlandica* HOLMGREN, Ins. Nordgroenl., 104.—Greenland.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 392, oc. in Popoff Ids., Alaska.  
*hæmorrhoidalis* LUNDBECK, see *cochleata*.  
*humicola* LUNDBECK, Dipt. Groenl., i, 252.—Greenland. Op. cit., ii, 313, perhaps  
 is same as *glacialis*.  
*inconstans* FITCH, 2d N. Y. Report, 487 (*Molobrus*).—N. Y.  
 COQUILLET, Amer. Nat., xxxi, 385, oc. in Mammoth Cave, Ky.; comp. with  
 type; larva in decaying apple in the cave.  
 CHITTENDEN, Bull. 27, n. s., Div. of Ent., 108, figs.; habits.—injurious in  
 greenhouses.—N. Y.; Ottawa; Me.; Pa.; N. J.; Va.; Ill.; O.; Nebr.  
 HINE, Ent. News, Sept. 1899, 201, figs., no desc.; larva bores inside stems  
 of carnations (Det. by Dept. of Agric.).  
*iridipennis* ZETTERSTEDT, Ins. Lapp., 827.—Lappland. Dipt. Scand., x, 3740.  
 STAEGER, Groenl. Antl., 357, 1845, oc. in Greenland.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 392, oc. in Alaska.  
*latipennis* LUNDBECK, see *attenuata*.  
*lurida* WALKER, List, i, 106.—Trenton Falls, N. Y. Dipt. Saund., 418.  
*mali* FITCH, 2d N. Y. Report, 485 (*Molobrus*).—New York. In burrows of cod-  
 ling moth in apple.  
*marginata* RÜBSAAMEN, see *cochleata*.  
*multisetæ* FELT, in Lintner's 12th N. Y. Report, 223, pl. vi, f. 11.—N. J. Larva  
 reared from mushrooms.  
*nigra* WIEDEMANN, Dipt. Exot., 44; Auss. Zw., i, 68.—Savannah, Ga.  
 BEULAH, N. M.—Skinner.  
*ocellaris* OSTEN SACKEN, of Comstock, see *Cecidomyia*.

- ochrolabis* LOEW, Cent., IX, 57.—N. Y. Also White Mts., N. H.—Slosson.  
*pauciseta* FELT, in Lintner's 12th N. Y. Report, 224, pl. VI, f. 12.—N. J. Larva bred from decaying potatoes.  
*perpusilla* WALKER, List, I, 106.—Martin Falls, Canada.  
*polita* SAY, Long's Exped., App., 366; Compl. Works, I, 249.—N. W. Terr. WIEDEMANN, Auss. Zw., I, 70. Also N. J.—Smith Cat.  
*prolifera* FELT, in Lintner's 12th N. Y. Report, 226.—Mass. In greenhouses.  
*punctata* WALKER, List, I, 106.—N. Amer.  
*robusta* WALKER, List, I, 105.—Martin Falls, Canada.  
*rotundipennis* MACQUART, Dipt. Exot., I, 2, 178.—Carolina. BELLARDI, Saggio, I, 13, oc. in Mexico.  
*sciophila* LOEW, Cent., IX, 56.—D. C.  
*septemtrionalis* RÜBSAAMEN, Bibl. Zool., 1898, Lief. 4, 109, pl. VI, f. 12.—Greenland. LUNDBECK, Dipt. Groenl., II, 312, note.  
*striata* RÜBSAAMEN, Berl. Ent. Zeitsch., 1894, 37.—Mex.  
*tilicola* OSTEN SACKEN, quoted by Comstock, Ag. Report, 1881, with gall, and this by Packard, 5th Report U. S. Ent. Comm., 412. I do not find the original desc.—it may not have been previously described.  
*tridentata* RÜBSAAMEN, Bibl. Zool., 1898, Lief. 4, 107, pl. VI, f. 13, 24.—Greenland. COQUILLET, Proc. Wash. Acad. Sci., II, 392, oc. in Lowe Inlet, Br. Col. LUNDBECK, Dipt. Groenl., I, 243, pl. V, f. 2 (*validicornis*). [Lundbeck.]  
*tritici* COQUILLET, Ins. Life, VII, 406, figs., life hist., etc.—D. C. Larvæ live at the roots of young wheat plants.  
*unicolor* SAY, Jour. Acad. Sci. Phil., VI, 153; Compl. Works, II, 351.—Mex.  
*validicornis* LUNDBECK, see *tridentata*.  
*vulgaris* FITCH, 2d N. Y. Report, 487 (*Molobrus*).—N. Y. Also White Mts.,—Slosson.  
*zygoneura* WILLISTON, Dipt. St. Vincent, 267, pl. VIII, f. 23.—St. Vincent, W. I.

#### MANOTA.

WILLISTON, Dipt. St. Vincent, 260, 1896.

*Note.*—The wing having a very incomplete venation, I cannot place the genus in any of the established subfamilies.

*defecta* WILLISTON, loc. cit., pl. VIII, f. 14.—St. Vincent, W. I.

#### HESPERODES.

COQUILLET, Ent. News, 1900, 429.

*Note.*—This genus is said to be "near *Hesperinus*," which Osten Sacken, after seeing the type, placed in the Bibionidæ.

*johnsoni* COQUILLET, loc. cit.—Delaware Water Gap, N. J.

#### CECIDOMYIDÆ.

There are peculiar difficulties in the task of properly representing this family in the present Catalogue. On account of the fact that many species make galls on plants, we encounter here a mixture of botanical and zoological science, which has tended to separate the study of the Cecidomyidæ from that of the other Diptera. Only those who have made a special study of the family are at all informed about it. Unfortunately, not one of the present generation of American entomologists has given this special attention.

To make matters ten-fold worse, the European specialists in Cecidomyidæ

have come to a practical unanimity in accepting certain principles of nomenclature which radically change the generic names used by Osten Sacken, who followed Loew. The change hinges on the application of the name *Cecidomyia* (disregarding for the time being the new genera which have naturally come into existence), and will be found fully discussed in the following papers:

KARSCH, Revision der Gallmücken, Münster, 1878, 10-20.

OSTEN SACKEN, Catalogue, 215, note 1, 1878.

RÜBSAAMEN, Berl. Ent. Zeitsch., XXXVI, 324-327, 1892.

KIEFFER, Annales Soc. Ent. France, 1900, 436.

OSTEN SACKEN, Ent. Mo. Mag., 1901, 40-43.

The practical effect of the changes adopted by Karsch, Rübsaamen and Kieffer is to apply the name *Cecidomyia* to the *Diplosis* of Osten Sacken's Catalogue, and to divide up his *Cecidomyia* between *Rhabdophaga* and *Dasyneura*. As nearly all the species in the family were referred to *Cecidomyia* and *Diplosis* in Osten Sacken's Catalogue, the adoption of the changed nomenclature will leave few members of the family in the same genera to which Osten Sacken referred them.

Realizing the immense practical disadvantage of such an overturning of names, I should have been well content to let the problems of nomenclature lie in abeyance; but they have been already threshed out in Europe, and the conclusions reached and put in use there cannot be ignored.

After much consideration, I can find no better course to follow than to adopt the generic distribution of Kertész, in his *Catalogus Dipteriorum*, vol. II. Not having much knowledge of the family myself, and not being able to consult an American authority on it, I have carried out this plan. I take occasion to remark, however, that Osten Sacken thoroughly disapproves of the changes, and has given, in the last reference above, his reasons for his views.

Some of the species still included under *Cecidomyia* doubtless belong to other established genera, but are not yet sufficiently described to allow of a positive reference; in fact, many of the species need further study, and at best the present scheme must be considerably modified by more thorough investigation. No family of the Diptera offers greater inducements to a worker who will patiently carry on the biological and systematic study of it conjointly.

The status of those names which have been applied to larvæ and galls only, or to pupæ, larvæ and galls, or even to galls alone, need not be settled at the present time. I have placed all such names in a division by themselves. My opinion is that when the adult is at last described, the same old specific name should be used, unless impracticable, but that thenceforth the description of the adult should be regarded as the real description of the species. Meanwhile, it is very convenient, and thoroughly in accord with the objects of nomenclature, that the provisional name should stand.

A few species described since Kertész have been added, in harmony with his general distribution.

Cross-references have not been thought necessary, considering the small size of the family.

The European literature is voluminous; Kieffer gives over 800 references. His *Monographie des Cécidomyides d'Europe et d'Algerie*, in *Annales Soc. Ent. France*, 1900, 181-472, 30 plates, is indispensable to any student of the family. I add here only a few references.

COMSTOCK, Dept. Agric. Rept., 1880, 270, 271, list of references on parasitic and inquiline species.

BRAUER, *Zweifl. d. Kaiserl. Mus.*, III, 1883, 20 and 53, references to descriptions of larvæ.

- MIK, Wien. Ent. Zeit., XVI, 284-289, on mounting and describing specimens.
- OSTEN SACKEN, Western Dipt., 192, 1877, describes several galls without naming them.
- MRS. SLOSSON, Ent. News, VII, 238, a species attaching itself to wing of a lace-wing fly to be carried about.
- SMITH, Dept. Agric. Rept., 1884, 396-398, a species infesting pears in Conn.
- RILEY and HOWARD, Ins. Life, III, 294, note on a species destroying buds of roses grown under glass—see *Neocerata rhodophaga*.

## TRICHOPTEROMYIA.

- WILLISTON, Trans. Ent. Soc. Lond., 1896, 255.
- modesta* WILLISTON, loc. cit., pl. VIII, f. 6.—St. Vincent, W. I.

## CAMPYLOMYZA.

- MEIGEN, Syst. Besch., I, 101, 1818.
- LOEW, Mon. N. A. Dipt., I, 178, 1862.
- SCHINER, Fauna Austr., II, 411, 1864.
- atra* MEIGEN, Syst. Besch., I, 102; VI, 271.—Europe.
- ZETTERSTEDT, Dipt. Scand., IX, 3670.
- SCHINER, Fauna Austr., II, 412.
- WINNERTZ, Verh. Zool.-Bot. Ges., XX, 25.
- LUNDBECK, Dipt. Grœnl., I, 239, oc. in Greenland.
- scutellata* SAY, Jour. Acad. Sci. Phil., III, 17; Compl. Works, II, 44.—Mo.
- WIEDEMANN, Auss. Zweifl., I, 22.

## LESTREMIA.

- MACQUART, Dipt. Nord. de la France, I, 123, 1826; Hist. Nat. Dipt., I, 157, 1834.
- LOEW, Stett. Ent. Zeit., V, 324, 1844 (*Cccidogona*).
- SCHINER, Fauna Austr., II, 413, 1864.
- leucophæa* MEIGEN, Syst. Besch., I, 281 (*Sciara*); VI, 308, pl. LXV, f. 16.—Europe.
- ZETTERSTEDT, Dipt. Scand., X, 3768.
- SCHINER, Fauna Austr., II, 413.
- COQUILLET, Ent. News, 1896, 263, records from White Mts., N. H.

## LASIOPTERA.

- MEIGEN, Syst. Besch., I, 88, 1818.
- WINNERTZ, Mon. Gallmücken, 191, 1853.
- OSTEN SACKEN, Mon. N. A. Dipt., I, 175, 1862.
- SCHINER, Fauna Austr., II, 406, 1864.
- carbonitens* COCKERELL, Canad. Ent., XXXIV, 183.—Las Valles, N. M.; larvæ in "aborted shoots of grass."
- ephedræ* COCKERELL, Ann. & Mag. Nat. Hist., ser. VII, vol. II, 327.—N. M.; bred from *Ephedra trifurca*.
- ephedricola* COCKERELL, Canad. Ent., XXXIV, 184.—Mesilla Park, N. M.; gall on *Ephedra trifurca*, a swelling of the twig.
- muhlenbergiæ* MARTEN, Bull. Ohio Ex. Sta., Technical ser., I, No. 3, p. 155.—Ohio; gall in tip of *Muhlenbergia mexicana*, shown in pl. II, f. 6.
- parva* WALKER, List, I, 29.—Martin Falls, Canada.



- solidaginis** OSTEN SACKEN, Proc. Ent. Soc. Phil., I, 370.—D. C.; larvæ probably inquilinous in galls on Solidago.
- tertia** COCKERELL, Ann. and Mag. Nat. Hist., ser. VII, vol. II, 328.—N. M.
- ventralis** SAY, Long's Exped., App., 357; Compl. Works, I, 242.—Philadelphia.  
WIEDEMANN, Auss. Zw., I, 21.
- vitis** OSTEN SACKEN, Mo. N. A. Dipt., I, 201.—D. C.; larvæ in "swellings of the stem and leafstalks of the wild grape."  
WALSH and RILEY, Amer. Ent., I, 1869, 247, fig. of gall.  
RILEY, 5th Mo. Rept., 1873, 117, fig. of gall.—Mo.  
REED, 13th Rept. Ent. Soc. Ontario, 1883, 49, fig.—Canada.  
SAUNDERS, Insects. Inj. to Fruits, 295, fig.  
LINTNER, Country Gentleman, XLIV, 407, 1879; LIII, 511, 1888; Fourth N. Y. Rept., 63-67.—N. Y.  
N. J.—Smith Cat.
- willistonii** COCKERELL, Ann. and Mag. Nat. Hist., ser. VII, vol. II, 327.—N. M.; bred from *Atriplex canescens*.

### RHABDOPHAGA.

- WESTWOOD, Gardener's Chronicle, 1847, 588.  
H. LOEW, Dipt. Beitr., IV, 21, 1850 (*Cecidomyia* MEIG., in part).  
RONDANI, Atti Soc. Sc. Nat. Milano, II, 286, 1860 (id.).  
RÜBSAAMEN, Berl. Ent. Zeitsch., XXXVII, 346 (*Dichelomyia*, in part).  
KIEFFER, Bull. Soc. Ent. France, 1896, 189 (*Bertieria*).
- batatas** WALSH, Proc. Ent. Soc. Phil., III, 601; VI, 225 (both *Cecidomyia salicis-batatas*).—Rock Id., III.; makes a potato-like, polythalamous gall on *Salix humilis* and other species.  
BERGENSTAMM and LOEW, Synopsis, 71, note.  
N. J.—Smith Cat.
- brassicoides** WALSH, Proc. Ent. Soc. Phil., III, 577; Amer. Entomologist, I, 105, f. 84 (both *Cecidomyia salicis-brassicoides*).—Rock Id., III.; makes a cabbage-like gall on *Salix longifolia*.  
PACKARD, Guide to the Study of Insects, 377, f. 282 (id.).—Ill., etc.  
TOWNSEND, Canad. Ent., XXVII, 205, oc. in Arizona; parasites, etc. (id.).  
N. J.—Smith Cat.
- cornu** WALSH, Proc. Ent. Soc. Phil., III, 590, gall and larva (*Cecidomyia salicis-cornu*); VI, 224, adult (id.).—Rock Id., III.; gall a deformed, hornlike lateral bud of *Salix humilis*.
- gnaphaloides** WALSH, Proc. Ent. Soc. Phil., III, 583, all stages (*Cecidomyia salicis-gnaphaloides*).—Rock Id., III.; gall a rather open cone on *Salix humilis*.  
Additional notes, op. cit., VI, 223.
- rhodoides** WALSH, Proc. Ent. Soc. Phil., III, 586, all stages (*Cecidomyia salicis-rhodoides*).—Rock Id., III.; rose-like single gall on tip of twig of *Salix humilis*.  
Additional note, VI, 224.
- salicis** SCHRANK, Fauna Boica, III, 69, 1803 (*Tipula*).—Europe.  
LOEW, Dipt. Beitr., IV, 37 (*Cecidomyia*).  
WINNERTZ, Linnæa Ent., VIII, 215 (id.).  
SCHINER, Fauna Austr., II, 370 (id.).  
RÜBSAAMEN, Berl. Ent. Zeitsch., XXXVII, 347, pl. VIII, XII, XV, and XVIII (*Dichelomyia*).  
FELT, 17th N. Y. Rept., 1902, 750, figs. and pl. II, oc. in N. Y.; "produces many-celled galls in the stems of small willows."



**siliqua** WALSH, Proc. Ent. Soc. Phil., III, 591; VI, 224 (both *Cecidomyia salicis-siliqua*).—Rock Id., Ill.; makes a pod-like gall on *Salix humilis*, *cordata*, and *discolor*.

BAKER, Ent. News, VI, 173, oc. at Fort Collins, Col., on *S. amygdaloides*.

**strobiliscus** WALSH, Proc. Ent. Soc. Phil., III, 582, gall only; VI, 223 (both *Cecidomyia salicis-strobiliscus*).—Winnebago Co., Ill.; a pine-cone-like gall on *Salix rostrata*.

**strobiloides** WALSH, Proc. Ent. Soc. Phil., III, 580, all stages (*Cecidomyia salicis-strobiloides*).—Rock Id., Ill.; makes a pine-cone-like gall on *Salix rostrata*.

OSTEN SACKEN, Mon. N. A. Dipt., I, 203, gall (id.).

RILEY and WALSH, Amer. Entomologist, I, 105, f. 82 (id.).

BERGENSTAMM and LÖW, Synopsis, 71, suggest that *rhodoides*, *gnaphaloides*, *strobiliscus* and *coryloides* may all be the same as this; quoted by Osten Sacken, Cat., 215.

PETTIT, Bull. 186, Mich. Ex. Sta., oc. at Chatham, Northern Mich. (id.).

N. J.—Smith Cat.

#### DASYNEURA.

RONDANI, Nuovi Annal. Sc. Nat. Bologna, ser. 2, VI, 12, 1846; op. cit., 371, note (*Perrisia*).

LOEW, Dipt. Beitr., IV, 21, 1850 (*Cecidomyia* MEIG., in part).

RÜBSAAMEN, Berl. Ent. Zeitsch., XXXVII, 346, 1892 (*Dichelomyia*, in part).

**grossulariæ** FITCH, Trans. N. Y. State Agl. Soc., 1854, 880; 1st N. Y. Rept., 176; 2d Rept., 150; 3d Rept., 437 (all *Cecidomyia*).—N. Y.; larvæ in gooseberries

**hirtipes** OSTEN SACKEN, Mon. N. A. Dipt., I, 195 (*Cecidomyia*).—D. C., on *Solidago*.

**leguminicola** LINTNER, Canad. Ent., 1879, 44 and 121; Amer. Nat., 1879, 190 (*trifolii*); Rept. Ent. Soc. Ont., 1879, 128; 5th N. Y. Rept., 262; 13th Rept., 359 (all *Cecidomyia*).—N. Y.; larvæ in clover heads, destroying the seed; "The Clover-seed Midge."

COMSTOCK, Rept. Dept. Agric., 1879, 193 (id.).

SAUNDERS, Rept. Ent. Soc. Ont., 1881, 38, fig. (id.).

FORBES, Ill. Rept., 1888, 15, note on first oc. in Ill. (id.).

RILEY and HOWARD, Ins. Life, I, 142, notes; oc. in Ohio (id.).

ORMEROD, Ins. Life, III, 293, oc. in England; Rept. on Inj. Ins., 1890, 23 (id.).

**pseudacaciæ** FITCH, 2d N. Y. Rept., 331 (*Cecidomyia*); 5th N. Y. Rept., 833 (id.).—N. Y.; the larvæ in young leaflets of locust, *Robinia pseudacacia*.

PACKARD, 5th Rept. U. S. Ent. Comm., 368, abstract of Fitch.

N. J.—Smith Cat.

**rhois** COQUILLET, Ins. Life, VII, 348 (*Cecidomyia*).—N. Y.; galls on the roots of poison ivy, *Rhus toxicodendron*.

**serrulata** OSTEN SACKEN, Mon. N. A. Dipt., I, 198 (*Cecidomyia*).—D. C., on *Alnus serrulata*.

TOWNSEND, Proc. Ent. Soc. Wash., II, 388, desc. of gall (*Cecidomyia*).—Va. N. J.—Smith Cat.

**solidaginis** LOEW, Mon. N. A. Dipt., I, 194, pl. 1, f. 8 (*Cecidomyia*).—D. C., on *Solidago*.

N. J.—Smith Cat.

? **spongivora** WALKER, List, I, 30 (*Cecidomyia*).—Martin Falls, Canada.

Gen. ref. by Kertész, but very doubtful.

- strobiloides** TOWNSEND, Psyche, 1894, 176 (*Cecidomyia bigelovia-strobiloides*).—N. M.; makes galls on *Bigelovia*.
- trifolii** LÖW, Verh. Zool.-Bot. Ges., 1874, 143 (*Cecidomyia*).—Europe; larvæ in fold of the leaf of white clover.
- COMSTOCK, Dept. Agric. Rept., 1879, 197-199, pl. 1, f. 5, oc. in U. S., life hist., etc. (id.).

## NEOCERATA.

- COQUILLET, Bull. 22, n. ser., Div. of Ent., 1900, 47.
- rhodophaga** COQUILLET, loc. cit., with fig.—D. C.; infests buds of roses grown under glass.

## ASPHONDYLIA.

- LOEW, Dipt. Beitr., iv, 21, 1850.
- WINNERTZ, Mon. Gallmücken, 187, 1853.
- OSTEN SACKEN, Mon. N. A. Dipt., 1, 176, 1862; Trans. Amer. Ent. Soc., 1869, 299.
- SCHINER, Fauna Austr., II, 395, 1864.
- atriplicis** TOWNSEND, Ann. and Mag. Nat. Hist., xxvii, 1893, 1021 (*Cecidomyia*).—N. M.; on *Atriplex canescens*. Gall only described.
- COCKERELL, op. cit., xxix (id.).—N. M.
- Gen. ref. by Cockerell *in litt.*, and doubtfully in footnote in Jour. N. Y. Ent. Soc., vi, 204.
- conspicua** OSTEN SACKEN, Trans. Amer. Ent. Soc., III, 51 (*rudbeckia-conspicua*).—Pa., on *Rudbeckia triloba*.
- globulus** OSTEN SACKEN, Trans. Amer. Ent. Soc., II, 301 (*helianthi-globulus*).—Rock Id., Ill., on *Helianthus*.
- MARTEN, Psyche, 1888, 102 (id.).—Ill.
- gutierreziae** COCKERELL, Canad. Ent., xxxiii, 23.—Las Vegas, N. M., on *Gutierrezia sarothra*.
- mentzeliae** COCKERELL, Entomologist, Nov., 1900, 302.—Raton, N. M., breeding in ovaries of *Mentzelia multiflora*.
- monacha** OSTEN SACKEN, Trans. Amer. Ent. Soc., II, 300; III, 347; Biologia, Dipt., I, 1 (oc. and biology).—N. Y.; Mexico; bred in N. Y. from *Solidago altissima*.
- neomexicana** COCKERELL, Jour. N. Y. Ent. Soc., iv, 204 (*Cecidomyia*).—N. M.; makes galls on *Atriplex canescens*. Gen. ref. by Cockerell *in litt.*, and also doubtfully in footnote under description.
- prosopidis** COCKERELL, Ann. and Mag. Nat. Hist., 1898.—N. M., on *Prosopis juliflora* var. *glandulosa*.
- recondita** OSTEN SACKEN, Canad. Ent., Nov., 1875.—Long Id., N. Y., on *Aster patens*.

## RHOPALOMYIA.

- RÜBSAAMEN, Berl. Ent. Zeitsch., xxxvii, 370, 1892.
- tridentatae** RÜBSAAMEN, Ent. Nachricht., xix, 163, 1893.—N. A., on *Artemisia tridentata*.

## OLIGOTROPHUS.

- LATREVILLE, Hist. Nat. Crust. et Ins., xiv, 288, 1805.
- H. LOEW, Dipt. Beiträge, iv, 21, 1850 (*Cecidomyia* MEIG., in part).
- RÜBSAAMEN, Berl. Ent. Zeitsch., xxxvii, 376, 1892.
- betulae** WINNERTZ, Linnæa Ent., viii, 234 (*Cecidomyia*).—Europe; the larvæ infest the catkins of white birch, *Betula alba*.
- SCHINER, Fauna Austr., II, 381 (id.).

F. LÖW, Verh. Zool.-Bot. Ges., 1878, 15, pl. iv, f. 4 (id.).

WACHTL, Entom. Biol. Stud., ser. 1, 1878, 9-11, on var. of *Betula pendula* (id.).

LINTNER, Country Gentleman, LI, 287. 1886, oc. in N. A.; 3d N. Y. Rept., 85, 86, 141, 143; 4th Rept., 27, 205, 206 (parasites); 11th Rept., 162-165, pl., life hist., etc. (all *Cecidomyia*).

RÜBSAAMEN, Berl. Ent. Zeitsch., xxxvii, 377, pl. vii and xii.

### MAYETIOLA.

KIEFFER, Miscellanea Entomologica, Jan., 1896; Wien. Ent. Zeit., xv, 89, 1896.

*Note.*—The only North American representative is the well-known "Hessian Fly," so-called from the supposition that it was introduced from Europe along with the Hessian soldiers in the Revolution. It has uniformly been referred to the genus *Cecidomyia* in the past by American writers. The larva injures young wheat plants; it is found between the stalk and the sheathing portion of one of the lower leaves.

The literature is very voluminous. Kertész, in his Catalogue, II, 76, gives three pages of references; Osborn, in Bull. 16, mentioned below, gives a far more lengthy list. I give a few of the early references, paying more attention to the newer publications, since the time of Osborn's paper. From the first, the articles are biological and economic in their scope. The European references are omitted here.

**destructor** SAY, Jour. Acad. Sci. Phil., I, 45, pl. III, f. 1-3; Compl. Works, I, 4.—Eastern U. S.

FITCH, Amer. Quart. Jour. Ag. and Sci., iv, 244-264, 1846; v, 1-27, 1847; revised and republished, Trans. N. Y. State Ag. Soc., 1846, 316-373, I pl.; 3d N. Y. Rept., 133-144; 7th Rept., 819-830, pl. III, f. 2, 3; 8th Rept., 685, note.

PACKARD, Bull. 4, U. S. Ent. Comm.; full life hist. and figs.; the same with additions, 3d Rept. U. S. Ent. Comm., 198-248, pl. iv, v; also in the appendix to the third Report is a transl. of an article by Löw and Wagner.

FORBES, Ill. Rept., 1885, 14; 1886, 21-34; 1890, 54-63.—Ill. and Mississippi Valley generally.

LINTNER, 5th N. Y. Rept., 263, notes.

RILEY, Ins. Life, I, 32, 107, 131, 322; Dept. Agric. Rept., 1891, 235; 1892, 158; 1893, 211,—various notes on life history, parasites, etc.

MARTEN, Ins. Life, III, 265, notes on habits.

RILEY and HOWARD, Ins. Life, III, 306, affecting grasses in Cal.

WEBSTER, Ins. Life, VI, 146, general article.

LUGGER, 2d Rept. Ent. Minn. Ex. Sta., 1896, 11-15, good figure.

OSBORN, Bull. 16, n. ser., Div. of Ent., 1896; full discussion, bibliog., etc.

ASHMEAD, Psyche, 1897, 135, parasites.

JOHNSON, Bull. 58, Md. Ex. Sta., 1898, 117-122, figs.

MARLATT, Farmers' Bull. 132, Dept. of Agric.

FLETCHER, Rept. Ent. and Bot., 1898, 173; 1899, 163.

PETTIT, Bull. 175, Mich. Ex. Sta., 1899, 358; repeated in the Annual Rept. for same year, 137.

STEDMAN, 34th Annual Rept. Bd. of Agric. of Mo., 75-86.

HOPKINS, Bull. 67, W. Va. Ex. Sta., 1900.

LOCHHEAD, Bull. 116, Ont. Ag. Coll. and Ex. Sta., 1901.

FELT, 17th N. Y. Rept., 1902, 705-730, figs. and pl.

GARMAN, Bull. 103, Ky. Ex. Station, 1902, experiments.

WASHBURN, Bull. 77, Minn. Ex. Sta., 1-7, figs.; Canad. Ent., xxv, 317, notes.

*Note*.—The species occurs in Europe and New Zealand.

#### BREMIA.

RONDANI, Atti Soc. Sci. Nat. Milano, II, 287, 1860.

*cucumeris* LINTNER, 11th N. Y. Rept., 165-168, pl. II (*Diplosis*).—Mass.; the larva transforms smaller leaves of musk-melon into hairy galls. Called "The Melon-vine Midge."

#### CONTARINIA.

RONDANI, Atti Soc. Sci. Nat. Milano, II, 287, 1860.

KIEFFER, Bull. Soc. Ent. France, LXIII, 28, 1894 (*Eudiplosis* and *Stictodiplosis*); Wien. Ent. Zeit., xv, 94, 1896, syn., etc.

*pyrivora* RILEY, Dept. Agric. Rept., 1885, 283, pl. VII, f. 2-4 (*Diplosis*).—E. U. S.; larvæ in fruit of pears.

? MEIGEN, Klassifikation, I, 39, pl. II, f. 8 (*Cecidomyia nigra*); Syst. Besch., I, 95, pl. III, f. II (id.).—Europe.

? NORDLINGER, Die Kleine Feinde d. Landwirthschaft, 622, 1869 (*Cecidomyia pyricola*).—Europe.

RILEY, Wien. Ent. Zeit., VI, 203, f. 1-3 (*Diplosis*).

MEADE, Entomologist, XXI, 123-131, 1888 (id.).

LINTNER, 8th N. Y. Rept., 140-151, full discussion, bibliog., etc. (id.); 10th Rept., 386, 387, notes (id.); Canad. Ent., XXIII, 223, abstract of habits and oc. (id.).—N. Y.

SMITH, Ent. News, IV, 297-299, experiments for destruction of (id.).

KIEFFER, Synops. Cécid. Europe et Alg., 33, 1898, oc. in Europe.

*setigera* LINTNER, 11th N. Y. Rept., 168-170, pl. III.—Mass.; affects young leaves of musk-melons the same as *Contarinia cucumeris*; "The Hairy Melon-vine Midge."

*tritici* KIRBY, Trans. Linn. Soc., IV, 246 (*Tipula*).—England; larvæ in wheat heads.

HARRIS, Ins. Inj. to Veg., 592 (*Cecidomyia*).—Mass.

FITCH, Essay on the Wheat Fly, 1845 (*Cecidomyia*); 3d N. Y. Rept., 1-88, pl. II, f. I, 4 (id.).—N. Y. Called "The Wheat Midge."

AMYOT, Bull. Soc. Ent. France, CIV, 1855 (id.).

LINTNER, 1st N. Y. Rept., 6, republishes Fitch's cut, etc. (id.).

WEBSTER, Dept. Agric. Rept., 1884, 389; 1885, 318 (*Diplosis*).

KIEFFER, Wien. Ent. Zeit., xv, 99, gen. ref.; Synops. Cécid. Europe et Alg., 34.

FLETCHER, Rept. Ent. and Bot., 1898, 172 (*Diplosis*).

MARLATT, Farmers' Bull. 132, Dept. of Agric. (id.).

LOCHHEAD, Bull. 116, Ont. Ag. Coll. and Ex. Sta., 7, 8, fig. (id.).

*violicola* COQUILLET, Bull. 22, n. ser., Div. of Ent., 47-50, fig. (*Diplosis*).—Va., N. Y., D. C.; infesting and folding leaves of violets.

HOWARD, Amer. Florist, Jan. 21, 1899 (id.).

GALLOWAY, "Commercial Violet Culture," 211-215, fig. (id.).

CHITTENDEN, Bull. 27, n. ser., Div. of Ent., 47-50, pl. and figs. (id.).

#### CECIDOMYIA.

MEIGEN, Illig. Mag., II, 261, 1803; Klassifikation, 1804.

- LOEW, Dipt. Beitr., IV, 20, 1850 (*Diplosis*).
- OSTEN SACKEN, Mon. N. A. Dipt., I, 175, 1862; Ent. Mo. Mag., sec. ser., XII, 40, 1901 (id.).
- KARSCH, Revis. d. Gallmücken, 19, 1878.
- RÜBSAAMEN, Berl. Ent. Zeitsch., XXXVII, 324, 1892.
- aceris** SHIMER, Trans. Amer. Ent. Soc., I, 281.—Ill.; larva on surface of leaves of *Acer dasycarpum*.
- albovittata** WALSH, Proc. Ent. Soc. Phil., III, 620; VI, 227.—Rock Id., Ill.; in-quinilous in galls of *strobiloides*, *strobiliscus*, *brassicoides* and *rhodoides*.
- alticola** COCKERELL, The Entomologist, 1890, 281.—Col.
- BAKER, Ent. News, VI, 173, oc. at Ft. Collins, Col., affecting *Artemisia dracunculoides*.
- amyotii** FITCH, 3d N. Y. Rept., 31.—N. Y.
- ananassi** RILEY, Amer. Ent., II, 244, 273, f. 153 (gall) (*cupressi-ananassi*).—Tenn., on *Taxodium distichum*.
- annulipes** WALSH, Proc. Ent. Soc. Phil., III, 629 (*Diplosis*).—Rock Id., Ill.; in-quinilous in galls of *strobiloides*.
- antennariæ** WHEELER, Proc. Wis. Nat. Hist. Soc., Apr., 1899, 209-212, all stages.—Wis.; galls in terminal buds of *Antennaria plantaginifolia*.
- anthophila** OSTEN SACKEN, Trans. Amer. Ent. Soc., II, 302.—N. Y.; larvæ on *Solidago*.
- atricornis** WALSH, Proc. Ent. Soc. Phil., III, 628 (*Diplosis*).—Rock Id., Ill.; in-quinilous in galls of *strobiloides*.
- atriplicicola** COCKERELL, Ann. Mag. Nat. Hist., ser. 7, II, 236 (*Diplosis*).—N. M., on *Atriplex*.
- atrocularis** WALSH, Proc. Ent. Soc. Phil., III, 626; VI, 227 (*Diplosis*).—Rock Id., Ill.; bred from galls of *strobiliscus* and from a Cynipid gall.
- bigeloviæ** COCKERELL, West Amer. Scientist, VI, 106; Ent. Mo. Mag., 1890, 324.—Col.; bred from gall of *Eurosta bigeloviæ*—from some knowledge of the various gall-insects of Bigelovia, I think this may be an error, and that it is much more likely to be one of the species with an independent gall.
- bulia** WALSH, Proc. Ent. Soc. Phil., VI, 228 (*Diplosis helianthi-bulla*).—Rock Id., Ill.; makes a globular gall on leaves of *Helianthus*.
- BRODIE, Biol. Rev. of Ont., I, 1894, 74, oc. in Ont.
- caryæ** OSTEN SACKEN, Mon. N. A. Dipt., I, 191 (*Diplosis*).—D. C.; forms galls on leaves of hickory.
- catalpæ** COMSTOCK, Rept. Dept. Agric., 1880, 266 (*Diplosis*).—D. C.; larvæ in pods of Catalpa. They have the power of jumping.
- caulicola** COQUILLET, Ins. Life, VII, 401 (*Diplosis*).—N. H.; larvæ in stems of garden poppy, *P. nudicaule*.
- chrysopsidis** LOEW, Mon. N. A. Dipt., I, 203, pl. i, f. 1.—D. C.; on *Chrysopsis mariana*.
- ? TOWNSEND, Proc. Ent. Soc. Wash., II, 389, notes on gall, perhaps not the same.
- coccidarum** COCKERELL, The Entomologist, 1892, 181; Proc. Acad. Nat. Sci. Phil., 1894, 419 (both *Diplosis*).—Jamaica.
- COQUILLET, Proc. U. S. N. M., XXII, 249, oc. in Porto Rico; "Bred from larvæ associated with *Dactylopius citri* . . . and bred from *Lecanium hemisphaericum*."
- cornuta** WALSH, Proc. Ent. Soc. Phil., III, 625,—gall, pupa, imago.—Rock Id., Ill., on *Salix longifolia*.
- costræ** SHIMER, Trans. Amer. Ent. Soc., II, 395.—Ill.; on hickory.
- frater** COCKERELL, The Entomologist, 1890, 280.—Colo.



- gleditchiæ** OSTEN SACKEN, Proc. Ent. Soc. Phil., vi, 219.—R. I., on *Gleditchia triacanthos*. N. J.—Smith Cat.
- graminis** FITCH, 6th N. Y. Rept., 832, pl. II, f. 2, name changed and redesc.; Essay on the Wheat-fly (*cercalis*, preoc.).—N. Y.
- ? **grassator** FYLES, Canad. Ent., xiv, 237, fig.; Rept. Ent. Soc. Ont., 1883, 30 (both ? *Diplosis*).—Ontario.
- inimica** FITCH, 6th N. Y. Rept., 830-832.—N. Y.; in wheat heads with tritici.
- maccus** LOEW, Mon. N. A. Dipt., I, 187, pl. I, f. 11, 12 (*Diplosis*).—D. C.
- negundinis** GILLETTE, Psyche, 1890, 392, figs.—Iowa; larvæ produce galls in terminal buds of *Acer negundo*.
- orbitalis** WALSH, Proc. Ent. Soc. Phil., III, 623; VI, 227.—Rock Id., Ill.; inquilinous in galls of *batatas*, *strobiloides* and *brassicoides*; also in those of *Euura salicis-ovum*, a sawfly.
- oxycoccana** JOHNSON, Ent. News, x, 80, 1899, change of name; Ent. News, XI, 324, quotes orig. desc.; "infests the terminal buds of cranberry and loose-strife (*Lysimachia terrestris*)."—N. J.
- SMITH, Special Bull. K, N. J. Ex. Sta., 31-37, figs., 1890 (*vaccinii*, preoc.).—N. J.
- parthenicola** COCKERELL, The Entomologist, July, 1900, 201 (*Diplosis*).—N. M.
- pictipes** WILLISTON, Trans. Ent. Soc. Lond., 1896, 253 (*Diplosis*).—St. Vincent, W. I.
- pilulæ** WALSH, Amer. Ent., II, 29, gall only (*quercus-pilulæ*).—Ill., on laurel-leaved oak.
- PACKARD, 5th Rept. U. S. Ent. Comm., 206, 207, fig. of gall, and notes on adult.
- radiatæ** SNOW, Ent. News, XI, 489, figs. (*Diplosis*).—Palo Alto, Cal.; larva in young shoots of *Pinus radiata* and other *Pinus*.
- CANNON, Amer. Nat. Oct., 1900, 801-810, figs.,—a botanical study of the gall.
- resinicola** OSTEN SACKEN, Trans. Amer. Ent. Soc., III, 345 (*Diplosis*).—N. Y.; in the resin of *Pinus inops*. The description is reprinted in Ent. Nachrichten, 1896, 343-345.
- SANBORN, Proc. Bost. Soc. Nat. Hist., XII, 93, larva only.
- COMSTOCK, Rept. Dept. Agric., 1879, 256, pl. VI, f. 5, life history; larva in resin of *Pinus inops*, *rigida* and *tæda*.
- PACKARD, 5th Rept. U. S. Ent. Comm., 797, figs., quotes Comstock.
- TOWNSEND, Proc. Ent. Soc. Wash., II, 389, notes on relation to *Retinia comstockiana*, a twig-borer of *P. inops*.
- PACKARD, Rept. U. S. Geol. Surv. of the Terr., x, 1876, 527 (*Diplosis pini-rigida*); 5th Rept. U. S. Ent. Comm., 798-800, fig.; larvæ make galls in needles of *P. rigida*. [Syn. taken from Kertész, Catalogue.]
- MIK, Wien. Ent. Zeit., XVI, 290-292 (id.).
- ECKEL, Ent. News, XIV, 279-284, pl., habits, etc. (*Diplosis*).
- robinia** HALDEMAN, Amer. Jour. Agr. and Sci., VI, 193, figs.; reprinted in Proc. Boston Soc. Nat. Hist., VI, 401.
- HARRIS, Ins. Inj. to Veget., 3d edit., 567.
- FITCH, 2d N. Y. Rept., 332.
- On leaves of locust, *Robinia pseudacacia*, in Atlantic States.
- sorghicola** COQUILLET, Bull. 18, n. ser., 82 (*Diplosis*).—Ala., Tex.; larvæ in seeds of sorghum.
- togata** FITCH, Amer. Quart. Jour. Agr. and Sci., II, 233-264, 1845.
- thoracica** FITCH, Essay on the Wheat-fly, f. 5, 6.—N. Y.
- OSTEN SACKEN, Cat., 5, note on genus.



**thurstoni** BRODIE, Biol. Rev. of Ontario, I, 1894, 73-75.—Toronto; gall in stem of *Helianthus divaricata*.

### CLINODIPLOSIS.

KIEFFER, Feuille jeune Natural., XXIV, 121, 1894.

**rosivora** COQUILLET, Bull. 22, n. ser., Div. of Ent., 46 (*Diplosis*).—East. U. S.; infests buds of roses grown under glass.

### LESTODIPLOSIS.

KIEFFER, Bull. Soc. Ent. France, LXIII, 28, 1894; Feuille jeun. Natural., XXIV, 84, 1894 (the latter as *Coprodiplosis*).

**caliptera** FITCH, Essay on the Wheat-fly (first edition in Amer. Quart. Jour. Agric. and Sci., II, No. 2, 1845, pl. v. f. 2; second edit. in Trans. N. Y. State Agl. Soc., 1846, vol. v. Mentioned as *Cecidomyia* in both. *Cercalis* is separated in the second only.) Also in 3d N. Y. Rept., 90, pl. II, f. 18 (id.).—N. Y.; affects wheat like *tritici*.

**decemmaculata** WALSH, Proc. Ent. Soc. Phil., III, 631 (*Diplosis*).—Rock Id., Ill.; inquilinous in galls of *strobiloides*.

**septemmaculata** WALSH, Proc. Ent. Soc. Phil., III, 630; VI, 228 (both *Diplosis*).—Rock Id., Ill.; inquilinous in galls of *brassicoides*, bred from black knot on plum, and "from the coccidian gall *vitifolia* Fitch."

? SAY, Long's Exped., App., 357 (*ornata*); Compl. Works, I, 242 (id.).—Pa. [Walsh, with a doubt.]

? WIEDEMANN, Auss. Zw., I, 22 (id.).

### ASYNAPTA.

LOEW, Dipt. Beitr., IV, 39, 1850.

OSTEN SACKEN, Mon. N. A. Dipt., I, 177, 1862.

RÜBSAAMEN, Berl. Ent. Zeitsch., XXXVII, 400, 1892.

KIEFFER, Annales Soc. Ent. France, 1900, 446.

**antennariæ** WHEELER, Proc. Wis. Nat. Hist. Soc., Apr., 1889, 212-216, all stages and habits; galls in terminal buds of *Antennaria plantaginifolia*; courtship mentioned.—Wis.

### CECIDOMYIDÆ OF WHICH THE ADULT IS UNDESCRIBED.

These have all been referred to as belonging to the genus *Cecidomyia*, except as noted.

**agrostis** OSTEN SACKEN, Mon. N. A. Dipt., I, 204.—N. Y.

FITCH, The Hessian Fly, 2d edit., 38, original mention as "imbricated gall on *Agrostis laterifolia*."

**balsamicola** LINTNER, 4th N. Y. Rept., 60-63, figs.—N. Y.; larvæ make swellings in base of leaves of balsam fir, *Abies balsamea*.

LINTNER, 7th N. Y. Rept., 307, oc. in *Abies fraseri* in N. C.

**coryloides** WALSH, Proc. Ent. Soc. Phil., III, 588; VI, 224 (*salicis-coryloides*).—Rock Id., Ill., on *Salix discolor*.

BERGENSTAMM und LOEW, Synopsis Cecid., 71, quoted by O. S., Cat., 215.

**coryloides** WALSH, Proc. Ent. Soc. Phil., III, 588; VI, 224 (*vitis-coryloides*).—Ill.; galls on wild grapes—*Vitis cordifolia* and *riparia*.

WALSH and RILEY, Amer. Ent., I, 107, fig. of gall.

RILEY, 5th Mo. Rept., 116, same fig. and note.

PACKARD, Guide to Study of Ins., 376, fig.

- bedeguar** WALSH, *Canad. Ent.*, I, 79; *Proc. Ent. Soc. Phil.*, VI, 266 (*cratægi-bedeguar*).—Ill.; on *Cratægus tomentosa*, the thorn-apple.
- brachyteroides** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 198.—D. C.; on *Pinus inops*.
- brassicoides** TOWNSEND, *Psyche*, 1893, 490 (*bigelovia-brassicoides*).—N. M., on *Bigelovia graveolens*.
- carbonifera** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 195.—D. C., on leaves of *Solidago*. N. J.—Smith Cat.
- caryæcola** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 192.—D. C., on *Carya*. N. J.—Smith Cat.
- citrina** OSTEN SACKEN, *Trans. Amer. Ent. Soc.*, III, 53.—N. Y., on *Tilia americana*.
- clavula** BEUTENMÜLLER, *Bull. Amer. Mus. Nat. Hist.*, IV, 1892, 269, pl. xv, f. 5.—N. Y., on *Cornus* sp. N. J.—Smith Cat.
- TOWNSEND, *Proc. Ent. Soc. Wash.*, II, 390, gall.—Va.
- culmicola** MORRIS (Miss), *Proc. Acad. Nat. Sci. Phil.*, IV, 194.—Pa.; in wheat stalks.
- HARRIS, *Ins. Inj. to Veget.*, 582.
- cynipsea** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 193.—D. C., on *Carya*.
- deserta** PATTON, *Canad. Ent.*, XXIX, 247 (*Cecidomyia-celtis-deserta*).—Conn.
- erigerontis** BRODIE, *Biol. Rev. of Ont.*, I, 1894, 13-15 (*Diplosis*—gen. ref. taken from adult).—Toronto, Can.; on *Erigeron canadense*.
- erubescens** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 193.—D. C.; on *Quercus*.
- farinosa** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 204.—D. C.; on leaves of blackberry, *Rubus*.
- BRODIE, *Biol. Rev. of Ont.*, I, 1894, 110, oc. at Toronto (*Diplosis*). N. J.—Smith Cat. (*Lasioptera*).
- glutinosa** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 193.—D. C.; on *Carya*.
- hageni**, n. sp.: I apply this term to the gall described, but not named, by Hagen, *Canad. Ent.*, 1881, 37, on *Aristolochia siph.*
- helianthi** BRODIE, *Biol. Rev. of Ont.*, I, 1894, 44-46.—Toronto, Can.; in axils of leaves of *Helianthus decapetalus* and *divaricatus*.
- holotricha** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 193; *Cat.*, 216, note.—D. C., on *Carya*. N. J.—Smith Cat.
- hordoides** WALSH, *Proc. Ent. Soc. Phil.*, III, 599 (*salicis-hordoides*).—Rock Id., Ill.; on *Salix humilis*.
- impatiens** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 204; *Amer. Ent.*, II, 63, fig. of gall.—D. C.; deforms flowers of *Impatiens*. N. J.—Smith Cat.
- inopis** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 196 (*pini-inopis*).—D. C.; forms a resinous cocoon on *Pinus virginiana* (*inopis*). N. J.—Smith Cat. (*Diplosis*).
- liriodendri** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 204.—D. C.; on leaves of *Liriodendron*.
- HAGEN, *Canad. Ent.*, XVIII, 159, note on pædogenesis. N. J.—Smith Cat.
- monardæ** BRODIE, *Biol. Rev. of Ont.*, I, 1894, 109-111 (*Diplosis monardi*, or perhaps a *Lasioptera*).—Toronto, Canada; gall on *Monarda fistulosa*.
- majalis** OSTEN SACKEN, *Trans. Amer. Ent. Soc.*, III, 53 (*quercus-majalis*); *Mon. N. A. Dipt.*, I, 204 (id.).—D. C.
- PACKARD, 5th Rept. U. S. Ent. Comm., 207 (id.), gall and larva; on pin-oak, *Quercus palustris*.
- niveipila** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 199, gall.—D. C.; on oak of several species. N. J.—Smith Cat.

- nodulus** WALSH, Proc. Ent. Soc. Phil., III, 599 (*salicis-nodulus*).—Rock Id., III.; gall on *Salix longifolia*.
- nucicola** OSTEN SACKEN, Trans. Amer. Ent. Soc., III, 53.—N. Y.; in the husks of nuts of *Hicoria*.
- ocellaris** OSTEN SACKEN, Mon. N. A. Dipt., I, 199.—D. C.; larva in depression on under side of leaf of *Acer rubrum*.  
*Note*.—Comstock, Rept. Dept. Agric., 1881-2, 202, pl. xvii, describes the adult as a *Sciara*. But Mik, in Verh. Zool.-bot. Ges., 1883, 190-192, considers this an error of rearing, the *Sciara* coming from the earth in the breeding cage. The same view is held by Brauer, Zweifl. d. Kaiserl. Mus., III, 46, and by Osten Sacken, 2d edit. of his Characters of Larvæ of Mycetophilidæ, Heidelberg, 1886, postscript, p. 27.  
 N. J.—Smith Cat.; Mich.—J. M. A.
- pellex** OSTEN SACKEN, Mon. N. A. Dipt., I, 199.—D. C.; galls on leaves of *Fraxinus americana*. N. J.—Smith Cat.
- persicoides** OSTEN SACKEN, Mon. N. A. Dipt., I, 193; Cat., 216, note.—D. C.; on *Hicoria*. N. J.—Smith Cat.
- poculum** OSTEN SACKEN, Mon. N. A. Dipt., I, 201; Cat., 216, note (probably inquilinous in the gall of a Cynipid of *Quercus*).—D. C.  
 FITCH, 2d N. Y. Rept., No. 40, "Oak Spangles."  
 N. J.—Smith Cat.
- pomum** WALSH and RILEY, Amer. Ent., I, 106, f. 85, gall (*vitis-pomum*).—Ill.; on *Vitis cordifolia*.  
 RILEY, 5th Mo. Rept., 114-116, figs. and notes.  
 N. J.—Smith Cat.
- pudivunda** OSTEN SACKEN, Mon. N. A. Dipt., I, 202.—D. C.; on leaves of *Carpinus caroliniana*.
- racemicola** OSTEN SACKEN, Mon. N. A. Dipt., I, 196.—D. C.; larvæ among racemes of *Solidago*.
- rigidæ** OSTEN SACKEN, Mon. N. A. Dipt., I, 189, gall desc. and name changed.  
 FITCH, Amer. Quart. Jour. Agric. and Sci., I, 263 (*salicis*, preoc.).—N. Y.; makes a swelling at the tip of twig of *Salix rigida* and *lucida*.  
 WALSH, Proc. Ent. Soc. Phil., III, 595, abstr. of Fitch.  
 N. J.—Smith Cat.
- salicifoliæ** OSTEN SACKEN, Proc. Ent. Soc. Phil., VI, 220.—Canada; on *Spiræa salicifolia*.
- salicum** COCKERELL—the gall so mentioned is that of a sawfly of the genus *Pontania*, with "little or no doubt";—Ckll. *in litt*.
- sanguinolenta** OSTEN SACKEN, Mon. N. A. Dipt., I, 192.—D. C.; on *Hicoria*.  
 N. J.—Smith Cat.
- serotinæ** OSTEN SACKEN, Trans. Amer. Ent. Soc., III, 346.—N. Y.; on *Prunus serotina*. N. J.—Smith Cat.
- symmetrica** OSTEN SACKEN, Mon. N. A. Dipt., I, 200.—D. C.; on *Quercus*.
- triticoïdes** WALSH, Proc. Ent. Soc. Phil., III, 598; VI, 225 (*salicis-triticoïdes*).—Rock Id., III.; on *Salix cordata*.
- tubicola** OSTEN SACKEN, Mon. N. A. Dipt., I, 192; Cat., 216, note.—D. C.; on *Hicoria*.  
 N. J.—Smith Cat.
- tulipiferæ** OSTEN SACKEN, Mon. N. A. Dipt., I, 202.—D. C.; on *Liriodendron*.  
 N. J.—Smith Cat.
- umbelicola** OSTEN SACKEN, Trans. Amer. Ent. Soc., III, 52 and 347.—N. Y.; N. J.; on *Sambucus racemosa*, among the umbels.

- urnicola** OSTEN SACKEN, *Canad. Ent.*, Nov., 1875.—Trenton Falls, N. J.; on *Urtica gracilis*.
- verruca** WALSH, *Proc. Ent. Soc. Phil.*, III, 606 (*salicis-verruca*); VI, 226.—Rock Id., Ill.; on leaf of *Salix humilis* and *discolor*.
- verrucicola** OSTEN SACKEN, *Canad. Ent.*, Nov., 1875.—New England; on *Tilia americana*. N. J.—Smith Cat.
- viticola** OSTEN SACKEN, *Mon. N. A. Dipt.*, I, 202.—D. C.; on *Vitis*.  
RILEY, *Amer. Ent.*, II, 28 and 113, fig. (both as *vitis-litius*).  
N. J.—Smith Cat.

## BIBIONIDÆ.

## HESPERINUS.

- WALKER, *List*, I, 81, 1848.
- LOEW, *Berl. Ent. Zeit.*, II, 101, pl. I, f. 1-15, 1858 (*Spodius*).
- brevifrons** WALKER, *List*, I, 81.—Martin Falls, Canada.  
White Mts., N. H., and Rocky Mts., Col.—O. S. Cat.  
COQUILLET, *Proc. Wash. Acad. Sci.*, II, 290, oc. on Popoff Id., Alaska.

## PLECIA.

- WIEDEMANN, *Auss. Zw.*, I, 72, 1828.
- LOEW, *Berl. Ent. Zeit.*, II, 101.
- bicolor** BELLARDI, see *collaris*.
- collaris** FABRICIUS, *Syst. Antl.*, 54 (*Hirtca*).—S. A.  
WIEDEMANN, *Dipt. Exot.*, 32; *Auss. Zw.*, I, 74.—S. A.  
SCHINER, *Novara*, 21.—S. A.  
BELLARDI, *Saggio*, I, 16 (*bicolor*).—Mex.  
OSTEN SACKEN, *Biologia, Dipt.*, I, 3 (*bicolor*).—Presidio, Mex.  
WILLISTON, *Biologia, Dipt.*, *Suppl.*, 222, syn. and oc. at Teapa, Mex.
- heros** SAY, *Jour. Acad. Sci. Phil.*, VI, 154; *Compl. Works*, II, 352 (*Penthetria*).—Mex.
- heteroptera** SAY, *Jour. Acad. Nat. Sci. Phil.*, III, 77; *Compl. Works*, II, 69 (*Bibio*).  
Md.  
WIEDEMANN, *Auss. Zw.*, I, 80 (id.).  
? MACQUART, *Hist. Nat. Dipt.*, I, 175 (*Penthetria atra*); *Dipt. Exot.*, I, I, 85, pl. XII, f. 3 (*Eupitenus ater*, n. gen.).—Philadelphia. [Osten Sacken; I use a question mark on account of the very different figure accompanying the second desc.]  
LOEW, *Berl. Ent. Zeitsch.*, II, 109.  
VAN DER WULP, *Tijdschr. v. Ent.*, XII, 81, ref. to Macq.  
Montreal, Quebec, N. H., Mich., New Orleans. S. D.—J. M. A.
- heteroptera** MACQUART, see *plagiata*.
- nigerrima** BELLARDI, *Saggio*, I, 14.—Mex.  
WILLISTON, *Biologia, Dipt.*, *Suppl.*, 221, oc. in Mex., several places.
- plagiata** WIEDEMANN, *Analecta Ent.*, II; *Auss. Zw.*, I, 175.—Brazil.  
MACQUART, *Dipt. Exot.*, *Suppl.*, I, 21, pl. II, f. 10, female (*heteroptera*).—Colombia.  
BELLARDI, *Saggio, App.*, 7, f. 4 (*vittata*).—Mex.  
SCHINER, *Novara*, 22.—Colombia; notes and syn. preceding.  
OSTEN SACKEN, *Biologia, Dipt.*, I, 2; oc. in Vera Cruz and Tabasco, Mex.
- rostellata** LOEW, *Berl. Ent. Zeitsch.*, 1858, 109, fig.  
BELLARDI, *Saggio*, I, 15 (*rostrata*) [Schiner].—Mex.  
SCHINER, *Novara*, 21, notes.

- OSTEN SACKEN, *Biologia*, Dipt., 1, 2, notes and syn.; Mex. and Nicaragua.
- ruficollis** FABRICIUS, *Spec. Ins.*, II, 410 (*Tipula*; from Cape of Good Hope!); *Ent. Syst.*, IV, 249 (id.); *Suppl.*, 552 (*Hirtca*); *Syst. Antl.*, 53 (*Hirtca*, from South America).
- WIEDEMANN, *Dipt. Exot.*, I, 31; *Auss. Zw.*, I, 72.—S. A.
- MACQUART, *Hist. Nat. Dipt.*, I, pl. IV, f. 17 [O. S.].
- BELLARDI, *Saggio*, I, 15.—Mex.
- OSTEN SACKEN, *Biologia*, Dipt., 1, 3, oc. in Mex. and Fla., and notes. Florida—Johnson.
- VAN DER WULP, *Tijdschr. v. Ent.*, XXIV, 143, oc. in Guadeloupe.
- WILLISTON, *Biologia*, Dipt., I, 221, additional Mexican localities.
- rufithorax** WALKER, *List*, I, 116.—Jamaica.
- vittata** BELLARDI, see *plagiata*.

## BIBIO.

- GEOFFROY, *Hist. Nat. des Insectes*, II, 571, 1762.
- FABRICIUS, *Syst. Antl.*, 50, 1805 (*Hirtca*, preoc. by Scopoli).
- MEIGEN, *Syst. Besch.*, I, 309, 1818.
- MACQUART, *Hist. Nat. Dipt.*, I, 177, 1834.
- ZETTERSTEDT, *Dipt. Scand.*, IX, 3367, 1850 (*Hirtca*).
- SCHINER, *Fauna Austriaca*, II, 357, 1864.
- OSTEN SACKEN, *Cat.*, note 12, explains status of *Hirtca*.
- abbreviatus** LOEW, *Cent.*, v, 9.—D. C.
- albipennis** SAY, *Jour. Acad. Sci. Phil.*, III, 77; *Compl. Works*, II, 69.—Pa.
- WIEDEMANN, *Auss. Zw.*, I, 80.
- MACQUART, *Dipt. Exot.*, I, 1, 88, pl. XIII, f. 2.—N. A.
- LINTNER, 2d N. Y. Report, 110-115, figs., biology, etc. Larvæ in colonies under fallen logs, boards, etc., where there is much decaying vegetable matter.—New York.
- OSTEN SACKEN, *Biologia*, Dipt. 1, 4, doubtfully recognized from N. Sonora, Mex.
- N. J.—Smith *Cat.*: Montreal—Chagnon; Axton, N. Y.—M. and H.; Michigan, S. D., Idaho.—J. M. A.
- HINE, *Ohio Naturalist*, II, 170, note on larval habits; oc. in Ohio.
- articulatus** SAY, *Jour. Acad. Sci. Phil.*, III, 77; *Compl. Works*, II, 69.—Pa.
- WIEDEMANN, *Auss. Zw.*, I, 81.
- OSTEN SACKEN, *Cat.*, note 13, says unrecognizable.
- baltimoricus** MACQUART, *Dipt. Exot.*, *Suppl.*, v, 17.—Baltimore.
- Quebec—V. d. Wulp.
- basalis** LOEW, *Cent.*, v, 11.—N. H.
- brunneipes** FABRICIUS, *Ent. Syst.*, IV, 250 (*Tipula*); *Mantissa Ins.*, II, 327 (*Tipula rufipes*); *Syst. Antl.*, 54 (*Hirtca*).—Newfoundland. [Syn. by Fabr., *Syst. Antl.*]
- WIEDEMANN, *Auss. Zw.*, I, 81, quotes Fabr.
- canadensis** MACQUART, *Dipt. Exot.*, I, 2, 79.—Canada.
- ? BELLARDI, *Saggio*, I, 18, oc. in Mex., with a ?.
- castaneipes** JÆNNICKE, *Neue Exot. Dipt.*, 10.—Ill.
- criorhinus** BELLARDI, *Saggio*, I, 17.—Mex.
- WALKER, *Trans. Ent. Soc.*, n. ser., v, 331.—Mex.
- dubius** BELLARDI, *Saggio*, 18.—Mex.
- OSTEN SACKEN, *Biologia*, Dipt., 1, 3, notes.
- WILLISTON, *op. cit.*, *Suppl.*, 222, oc. in Jalisco, Mex.

- femoratus* WIEDEMANN, Dipt. Exot., 35; Auss. Zw., 1, 79.—N. A.  
 MACQUART, Dipt. Exot., 1, 1, 87 (*fuscipennis*).—N. A. [Loew.]  
 TOWNSEND, Ins. Life, II, 43, oc. in Mich. in numbers.  
 Atl. States (O. S.); N. J. (Smith Cat.); White Mts., N. H. (Slosson);  
 Axton, N. Y. (M. and H.).
- fraternus* LOEW, Cent., v, 8.—D. C.  
 NEEDHAM, Amer. Nat., XXXVI, 181, oc. at Lake Forest, Ill. Larvæ at base  
 of rotting stumps. Figs. larva and pupa.
- fuliginosus* BELLARDI, Saggio, 1, 19.—Mex.
- fumidus* COQUILLET, Dipt. of Commander Ids., 343.—Copper Island, Alaska.
- fumipennis* WALKER, List, 1, 122.—Martin's Falls, Canada.
- gracilis* WALKER, List, 1, 123.—Nova Scotia.  
 Quebec (Wulp); Montreal (Chagnon); White Mts., N. H. (Slosson).
- hirtus* LOEW, Cent., v, 2.—Cal.  
 OSTEN SACKEN, West. Dipt., 211, note; Biologia, 1, 4, notes.
- humeralis* WALKER, List, 1, 121.—Nova Scotia.
- inequalis* LOEW, Cent., v, 3.—Sitka.
- longipes* LOEW, Cent., v, 12.—D. C.  
 N. J. (Smith Cat.); Montreal (Chagnon).
- lugens* LOEW, Cent., v, 6.—Winnipeg.
- nervosus* LOEW, Cent., v, 4.—Cal.
- nigripilus* LOEW, Cent., v, 10.—Winnipeg.  
 Montreal—Chagnon.
- obscurus* LOEW, Cent., v, 5.—Huds. Bay Terr.  
 Alaska—Coq.
- pallipes* SAY, Jour. Acad. Sci. Phil., III, 76; Compl. Works, II, 68.—Pa.  
 WIEDEMANN, Auss. Zw., 1, 89.  
 VAN DER WULP, Tijdschr. v. Ent., XII, 81, notes.  
 Ohio (Webster; N. J. (Smith Cat.); Montreal (Chagnon); White Mts.,  
 N. H. (Slosson).
- piceus* BELLARDI, Saggio, 1, 17.—Mex.
- rufithorax* WIEDEMANN, Auss. Zw., 1, 78.—Pa.  
 St. Augustine Fla.—Johnson; "The thorax of the male is black."
- scitus* WALKER, List, 1, 122.—Nova Scotia.
- senilis* VAN DER WULP, Tijdschr. v. Ent., XII, 81.—Wis.
- striatipes* WALKER, List, 1, 122.—Nova Scotia.
- tennipes* COQUILLET, Proc. U. S. N. M., XXV, 95.—Williams, Ariz.
- thoracicus* SAY, Long's Exped., App., 368; Compl. Works, 1, 250.—East Fla.  
 WIEDEMANN, Auss. Zw., 1, 78.
- tristis* WILLISTON, Trans. Kans. Acad. Sci., XIII, 115, fig.—Kans.  
 KELLOGG, l. c. 112, biol., with figs.
- variabilis* LOEW, Cent., v, 7.—Sitka and N. H.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 394, oc. in Alaska and Ore.
- vestitus* WALKER, List, 1, 122.—Nova Scotia.  
 White Mts., N. H.—Slosson.
- xanthopus* WIEDEMANN, Auss. Zw., 1, 80.—N. Y.  
 MACQUART, Dipt. Exot., 1, 1, 88.—N. A.  
 OSTEN SACKEN, Biologia, Dipt., 1, 4, oc. in N. Sonora, Mex., with a doubt.  
 N. J.—Smith Cat.; Axton, N. Y.—M. and H.
- sp. KELLOGG, Ins. Life, v, 116, larvæ abundant in wheatfield, causing alarm, but  
 no damage.



## DILOPHUS.

MEIGEN, Illig. Mag., II, 264, 1803; Syst. Besch., I, 237, 1818.

MACQUART, Hist. Nat. Dipt., I, 176, 1834.

ZETTERSTEDT, Dipt. Scand., IX, 3389, 1850.

SCHINER, Fauna Austr., II, 355, 1864.

**bimaculatus** WALKER, Dipt. Saund., 422 (*Plecia*).—U. S.

OSTEN SACKEN, Cat., 16, refers here.

**breviceps** LOEW, Cent., IX, 59.—N. H. N. J.—Smith Cat.

**dimidiatus** LOEW, Cent., VIII, 3.—N. Y. N. J.—Smith Cat.

**fulvicoxa** WALKER, List, I, 117.—Martin Falls, Canada.

**longiceps** LOEW, Cent., I, 14.—Ill.

**maculatus** BELLARDI, Saggio, I, 19, pl. I, f. 5.—Mex.

**melanarius** VAN DER WULP, Tijdschr. v. Ent., XXIV, 146.—Mex.

OSTEN SACKEN, Biologia, Dipt., I, 4, note.

WILLISTON, Biologia, Dipt., I, 223, oc. in Mex., several places.

**minutus** BELLARDI, Saggio, App., 7.—Mex.

WILLISTON, Biologia, Dipt., I, 223, oc. in Orizaba and Tuxpango, Mex.; probably same as *stigmaterus* SAY.

**obesulus** LOEW, Cent., IX, 60.—D. C.

**orbatus** SAY, Jour. Acad. Sci. Phil., III, 77; Compl. Works, II, 69 (*Bibio*).—Pa.

WIEDEMANN, Auss. Zw., I, 77.

BELLARDI, Saggio, I, 19, oc. in Mex.

WILLISTON, Biologia, Dipt., I, 223, oc. in Mex., several places.

Fla.; several places—Johnson.

**serotinus** LOEW, Cent., I, 15.—Ill.

**seraticollis** WALKER, List, I, 117.—Martin Falls, Canada.

COQUILLET, Proc. Wash. Acad. Sci., II, 394, oc. in Alaska and Col.

JOHANNSEN, Ent. News, XIV, 15, notes.—Axton, N. Y.

Montreal—Chagnon.

**spinipes** SAY, Jour. Acad. Sci. Phil., II, 79; Compl. Works, II, 71.—Mo.

WIEDEMANN, Auss. Zw., I, 75.

**stigmaterus** SAY, Jour. Acad. Sci., Phil., III, 78; Compl. Works, II, 70.—Mo.

WIEDEMANN, Auss. Zw., I, 76. See *minutus*.

Beulah, N. M.—Skinner.

**stygius** SAY, Jour. Acad. Sci. Phil., VI, 155; Compl. Works, II, 352.—Mex.

TOWNSEND, Pr. Cal. Acad. Sci., IV, 593, notes.—Lower Cal.

**thoracicus** SAY, Jour. Acad. Sci. Phil., III, 80; Compl. Works, II, 71.—Pa. and Md.

WIEDEMANN, Auss. Zw., I, 77.

Occurs also in S. America—Wulp.

**tibialis** LOEW, Cent., IX, 61.—Sitka.

*Note*.—Wheeler has published in Archiv. für Entwicklungsmechanik der Organismen, III, 261–268, pl. XVI, an account of a most interesting “antenniform extra appendage,” branching from a fore coxa in this species; locality Wyoming.

## ASPISTES.

MEIGEN, Syst. Besch., I, 319, 1818.

KIRBY, Fauna Bor. Amer., Ins., 311, 1837 (*Arthria*).

ZETTERSTEDT, Dipt. Scand., IX, 3410, 1850.

SCHINER, Fauna Austr., II, 347, 1864.

**analis** KIRBY, Fauna Bor. Amer., Ins., 311, pl. v. f. 8 (*Arthria*).—Canada.

Republished in Canad. Ent., XIII, 165.

- LOEW, Stett. Ent. Zeit., 1847, 69 (*borcalis*). [Loew.]  
 OSTEN SACKEN, Cat., 17 and note, about the synonymy.  
 JOHNSON, Trans. Amer. Ent. Soc., XXIX, 101, oc. at Beulah, N. M.

## SCATOPSE.

- GEOFFROY, Hist. Nat. Ins., II, 545, 1764.  
 MEIGEN, Syst. Besch., I, 299, 1818.  
 MACQUART, Hist. Nat. Dipt., I, 181, 1834.  
 LOEW, Linnæa Ent., I, 324, 1846; Zeitsch. f. Ges. Naturwiss., XXXV, 1870.  
 ZETTERSTEDT, Dipt. Scand., IX, 3395, 1850.  
 SCHINER, Fauna Austr., II, 348, 1864.
- atrata** SAY, Long's Exped., App., 367; Compl. Works, I, 250.—Philadelphia.  
 WIEDEMANN, Auss. Zw., I, 71.  
 LOEW, Linnæa Ent., I, 330, pl. III. f. 4 (*recurva*).—Europe. [Loew.]  
 N. J.—Smith Cat.
- brevicornis** MEIGEN, Syst. Besch., VI, 314.—Europe.  
 SCHINER, Fauna Austr., II, 351.  
 White Mts., N. H.—Slosson.
- nitens** WALKER, List, I, 114.—Martin Falls, Canada.  
 OSTEN SACKEN, Cat., says is unrecognizable.
- notata** LINNÉ, Fauna Suec., No. 1773 (*Tipula*).—Europe.  
 FABRICIUS, Ent. Syst., IV, 250 (*Tipula albipennis*); Suppl., 353 (refers to *Hirtea*); Syst. Antl., 55 (*albipennis*).  
 GMELIN, Syst. Nat., V, 2825 (*Tipula*).  
 MEIGEN, Klassif. Zw., I, 105 (*latrinarum*); Syst. Besch., I, 300; *id. loc.*, 301 (*punctata*). [Schiner.]  
 ZETTERSTEDT, Dipt. Scand., IX, 3397.  
 SCHINER, Fauna Austr., II, 351.  
 OSTEN SACKEN, Cat., 17, oc. in N. A.  
 LUNDBECK, Dipt. Grœnlandica, oc. in Greenland.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 394, oc. in Alaska and Greenland, to Alabama. N. J.—Smith Cat.
- obscura** WALKER, List, I, 114.—Martin Falls, Canada.  
 Unrecognizable. [O. S.]
- pulicaria** LOEW, Linnæa Ent., I, 338, pl. III, f. 10.—Europe.  
 VAN DER WULP, Tijdschr. v. Ent., XII, 80, oc. in Wis.  
 SCHINER, Fauna Austr., II, 351.  
 HOWARD, Proc. Wash. Acad. Sci., II, oc. in Va.; bred from human excrement. White Mts., N. H.—Slosson.
- pusilla** WALKER, List, I, 114.—Martin Falls, Canada.
- pygmæa** LOEW, Cent., V, 13.—D. C.  
 WILLISTON, Dipt. St. Vincent, 269, pl. 333, f. 26.—St. Vincent, W. I.  
 COQUILLET, Proc. U. S. N. M., XXII, 250, oc. in Porto Rico.  
 N. J.—Smith Cat.
- varicornis** COQUILLET, Proc. U. S. N. M., XXV, 96.—D. C.

## SIMULIIDÆ.

## SIMULIUM.

- LATREILLE, Hist. Nat. d. Crust. et d. Ins., III, 426, 1802.  
 MEIGEN, Syst. Besch., I, 288, 1818 (*Simulia*).  
 MACQUART, Hist. Nat. Dipt., I, 173, 1834.  
 ZETTERSTEDT, Dipt. Scand., IX, 3414, 1850 (*Simulia*).

SCHINER, Fauna Austr., II, 363, 1864 (*Simulia*).

OSTEN SACKEN, Amer. Entomologist, II, 229, 1870, transformations; Berl. Ent. Zeitschr., XXXVII, 1892, 452, discussion of family characters.

COQUILLET, Bull. 10, new series, Div. of Ent., 66-69, table and brief desc. of N. A. species.

MEINERT, Eucephale Myggelarver, 458, 1886, bibliog. of transformations and study of same in *S. ornatum*, with pl. IV, f. 115-127.

*Note*.—The following references relate to biology, etc., of species which were not specifically determined:

RILEY, Dept. Ag. Rept., 1884, 340-345, pl. IX, f. 1, 2, 3.

RILEY and HOWARD, Insect Life, brief items and extracts from correspondence, Vol. I, 15, 61, 143, 224, 314; II, 7-11; IV, 143; VII, 426.

HOWARD, Insect Life, I, 99, habits of a species at Ithaca, N. Y.

TOWNSEND, Trans. Amer. Ent. Soc., XX, 45, describes early stages and habits of a species inhabiting Grand Canon of the Colorado; figs.

HAGEN, Can. Ent., XIII, 150, notes on a larva; Ent. Mo. Mag., 1883, 254, note.

LUGGER, 2d Rept. Ent. Minn., 1896, 172-182.

KELLOGG, Psyche, Feb., 1901, 166, says larvæ live largely on diatoms.

**argus** WILLISTON, Dipt. of Death Valley Exped., 253.—Argus Mts., Cal.

COQUILLET, Proc. Wash. Acad. Sci., II, 394, regards as a synonym of *vittatus*. JOHANNSEN, *in litt.*, does not.

WILLISTON, Biologia, Dipt., I, 223, oc. in Guerrero, Mex.

**bracteatum** COQUILLET, Bull. 10, n. ser., Div. Ent., 69.—Mass., Cal.

**cinereum** BELLARDI, Saggio, I, 13.—Mex.

TOWNSEND, Proc. Cal. Acad. Sci., IV, 593, note on oc. in Lower Cal. (Mex.).

**decorum** WALKER, List, I, 112.—Martin Falls, Canada.

COQUILLET, Bull. 10, n. ser., Div. Ent., makes this a synonym of *vittatum* ZETTERSTEDT; but the description seems to contradict this.

**fulvum** COQUILLET, Proc. U. S. N. M., XXV, 96. Mentioned in the following as *ochraceum* WALKER:

COQUILLET, Bull. 10, n. ser., Div. Ent., oc. in Col. and Mont., etc.; Proc. Wash. Acad. Sci., II, 393, oc. in Alaska and British Col.

COCKERELL, Ent. News, VIII, 100, oc. in N. M.

BAKER, Ent. News, VIII, 172, oc. in Col., and notes.

**glaucum** COQUILLET, Proc. U. S. N. M., XXV, 97.—Kansas City, Mo.

**griseum** COQUILLET, Bull. 10, n. ser., Div. Ent., 69.—Col.

**hirtipes** FRIES, Mon. Simuliar., 17, pl. I, f. 1, 1824.—Europe.

MEIGEN, Syst. Besch., VI, 311 and 312 (*rufipes* and *hirtipes*).

ZETTERSTEDT, Dipt. Scand., IX, 3426.

SCHINER, Fauna Austr., II, 368.

JOHANNSEN, Ent. News, XIV, 14, oc. in N. Y.

Idaho—Johannsen *in litt.*

**invenustum** WALKER, List, I, 112.—Martin Falls, Canada. See also *pecuarum*.

**irritatum** LUGGER, 2d Rept. Ent. Minn., 1896, 177, f. 145, 146, no description.—Minn.

**meridionale** RILEY, Rept. Dept. Agriculture, 1886, 513, pl. VII and VIII. Same distribution and habits as *pecuarum*; called the Turkey Gnat.

TOWNSEND, Psyche, July, 1891, 107 (*occidentale*).—New Mex. [Coq.]

COQUILLET, Bull. 10, n. ser., Div. Ent., 68, fig.—Mass., Nebr., Texas.

RILEY and HOWARD, Insect Life, I, 14; said to cause the death of thousands of chickens and turkeys yearly in Va.

- MARLATT, *Ins. Life*, III, 7; breeding on raft of logs in bayou in La. White Mts., N. H.—Slosson; Axton, N. Y.—M. & H.
- metallicum** BELLARDI, *Saggio*, I, 14.—Mex.
- mexicanum** BELLARDI, *Saggio*, App., 6.—Mex.
- minutum** LUGGER, 2d Rept. Ent. Minn., 1896, 175, f. 143, no desc.—Minn.
- molestum** HARRIS, see *venustum*.
- occidentale** TOWNSEND, see *venustum*.
- ochraceum** WALKER, *Trans. Ent. Soc.*, n. ser., v, 332.—Mex. See also references under *fulvum*.
- pecuarum** RILEY, Rept. Dept. Agriculture, 1886, 512, pl. VI, VII, VIII. The Southern Buffalo Gnat. Full biology. Occurs in La., Miss., Ark., Tenn., Mo., Ky., Ill., Ind., Kans.; attacks mules, horses, cattle, sheep, setting hens and turkeys, hogs, dogs and cats, killing many of these animals.
- COQUILLET, *Bull.* 10, n. ser., Div. Ent., 68, fig.—N. H., N. Y., Mass., Conn., D. C., Mich.
- HERRICK, *Bull.* 53, Miss. Agl. Expt. Station, brief notes.
- N. J.—Smith Cat.; White Mts., N. H.—Slosson; Alaska—Coquillett.
- Note*.—Coquillett regards this species as the same as *invenustum* WALKER. Johannsen *in litt.* does not.
- pictipes** HAGEN, *Proc. Boston Soc. Nat. Hist.*, xx, 305.
- COQUILLET, *Bull.* 10, n. ser., Div. Ent., 69.—N. Y., Texas, Cal.
- MISS R. O. PHILLIPS, thesis at Cornell Univ., abstract by Howard in *Bull.* 10, n. ser., Div. Ent., 66, 67, life history.
- quadrivittatum** LOEW, *Cent.*, II, 2.—Cuba.
- reptans** LINNÉ, *Fauna Suec.*, No. 1893, p. 465 (*Culex*).—Sweden.
- DEGEER, *Hist. Nat. Ins.*, VI, 161 (*Tipula erythrocephala*).
- SCHINER, *Fauna Austr.*, II, 365, fuller bibliography.
- LUNDBECK, *Dipt. Grœnl.*, I, 238, oc. in Greenland.
- tamaulipense** TOWNSEND, *Jour. N. Y. Ent. Soc.*, v, 171.—Tamaulipas, Mex.
- tarsale** WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 268, pl. VIII, f. 25.—St. Vincent, W. I.
- HUNTER, *Trans. Amer. Ent. Soc.*, xxvi, 297, would make this a synonym of *pulchrum* PHILIPPI (*Aufzählung d. Chilen. Dipt.*, 633), from Chili.
- tribulatum** LUGGER, 2d Rept. Ent. Minn., 1896, 178-181, figs. 146-151; life hist.; no description.—Minn.
- venustum** SAY, *Jour. Acad. Sci. Phil.*, III, 28; *Compl. Works*, II, 51.—Shippingsport, Ohio River.
- WIEDEMANN, *Auss. Zw.*, I, 71.
- HARRIS, *Ins. Inj. Vegetation*, 3d ed., 601 (*molestum*).—Mass. [Coq.]
- RILEY, *Amer. Ent.*, II, 367 (*piscicidium*) [Coq.]
- COQUILLET, *Bull.* 10, n. ser., Div. Ent., 68.—Can., N. H., N. Y., Mich., Minn., Wyo., Br. Col., Tex., La., Miss., Fla.
- Axton, N. Y.—M. & H.
- virgatum** COQUILLET, *Proc. U. S. N. M.* xxv, 97.—Las Vegas Hot Springs, N. M.
- vittatum** ZETTERSTEDT, *Ins. Lapp.*, 803; *Dipt. Scand.*, IX, 3423.—Europe.
- STAEGER, *Grœnl. Antl.*, oc. in Greenland.
- HOLMGREN, *Ins. Nordgr.*, 104, same.
- O. FABRICIUS, *Fauna Grœnl.*, 211, same (*Culex reptans* LINN.).
- STAEGER and SCHIÖDTE, *Berl. Ent. Zeit.*, 1859, 112.
- COQUILLET, *Bull.* 10 n. ser., Div. Ent., 69.—N. Y., Minn., Nebr., Kans., Col.

LUNDBECK, Dipt. Grœnl., 238, oc. in Greenland.

AXTON, N. Y.—M. & H.

See also *Simulium argus* WILL.

### BLEPHAROCERIDÆ.

LOEW, Boll. Soc. Ent. Ital., I, 85, 1869, monograph; Revis. der Blepharoceriden, Schles. Zeit. f. Ent., Neue Folge, VI, 54-90, 1 pl., 1877.

OSTEN SACKEN, Bemerkungen über Blepharoceriden, Deutsche Ent., 1878, 405-416, an appendix to Loew's revision; Synopsis of the Blepharoceridæ, Berl. Ent. Zeitsch., XXXVI, 1891, 407-411; Contributions to the Study of the Liponeuridæ, Berl. Ent. Zeitsch., XL, 1895, 148-169; suppl. to same, l. c., 351, where the old family name is used (he had already published a note in Ent. Mo. Mag., May, 1895, restoring the name).

JOHANNSEN, Bull. 68, N. Y. State Mus., 332, 1903.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 155, table of N. A. genera.

KELLOGG, Proc. Cal. Acad. Sci., 3d ser., III, 187-224, 5 pl., 1903, an elegant family revision for the species of the United States, with description and figures of early stages of six species (two undescribed, being unknown in the adult).

### PALTOSTOMA.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 931.

OSTEN SACKEN, Cat., 1878, note 19; Berl. Ent. Zeitsch., 1891, 410.

*schineri* WILLISTON, Trans. Ent. Soc. Lond., 1896, 269, pl. VIII, f. 27.—St. Vincent, W. I.

? *superbiens* SCHINER, Novara, 28, pl. II, f. 4.—S. A.

OSTEN SACKEN, Biologia, Dipt., I, 5, doubtful oc. in Mexico.

### BIBIOCEPHALA.

OSTEN SACKEN, Geol. Surv. of the Territories, 1873; Berl. Ent. Zeitsch., 1891, 409.

LOEW, Revision, 95, 1877.

ROEDER, Wien. Ent. Zeit., IX, 230, 1890 (*Agathon*, in part). [Kellogg.]

KELLOGG, Proc. Cal. Acad. Sci., 3d ser., III, 199, 200, table of species, etc.

*comstocki* KELLOGG, Proc. Cal. Acad. Sci., 3d ser., III, 192, figs. all stages.—Near Stanford University, Cal.

*doanei* KELLOGG, Psyche, April, 1900, 39 (*Liponeura*); Proc. Cal. Acad. Sci., 3d ser., III, 194, figs. all stages; Amer. Nat., 1902, 704-706, homology of mouth-parts, with figs.—Near Stanford University, Cal.

*elegantula* ROEDER, Wien. Ent. Zeit., IX, 230, 1890 (*Agathon*).—Nevada.

KELLOGG, Proc. Cal. Acad. Sci., 3d ser., III, 193, figs. all stages.—Col.

Northern Idaho—J. M. A.

*grandis* OSTEN SACKEN, Geol. Surv. of the Territories, 1873, 564.—Col.

LOEW, Revision, 95, transl. orig. desc.

### BLEPHAROCERA.

MACQUART, Annales Soc. Ent. France, II, I, 61, 1843 (*Blepharicera*).

WESTWOOD, Guérin's Magasin Zool., Ins., pl. 94, 1842 (*Asthenia*, preoc.).

SCHINER, Fauna Austr., II, 637, 1864.

OLDENBERG, Zeitsch. f. Hym. und Dipterol., 1901, would add *Liponeura* as a synonym.

KELLOGG, Proc. Cal. Acad. Sci., 3d ser., III, 199-200, 1903, table of species, etc.

- JOHANNSEN, Bull. 68, N. Y. State Mus., 333, 1903.  
**americana** WALKER, List, I, 28 (*Asthenia*).—Martin Falls, Canada.  
 OSTEN SACKEN, Cat., 217, note 18, says is unrecognizable, and does not belong to this family, and the type cannot be found.  
**jordani** KELLOGG, Proc. Cal. Acad. Sci., 3d ser., III, 189, figs. all stages.—Stanford University, Cal., and vicinity.  
**osten-sackeni** KELLOGG, Proc. Cal. Acad. Sci., 3d ser., III, 191, figs. all stages.—California, several places.  
**tenuipes** WALKER, List, I, 86 (*Asyndulum*).—Martin Falls, Canada.  
 LOEW, Cent., IV, 43 (*capitata*).—D. C. [O. S., from Walker's type.]  
 KELLOGG, Ent. News, XI, 305, figs., on structure and habits (id.); larval stages.—Ithaca, N. Y.  
 JOHANNSEN, Bull. 68, N. Y. State Mus., 333, life hist.—Axton and Ithaca, N. Y.  
 Wh. Mts., N. H.—O. S. Cat.; Axton, N. Y.—M. & H.

### PHILORUS.

- KELLOGG, Proc. Cal. Acad. Sci., 3d ser., III, 199, 1903.  
**ancilla** OSTEN SACKEN, Cat., 1878, 266 (*Blepharocera*).—Cal.  
**yosemite** OSTEN SACKEN, West. Dipt., 195 (*Blepharocera*).—Yosemite Valley, Cal.  
 KELLOGG, Psyche, 1903, 186, oc. and note.—Grand Canon of King's Riv., Cal.

### RHYPHIDÆ.

- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 155, 1892, table of N. A. genera.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., XXXVII, 456, 1892, discussion of adult and larval characters.

### RHYPHUS.

- LATREILLE, Hist. Nat. Crust. et Ins., XIV, 291, 1804.  
 MEIGEN, Syst. Besch., I, 320, 1818.  
 SCHINER, Fauna Austr., I, 494, 1864.  
**alternatus** SAY, Jour. Acad. Sci. Phil., III, 27; Compl. Works, II, 51.—Pa.  
 WIEDEMANN, Auss. Zw., I, 82.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson; Axton, N. Y.—M. & H.  
**dolorosus** WILLISTON, Dipt. St. Vincent, 298, pl. x, f. 74.—St. Vincent, W. I.  
**fenestralis** SCOPOLI, Ent. Carn., 322 (*Tipula*).—Europe.  
 MEIGEN, Syst. Besch., I, 323.  
 ZETTERSTEDT, Dipt. Scand., IX, 3436.  
 SCHINER, Fauna Austr., II, 495.  
 LOEW, Silliman's Jour., oc. in N. A.  
 VAN DER WULP, Dipt. Neerl., 438; Tijdschr. v. Ent., XXIV, 153, oc. at Quebec.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., XXXVII, 457, 1892, notes on larva.  
 White Mts., N. H.—Slosson.  
**punctatus** FABRICIUS, Mant. Ins., II, 333 (*Rhagio*); Ent. Syst., IV, 274 (id.); Syst. Antl., 59 (*Sciara*).—Europe.  
 MEIGEN, Syst. Besch., I, 322.  
 ZETTERSTEDT, Dipt. Scand., IX, 3434.  
 SCHINER, Fauna Austr., II, 495.  
 SAY, Jour. Acad. Sci. Phil., III, 27; Compl. Works, II, 50 (*marginatus*).—Pa. [Loew, Silliman's Jour.]  
 WIEDEMANN, Auss. Zw., I, 82 (*marginatus*).



VAN DER WULP, Dipt. Neerl., 438; Tijdschr. v. Ent., xxiv, 153, oc. at Quebec.

HOWARD, Canad. Ent., xxxiii, 43, oc. in Va.; bred from cowdung.

N. J.—Smith Cat.; White Mts.—Slosson.

**scalaris** WIEDEMANN, Auss. Zw., ii, 618.—Ga.

### OLBIOGASTER.

OSTEN SACKEN, Biologia, Dipt., i, 20, 1886.

**cognatus** OSTEN SACKEN, loc. cit., 21.—Irazu, Costa Rica.

**tæniatus** BELLARDI, Saggio, App., 5, f. 15 (*Rhyphus*).—Mex.

TOWNSEND, Annals and Mag. Nat. Hist., xx, 21.—Vera Cruz.

## ORPHNEPHILIDÆ.

### ORPHNEPHILA.

HALIDAY, Zool. Jour., v, 350, pl. xv, f. 1—9, 1831.

RUTHE, Isis, 1831 (*Thaumaba*).

MACQUART, Hist. Nat. Dipt., i, 152, 1834, pl. iv, f. 3, 4, 5 (*Chenesia*).

SCHINER, Fauna Austr., ii, 643, 1864.

OSTEN SACKEN, Berl. Ent. Zeitsch., xxxvii, 458, 1892.

**testacea** RUTHE, Isis, 1211, 1831.—Europe.

HALIDAY, Zool. Jour., v, pl. xv, f. 2; Ent. Mag., i, 156 (*devia*).

MACQUART, Hist. Nat. Dipt., i, 152 (*Chenesia*).

ZETTERSTEDT, Ins. Lapp., 868; Dipt. Scand., ix, 3452 (*Chenesia obscura*).

SCHINER, Fauna Austr., ii, 643.

LOEW, Mon. N. A. Dipt., i, 6, oc. in New York.

N. Y.—Johannsen *in litt.*

## STRATIOMYIDÆ.

### BERIS.

LATREILLE, Hist. Nat. Crust. et Ins., iii, 447, 1802; xiv, 340, 1804.

MEIGEN, Syst. Besch., ii, 1, 1820.

SCHINER, Fauna Austr., i, 23, 1862.

LOEW, Stett. Ent. Zeit., 1846, 219.

RONDANI, Archivio per la Zool., 1863, 87 (*Oplacantha*).

GIGLIO-TOS, Ditt. del Mess., i, 5, 1892, syn. of *Oplacantha*.

**annulifera** BIGOT, Annales, 1887, 21 (*Oplacantha*).—Ga.

COQUILLET, Proc. Wash. Acad. Sci., ii, 406, oc. in Alaska, N. H., and Col.

**limbata** BIGOT, Annales, 1879, 196 (*Oplacantha*).—Mex.

GIGLIO-TOS, Ditt. del Mess., i, 6, pl. i, f. 1.—Orizaba, Mex.

**mexicana** BELLARDI, Saggio, i, 20, pl. i, f. 6.—Mex.

? WILLISTON, Canad. Ent., 1885, 123, oc. in Col., with a doubt.

WILLISTON, Trans. Amer. Ent. Soc., xv, 245 (*bellula*).—Rio Janeiro.

GIGLIO-TOS, Ditt. del Mess., i, 5, syn., etc.—Orizaba.

**morrisii** DALE, Annals and Mag. Nat. Hist., 1842.—England.

LOEW, Stett. Ent. Zeit., 1846, 284 (*pallipes*). [Schiner.]

SCHINER, Fauna Austr., i, 24.

VAN DER WULP, Tijdschr. v. Ent., xxiv, 153, oc. in N. A.—Quebec.

**viridis** see *Actina*.

## HETERACANTHIA.

MACQUART, Dipt. Exot., Suppl., iv, 43, 1851.

BRAUER, Zweifl. d. Kaiserl. Mus., 16, 1882.

*mexicana* GIGLIO-TOS, Boll. R. Univ. Torino, vi, 102, 1891; Ditt. del Mess., i, 8.—Mex.

## ALLOGNOSTA.

OSTEN SACKEN, Berl. Ent. Zeitsch., 1883, 297. Loew had erroneously referred the species to *Mctoponia* McQ., which is not a synonym.  
*fuscitarsis* SAY, Jour. Acad. Sci. Phil., iii, 29; vi, 155; Compl. Works, ii, 52 and 353 (all *Beris*).—Pa. and Ind.

SAY, Long's Exped., App., 377; Compl. Works, i, 257 (*Sargus dorsalis*).—Ky.

WIEDEMANN, Auss. Zw., i, 540 (*Beris dorsalis*); ii, 41 (*Sargus pallipes*).—Pa.

WALKER, List, i, 127 (*Beris lata* and *brevis*).—Trenton Falls, N. Y.

OSTEN SACKEN, Cat., 43, syn.

Atlantic States and Canada—O. S.; N. J.—Smith Cat.; Montreal—Chagnon.

*obscuriventris* LOEW, Cent., iv, 45 (*Mctoponia*).—D. C. Conn.—O. S. Cat.

LOEW, Besch. Europ. Dipt., iii, 72, mentions the possible occurrence of this species in Siberia.

N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.

*similis* LOEW, Cent., iv, 44 (*Mctoponia*).—N. Y.

## ACTINA.

MEIGEN, Klassifikation, 117, 1804.

SCHINER, Fauna Austr., i, 25, 1862.

BRAUER, Zweifl. d. Kaiserl. Mus., ii, 16, 1882.

*viridis* SAY, Long's Exped., App., 368; Compl. Works, i, 251 (*Beris*).—Pa.

WIEDEMANN, Auss. Zw., i, 83 (id.).

Atlantic States and British Poss.—O. S.; N. J.—Smith Cat.; Montreal—Chagnon; Axton, N. Y.—M. & H.

*Notc.*—The generic reference is by Mr. Kahl.

## NEOEXAIRETA.

OSTEN SACKEN, Cat., 1878, 44, change of name.

SCHINER, Verh. Zool.-Bot. Ges., 1867, 309; Novara, 71, 1869 (*Exaireta*, preoc.)

MACQUART, Dipt. Exot., i, 1, 172, 1838 (*Diphysa*, in part).

NOWICKI, Beitr. zur Kenntniss d. Dipterenfauna Neuseelands, 1875, 12.

BRAUER, Zweifl. d. Kaiserl. Mus., ii, 16, 1882.

OSTEN SACKEN, Berl. Ent. Zeitsch., xxvi, 370, 1882.

*rufipalpis* WIEDEMANN, Auss. Zw., ii, 619 (*Xylophagus*).—Mex.

MACQUART, Dipt. Exot., i, 1, 172 (*Diphysa*).—Mex.

## BERISMYIA.

GIGLIO-TOS, Bull. Mus. Zool., Univ. Torino, vi, 108, p. 2, 1891; Ditt. del Mess., i, 6, 1892.

*fusca* GIGLIO-TOS, Ditt. del Mess., i, 7, pl. i, f. 2.—Mex.

*nigrofemorata* WILLISTON, Biologia, Dipt., i, 230, pl. iv, f. 7.—Guerrero, Mex.

## SCOLIOPELTA.

WILLISTON, Entom. Americana, i, 119, 1885.

*luteipes* WILLISTON, op. cit., 119.—N. H.

### CAMPEPROSOPA.

MACQUART, Dipt. Exot., Suppl., III, 46, 1850.

WILLISTON, Ent. News, VII, 185, reports from N. A.; *Biologia*, Dipt., I, 239, 1900.

*longicornis* WILLISTON, op. cit., 239, pl. IV, f. II.—Guerrero, Mex.

### HERMETIA.

LATREILLE, Dict. d'Hist. Nat., XXIV, 1804; *Hist. Nat. Crust. et Ins.*, XIV, 338, 1804.

MACQUART, *Hist. Nat. Dipt.*, I, 228, 1834.

BRAUER, *Zweifl. d. Kaiserl. Mus.*, II, 10, 1882.

OSTEN SACKEN, *Biologia*, Dipt., I, 27, 1886, partial table of species.

*æneipennis* WILLISTON, *Biologia*, Dipt., I, 241.—Yucatan.

GIGLIO-TOS, *Ditt. del Mess.*, I, II (var. of *flavipes*).—Mex.

*albitarsis* FABRICIUS, *Syst. Antl.*, 63.—S. A.

WIEDEMANN, *Auss. Zw.*, II, 24, pl. VII, f. 4.—S. A.

MACQUART, *Hist. Nat. Dipt.*, I, 228 (*bimaculata*); 229 (*ser-maculata*); *Dipt. Exot.*, Suppl., I, 50 (*planifrons*).—Brazil; Porto Rico; Yucatan; Colombia. [Syn. by Will., with a doubt as to *bimaculata* and *ser-maculata*.]

WILLISTON, *Trans. Amer. Ent. Soc.*, XV, 246, oc. in Brazil; *Biologia*, Dipt., I, 240.—Teapa, Mex.

*aurata* BELLARDI, *Saggio*, 27, fig.—Mex., Morelia.

OSTEN SACKEN, *Biologia*, Dipt., I, 28.—Texas; N. Sonora, Mex.

TOWNSEND, *Proc. Cal. Acad. Sci.*, IV, 594.—Lower Cal.

WILLISTON, *Biologia*, Dipt., I, 240, notes.

*ceria* WILLISTON, *Biologia*, Dipt., I, 242, pl. IV, f. 13.—Durango, Mex.

*chrysopila* LOEW, *Cent.*, X, II.—Texas.

WILLISTON, *Canad. Ent.*, 1885, 125, syn. of *aurata*; oc. in N. M.; *Biologia*, Dipt., I, 240, may be distinct.

OSTEN SACKEN, *Biologia*, Dipt., I, 28, syn. of *aurata*.

*coarctata* MACQUART, *Dipt. Exot.*, Suppl., I, 50, fig.—Mex.

BELLARDI, *Saggio*, I, 24.—Mex.

SCHINER, *Novara*, 70.—S. A.

OSTEN SACKEN, *Biologia*, Dipt., I, 32.—Merida, Yucatan.

*comstocki* WILLISTON, *Canad. Ent.*, 1885, 125.—Ariz.

OSTEN SACKEN, *Biologia*, Dipt., I, 28, pl. I, f. 3.—N. Sonora, Mex.

*concinna* WILLISTON, *Canad. Ent.*, 1885, 125 (*lativentris* BELLARDI, an erroneous identification); *Biologia*, Dipt., I, 241.—N. M.; Arizona.

*crabro* OSTEN SACKEN, *Biologia*, Dipt., I, 29, pl. I, f. 4.—Guatemala.

*eiseni* TOWNSEND, *Proc. Cal. Acad. Sci.*, IV, 594.—Lower Cal.

*flavipes* WIEDEMANN, *Auss. Zw.*, II, 26.—Brazil.

WALKER, *List.*, III, 515 (*Sargus andreas*); V, 21, syn. of *andreas*.—Para.

GIGLIO-TOS, *Ditt. del Mess.*, I, II (var. *æneipennis*).

See *æneipennis* WILL.

*flavoscutata* BIGOT, *Annales*, 1879, 201.—Mex.

*formica* OSTEN SACKEN, *Biologia*, Dipt., I, 32.—Panama.

*illucens* LINNÉ, *Syst. Naturæ*, 12th ed., II, 979 (*Musca illucens* and *leucopa*).—S. A.

DEGEER, *Mém. pour serv. Hist. Ins.*, VI, 205, pl. XXIX, f. 8 (*Nemotelus*).

- FAERICIUS, Mantissa Ins., II, 327 (*Bibio*); Ent. Syst., IV, 253 (*Mydas*); Syst. Antl., 62.—West Indies.
- LATREILLE, Dict. d'Hist. Nat., XXIV, 194; Hist. Nat. Crust. et Ins., XIV, 338; Gen. Crust. et Ins., IV, 271.
- LAMARCK, Hist. Anim. sans Vert., III, 355 (*Xylophagus*).
- GUÉRIN et PERCHERON, Gén. des Insectes, Dipt., pl. IV.
- WIEDEMANN, Auss. Zw., II, 22, pl. VII, f. 3.
- MACQUART, Hist. Nat. Dipt., I, 228; Dipt. Exot., I, 1, 177, pl. XXI, f. 2.
- BIGOT, in Sagra's Cuba, 799.
- BELLARDI, Saggio, I, 26.—Mex.
- RILEY and HOWARD, Insect Life, I, 353, habits—larvæ live in beehives, on wax, etc., in Alabama. (Mentioned as *H. mucens*.)
- BIGOT, Annales, 1879, 200 (*nigrifacies*).—Mex.
- OSTEN SACKEN, Biologia, Dipt., I, 32, oc. in Mexico, Guatemala, Costa Rica, and Panama.
- JOHNSON, Ent. News, IX, 56, oc. at Philadelphia.
- MORGAN, Bull. 48, N. Ser., La. Ex. Station,—larvæ supposed to be of this species in alimentary canal of man; figs., larva and adult. Also bred from potatoes.
- WILLISTON, Biologia, Dipt. I, 240, syn. and notes.
- Porto Rico—Roeder and Coquillett; Jamaica—Johnson.
- lativentris** BELLARDI, Saggio, I, 27, pl. I, f. 9; App., 8.—Mex.
- ? WILLISTON, Canad. Ent., XVII, 125, doubtfully recognized from N. M.
- WILLISTON, Biologia, Dipt., I, 241, notes; the N. M. species is different.
- Oc. in Mexico, several places.
- mucens**, see *illucens*.
- nigrifacies** BIGOT, see *illucens*.
- planifrons** MACQUART, see *albitarsis*.
- ptero-causta** OSTEN SACKEN, Biologia, Dipt., I, 33, pl. I, f. 5.—Panama.
- relicta** OSTEN SACKEN, Biologia, Dipt., I, 30.—Panama.
- sexmaculata** MACQUART, see *albitarsis*.

#### ANALCOCERUS.

- LOEW, Verh. Zool.-Bot. Ges., 1855, 10.
- BRAUER, Zweifl. d. Kaiserl. Mus., II, 12, 1882.
- hortulanus** WILLISTON, Biologia, Dipt., I, 238, pl. IV, f. 10.—Yucatan.

#### ACROCHÆTA.

- WIEDEMANN, Auss. Zw., II, 42, 1830.
- BRAUER, Zweifl. d. Kaiserl. Mus., II, 12, 1882.
- GIGLIO-TOS, Ditt. del Mess., I, 17, 1892.
- fasciata** WIEDEMANN, Auss. Zw., II, 42.—Brazil.
- MACQUART, Hist. Nat. Dipt., I, 260.—Brazil.
- WALKER, List, v, 68.—Brazil.
- LOEW, Verh. Zool.-Bot. Ver., v, 1855, 131.
- GIGLIO-TOS, Ditt. del Mess., I, 16.—Orizaba, Mex.
- WILLISTON, Biologia, Dipt., I, 232, oc. in Orizaba and Teapa, Mex.

#### RHAPHIOCERA.

- MACQUART, Hist. Nat. Dipt., I, 253, 1834.
- BRAUER, Zweifl. d. Kaiserl. Mus., II, 14, 1882.
- caloptera** OSTEN SACKEN, Biologia, Dipt., I, 26.—Paso del Macho, Mex.

## HISTIODROMA.

SCHINER, Novara, 68, 1868.

BRAUER, Zweifl. d. Kaiserl. Mus., II, 14, 1882.

*flaveola* BIGOT, Annales, 1879, 205.—Mex.

## PTECTICUS.

LOEW, Verh. Zool.-Bot. Ges., v, 142, 1855.

BRAUER, Zweifl. d. Kaiserl. Mus., II, 14, 1882.

*concinus* WILLISTON, Biologia, Dipt., I, 238.—Guerrero, Mex.

*cyanifrons* RONDANI, Esame di var. sp., etc., 43 (*Sargus*).—Brazil.

GIGLIO-TOS, Ditt. del Mess., I, 118 (as a var. of *testaceus*).—Mex.

WILLISTON, Biologia, Dipt., I, 237.—Mex., several places.

*figlinus* OSTEN SACKEN, Biologia, Dipt., I, 24.—Guatemala.

WILLISTON, Biologia, Dipt., I, 236.—Guerrero and Jalisco, Mex.

*flaviceps* BIGOT, Annales, 1879, 230.—Mex.

GIGLIO-TOS, Ditt. del Mess., I, 23.—Mex.

*maculatus* WILLISTON, Biologia, Dipt., I, 238.—Yucatan.

? *nitidipennis* LOEW, Verh. Zool.-Bot. Ges., 1855, 13.—Venezuela.

? WILLISTON, Biologia, Dipt., I, 237, doubtful oc. in Guerrero, Mex.

*sackeni* WILLISTON, Canad. Ent., XVII, 124.—Fla.

OSTEN SACKEN, Cat., 45 (*testaceus* Fabricius). [Will.]

LYNCH, A., Catalogos, etc., 125, oc. in S. A.

WILLISTON, Biologia, Dipt., I, 237.—Guerrero, Mex.

Fla.—Johnson; N. J.—Smith Cat.

*similis* WILLISTON, see *trivittatus*.

*testaceus* FABRICIUS, Syst. Antl., 257 (*Sargus*).—S. A.

WIEDEMANN, Auss. Zw., II, 35 (id.).—Brazil.

MACQUART, Dipt. Exot., I, 1, 203 and Suppl. I, 57 (id.).—Brazil and Guiana;  
Merida, Yucatan.

BELLARDI, Saggio, I, 45 (id.).—Mex.

RONDANI, Esame di . . . Ins. Ditt. Brasil., 1848, 43 and 75.

LOEW, Verh. Zool.-Bot. Ver., v, 147 (*Ptecticus*).

SCHINER, Novara, 64.

VAN DER WULP, Tijdschr. v. Ent., XXIV, 1881, 156.

GIGLIO-TOS, Ditt. del Mess., I, 22, places *cyanifrons* as a variety.—Mex.

WILLISTON, Biologia, Dipt., I, 236, oc. in Mexico generally.

West. N. Y.—O. S. Cat.; N. J.—Smith Cat.

*trivittatus* SAY, Jour. Acad. Sci. Phil., VI, 159; Compl. Works, II, 355 (*Sargus*).  
—Ind.

WILLISTON, Canad. Ent., 1885, 124 (*similis*).—Va., Ga. [Kahl]

N. J.—Smith Cat.

*trivittatus* GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 102, 1891; Ditt. del Mess.,  
I, 24, pl. I, f. 8.—Mex.

## MEROSARGUS.

LOEW, Verh. Zool.-Bot. Ver., 1855, 144.

BRAUER, Zweifl. d. Kaiserl. Mus., II, 15, 1882.

*bulbifrons* WILLISTON, Biologia, Dipt., I, 235, pl. IV, f. 8, 8a.—Guerrero, Mex.

*calceolatus* BIGOT, Annales, 1879, 229.—Mex.

*cingulatus* SCHINER, Novara, 62.—S. A.

? FABRICIUS, Syst. Antl., 253 (*Scava staminea*).—S. A. [G.-T., with ?]

WIEDEMANN, Auss. Zw., II, 39 (*Sargus stamineus*).—S. A. [Will.]

- WALKER, List, v, 92 (*Sargus stamineus* F.).—S. A.  
 GIGLIO-TOS, Ditt. del Mess., I, 18, syn.—Orizaba, Mex.  
 WILLISTON, Biologia, Dipt., I, 234 (*stamineus* Wd.).—Mexico, sev. places.  
*concinatus* WILLISTON, Biologia, Dipt., I, 235, pl. iv, f. 9.—Guerrero, Mex.  
*coriaceus* GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 102, 1891; Ditt. del Mess., I, 21.—Orizaba, Mex.  
*dissimilis* GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 102, 1891; Ditt. del Mess., I, 20, pl. I, f. 7.—Orizaba, Mex.  
*fraternus* BIGOT, Annales, 1879, 228.—Mex.  
*hyalopterus* GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 102, 1891; Ditt. del Mess., I, 19.—Orizaba, Mex.  
*orizabæ* GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 102, 1891; Ditt. del Mess., I, 20.—Orizaba, Mex.  
*spatulatus* WILLISTON, Biologia, Dipt., I, 235.—Guerrero, Mex.  
*stamineus* FABRICIUS, see *cingulatus*.  
*subinterruptus* BELLARDI, Saggio, I, 44, pl. I, f. 22 (*Sargus*).—Mex.  
 WALKER, Trans. Ent. Soc., v, 271 (id.).—Mex.  
 GIGLIO-TOS, Ditt. del Mess., I, 19.—Mex.

### CHRYSOCHROMA.

- WILLISTON, Manual N. A. Dipt., 47, 1896, change of name.  
 LOEW, Verh. Zool.-Bot. Ver., 1855, 146 (*Chrysonotus*, preoc.).  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 15, 1882 (id.).  
 WILLISTON, Biologia, Dipt., I, 233, 1900, notes.  
*æneiventris* GIGLIO-TOS, Ditt. del Mess., I, 25 (*Chrysonotus*).—Orizaba, Mex.  
*albipes* TOWNSEND, published by Adams, Kans. Univ. Sci. Bull., II, 31.—Guito, Mex.  
*anale* WILLISTON, Trans. Amer. Ent. Soc., xv, 251 (*Chrysonotus*).—Brazil.  
 GIGLIO-TOS, Ditt. del Mess., I, 24 (id.).—Mex.  
*flavopilosum* BIGOT, Annales, 1879, 227 (*Chrysonotus*).—Mex.  
 WILLISTON, Biologia, Dipt., I, 233, oc. in Mexico, several places.  
*nigricornis* LOEW, Cent., VII, 14 (*Chrysonotus*).—D. C.  
 West. N. Y.—O. S.  
*latifrons* WILLISTON, Biologia, Dipt., I, 234.—Guerrero, Mex.  
*pulchrum* WILLISTON, Biologia, Dipt., I, 233.—Guerrero, Mex.

### SARGUS.

- FABRICIUS, Ent. Syst., Suppl., 566, 1798.  
 MEIGEN, Syst. Besch., III, 104, 1822.  
 MACQUART, Hist. Nat. Dipt., I, 260, 1834.  
 SCHINER, Fauna Austr., I, 20, 1862.  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 15, 1882.  
*Note*.—Probably some of the following species do not belong to *Sargus* in the narrow sense.  
*alchidas* WALKER, see *Macrosargus*.  
*aureus* BELLARDI, Saggio, I, 42, pl. I, f. 20.—Mex.  
*bagosas* WALKER, List, III, 518.—Jamaica.  
*bicolor* WIEDEMANN, Auss. Zw., II, 41.—Porto Rico.  
*cæruleifrons* JOHNSON, Ent. News, XI, 325.—Delaware Water Gap, N. J.  
*cæsius* BELLARDI, Saggio, I, 40, pl. I, f. 18.—Mex.  
 GIGLIO-TOS, Ditt. del Mess., I, 28 (*filiformis*).—Mex. [Will.]  
 WILLISTON, Biologia, Dipt., I, 232.—Guerrero, Mex.



- ? **clavatus** WALKER, List, v, 93.—Brazil.  
 BELLARDI, Saggio, i, 41, doubtful oc. in Mexico.—Morelia.
- coarctatus** MACQUART, Dipt. Exot., i, 1, 202, pl. xxv, f. 2.—Brazil and Guiana.  
 WALKER, List, v, 92.—Brazil or Chili.  
 WILLISTON, Trans. Amer. Ent. Soc., xv, 249.—Brazil.  
 GIGLIO-TOS, Ditt. del Mess., i, 26.—Mex.  
 WILLISTON, Biologia, Dipt., i, 231, oc. in Amula in Teapa, Mex.: is probably the same as *S. notatus* WIED., Auss. Zw., II, 34, from Brazil.
- concinus** OSTEN SACKEN, Biologia, Dipt., i, 23.—Guatemala and Brazil.
- cuprarius** LINNÉ, Fauna Suecica, 1853 (*Musca*).—Europe.  
 DEGEER, Mém. pour Serv. Hist. Ins., vi, 81, pl. XII, f. 4 (*Nemotelus*).  
 SCOPOLI, Entom. Carniolica, 340 (*Musca violacea*).  
 MEIGEN, Syst. Besch., III, 106 and 107 (the latter *cerulicollis*).  
 WALKER, Ins. Brit., i, 30, pl. 1, f. 9.  
 SCHINER, Fauna Austr., i, 21.  
 Smith Cat., oc. in New Jersey.  
 Montreal—Chagnon (*cuprinus*, a mistake).
- debilis** WALKER, Dipt. Saund., 83.—U. S.
- decorus** SAY, Long's Exped., App. 376; Compl. Works, i, 257.—Pa. and E. Fla.  
 WIEDEMANN, Auss. Zw., II, 38 and 40 (the latter *xanthopus*, given by Will. as a doubtful syn.).  
 VAN DER WULP, Tijdschr. v. Ent., x, 134 (*marginatus*).—Wis. [Lw.]  
 Eastern North America, common. Beulah, N. M.—Skinner.
- elegans** LOEW, Cent., VII, 10.—Fla., Mass., N. Y. Ky.—O. S.
- filiformis** GIGLIO-TOS, see *casius*.
- lateralis** MACQUART, Macquart, Hist. Nat. Dipt., i, 262.—Cuba.  
 BIGOT, in Sagra's Cuba, 800.
- latus** BELLARDI, Saggio, 41, pl. 1, f. 19.—Mex.
- linearis** WALKER, List, v, 328.—Mex.
- lucens** LOEW, Cent., VII, 11.—Cuba.  
 GIGLIO-TOS, Ditt. del Mess., i, 27.—Orizaba, Mex.  
 WILLISTON, Biologia, Dipt., i, 231, notes on G. T.'s species, which is said to be different from *lucens*.
- nigribarbis** BIGOT, see *viridis*.
- nigrifemoratus** MACQUART, see *Merosargus*.
- nubeculosus** ZETTERSTEDT, Dipt. Scand., i, 157.—Europe.  
 SCHINER, Fauna Austr., i, 21.  
 JOHNSON, Ent. News, VII, 94, oc. in Pa.
- pallipes** BIGOT, Annales, 1887, 28.—Mt. Hood, Ore.  
 WILLISTON, Biologia, Dipt., III, 23, says is preoccupied twice.
- picticornis** BIGOT, Annales, 1887, 27.—Wash.
- pleuriticus** LOEW, Cent., VII, 13.—Cuba.
- punctifer** BIGOT, Annales, 1887, 27.—Col.
- sallei** BELLARDI, Saggio, i, 43, pl. 1, f. 21.—Mex.
- sapphireus** BIGOT, Annales, 1887, 28.—Cuba.
- speciosus** MACQUART, Dipt. Exot., Suppl., i, 56.—Merida, Yucatan.  
 BELLARDI, Saggio, i, 40.—Jalapa and Merida, Mex.
- splendens** BIGOT, Annales, 1879, 224.—Mex.
- stamineus** FABRICIUS, see *Merosargus cingulatus*.
- subinterruptus** BELLARDI, see *Merosargus*.
- tricolor** LOEW, Cent., VII, 12.—Cuba.  
 St. Augustine and Tick Id., Fla.—Johnson.

*trivittatus* SAY, see *Ptecticus*.

*versicolor* BELLARDI, Saggio, App., 13, f. 8.—Oaxaca, Mex.

*viridis* SAY, Jour. Acad. Sci. Phil., III, 87; Compl. Works, II, 77.—Cincinnati; Atlantic States.

WIEDEMANN, Auss. Zw., II, 39.

OSTEN SACKEN, Cat., 45 (*Chloromyia*).

BIGOT, Annales, 1879, 224 (*nigribarbis*).—Cal. [Will.]

WILLISTON, Canad. Ent., XVII, 123, note on genus.

N. J.—Smith Cat.; Montreal—Chagnon; Beulah, N. M.—Skinner.

*xanthopus* WIEDEMANN, see *decorus*.

#### MYIOCHRYSA.

RONDANI, Dipt. Ital. Prod., IV, 11, 1861, change of name.

MACQUART, Hist. Nat. Dipt., I, 262, 1834 (*Chrysomyia*, preoc.).

BRAUER, Zweifl. d. Kaiserl. Mus., II, 15, 1882.

*cærulea* BIGOT, Annales, 1887, 29.—N. A.

#### MICROCHRYSA.

LOEW, Verh. Zool.-Bot. Ver., V, 131, 1855.

BRAUER, Zweifl. d. Kaiserl. Mus., II, 15, 1882.

*nova* GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 102, 1891; Ditt. del Mess., I, 16.—Mex.

*polita* LINNÉ, Fauna Suecica, 1854 (*Musca*).—Europe.

FABRICIUS, Syst. Antl., 257 (*Sargus*).

MEIGEN, Syst. Besch., III, 111 (*Sargus*).

MACQUART, Dist. Nat. Dipt., I, 263 (*Chrysomyia*).

SCHINER, Fauna Austr., I, 22 (id.).

LOEW, Verh. Zool.-Bot. Ver., V, 135.

VAN DER WULP, Diptera Neerlandica, I, 163 (*Chrysomyia*); Tijdschr. v. Ent., XXIV, 156, oc. at Quebec.

N. J.—Smith Cat.; Montreal—Chagnon.

#### MACROSARGUS.

BIGOT, Annales, 1879, 187, 225.

BRAUER, Zw. d. Kaiserl. Mus., II, 15, 1882, probably is same as *Merosargus* Lw.

*alchidas* WALKER, List, III, 17 (*Sargus*).—Jamaica.

JOHNSON, Proc. Acad. Nat. Sci. Phil., 1894, 271.—Jamaica.

*clavis* WILLISTON, Canad. Ent., XVII, 123.—Va., N. C.

*smaragdiferus* BIGOT, Annales, 1879, 226.—Mex.

#### CHRYSOCHLORA.

LATREILLE, Familles Nat. du Règne Animal, 1825.

MACQUART, Dipt. Exot., I, 1, 198, 1838.

LOEW, Verh. Zool.-Bot. Ver., V, 1855.

BRAUER, Zweifl. d. Kaiserl. Mus., II, 9, 1882.

WILLISTON, Biologia, Dipt., I, 242, 1900.

*pulchra* WILLISTON, Biologia, Dipt., I, 242.—Tabasco, Mex.

*purpurea* WALKER, Trans. Ent. Soc., V, 271.—Mex.

*quadrilineata* BIGOT, Annales, 1887, 26.—Cuba.

#### CHORDONOTA.

GERSTÆCKER, Linnæa Ent., XI, 311, 1857.

BRAUER, Zweifl. d. Kaiserl. Mus., II, 12, 1882.

- carbonaria** BELLARDI, Saggio, App., II.—Mex., Tuxpango and Orizaba.  
**fuscipennis** BELLARDI, Saggio, App., II, f. 6.—Playa Vincente, Mex.  
**leiopteralma** WILLISTON, Dipt. St. Vincent, 302.—St. Vincent, W. I.

## CYPHOMYIA.

- WIEDEMANN, Zool. Mag., I, 3, 55, 1819; Analecta Ent., 1824.  
 MACQUART, Hist. Nat. Dipt., I, 241, 1834.  
 GERSTÄCKER, Linnæa Ent., XI, 263, 1857.  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 12, 1882.
- albitarsis** FABRICIUS, Syst. Antl., 80 (*Stratiomys*).—S. A.  
 MACQUART, Dipt. Exot., Suppl., I, 48 (*fenestrata*).—Yucatan. [Gerst.]  
 GERSTÄCKER, Linnæa Ent., XI, 300.  
 BELLARDI, Saggio, I, 22.—Mex.  
 OSTEN SACKEN, Biologia, Dipt., I, 35.—Costa Rica, Panama.  
 GIGLIO-TOS, Ditt. del Mess., I, 9.  
 WILLISTON, Biologia, Dipt., I, 243, oc. in Mexico, several places.
- androgyna** OSTEN SACKEN, Biologia, Dipt., I, 34.—Panama.
- auriflamma** WIEDEMANN, Zool. Mag., I, 3, 54; Auss. Zw., II, 54, pl. VIII, f. I.—Brazil.  
 MACQUART, Hist. Nat. Dipt., I, 242 (*cyanca* and *auriflamma*).—Cayenne; Brazil. [Gerst.]  
 GUÉRIN, Iconographie du Règne Animal, pl. xcviII, f. 5.  
 PERTY, Delectus Animalium Articulatorum, 184, pl. xxxvi, f. 14 (*Chryso-dota*). [Gerst.]  
 GERSTÄCKER, Linnæa Ent., XI, 276.
- bicarinata** WILLISTON, Biologia, Dipt., I, 244.—Guerréro, Morelos, Jalisco and Vera Cruz,—all in Mex.
- lasiophthalma** WILLISTON, Dipt. St. Vincent, 301, 1896.—St. Vincent, W. I.
- lasiophthalma** WILLISTON, Biologia, Dipt., I, 244, pl. IV, f. 15; 1900.—Jalisco and Guerrero, Mex.
- marginata** LOEW, Cent., VI, 31.—Cuba.
- ochracea** GIGLIO-TOS, Boll. R. Univ. Torino, VI, no. 102, 1891; Ditt. del Mess., I, 10, pl. I, f. 4.—Mex.
- pilosissima** GERSTÄCKER, Linnæa Ent., XI, 292.—Mex.  
 WILLISTON, Biologia, Dipt., I, 244.—Mexico City and Morelos, Mex.
- rubra** LOEW, Cent., VI, 30.—Cuba.
- similis** BELLARDI, Saggio, I, 23, pl. I, f. 7.—Mex.
- scalaris** BIGOT, Annales, 1875, 487.—Mex.  
 GIGLIO-TOS, Ditt. del Mess., I, 9, pl. I, f. 3.—Orizaba.
- simplex** WALKER, Trans. Ent. Soc., v, 268.—Mex.
- tomentosa** GERSTÄCKER, Linnæa Ent., XI, 294.—Mex.  
 BELLARDI, Saggio, I, 22.—Mex.
- varipes** GERSTÄCKER, Linnæa Ent., XI, 283.—Mexico.  
 SCHINER, Novara, 52, oc. in Colombia, etc.  
 OSTEN SACKEN, Biologia, Dipt., I, 34, oc. in Guatemala, Nicaragua and Panama.  
 WILLISTON, Biologia, Dipt., I, 243, oc. in Vera Cruz.

## NEORONDANIA.

- OSTEN SACKEN, Cat., 50, 1878, change of name.  
 JENNICKE, Neue Exot. Dipteren, 1867, 324 (*Rondania*, preoc.).  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 12, 1882.

- chalybea** WIEDEMANN, *Analecta Ent.*, 30; *Auss. Zw.*, II, 49 (*clitellaria*).—St. Thomas.  
 JÆNNICKE, *Neue Exot. Dipteren*, 324, pl. XLIII, f. 4.—Mex.  
**obscura** JÆNNICKE, *Neue Exot. Dipteren*, 325 (*Rondania*).—Mex.

## STRATIOMYIA.

- GEOFFROY, *Hist. Nat. d. Ins.*, II, 475, 1764 (*Stratiomys*).  
 FABRICIUS, *Syst. Antl.*, 77, 1805 (id.).  
 MEIGEN, *Syst. Besch.*, III, 132, 1822 (id.).  
 ZETTERSTEDT, *Dipt. Scand.*, I, 134, 1842 (id.).  
 GERSTÆCKER, *Linnaea Ent.*, XI, 317, 1857 (id.).  
 SCHINER, *Fauna Austr.*, I, 14, 1862 (id.).  
 LOEW, *Cent.*, VI, 4, 1865, amended as above.  
 BRAUER, *Zweifl. d. Kaiserl. Mus.*, II, 13, 1882 (*Stratiomys*).  
 JOHNSON, *Trans. Amer. Ent. Soc.*, XXII, 227, 1895, larval habits, table of species, etc.  
 PACKARD, *Amer. Nat.*, XVI, 1882, 599, 600, larva of undet. sp. in hot spring, at 157 degrees.  
 RILEY, *Amer. Nat.*, XVII, 1883, 1287, oc. of larva of undet. sp. in sea-water.  
**apicula** LOEW, *Cent.*, VI, 13.—Ill.  
 JOHNSON, *Trans. Amer. Ent. Soc.*, XXII, 239, pl. III, f. 23, 24.—Ia., Ill., Kans., Nebr. Montreal—Chagnon; Ill.—Hart.  
**badia** WALKER, *List*, III, 529 (*badius* and *ischiaca* HARRIS).—N. H.  
 Synonymy and correction of locality in *List*, IV, 1157.  
 LOEW, *Cent.*, VII, 21 (*picipes*).—English R., Canada. [O. S.]  
 JOHNSON, *Trans. Amer. Ent. Soc.*, XXII, 243, pl. III, f. 11, 12.—N. H., Mass.  
 NEEDHAM, *Bull.* 47, N. Y. State Mus., 576, pl. xxxv, f. 1, desc. of larva supposed to belong here and figs. of adult.—Adirondacks, N. Y.  
 Montreal—Chagnon; White Mts., N. H.—Slosson.  
**barbata** LOEW, *Cent.*, VI, 9.—Cal.  
 BIGOT, *Annales*, 1887, 23 (*diademata* and *calopus*).—Ga. and Col. [Johnson.]  
 JOHNSON, *Trans. Amer. Ent. Soc.*, XXII, 231, pl. III, f. 1.—Wash., Ore., Ida., Wyo., Col., Brit. Col. Montreal—Chagnon; Beulah, N. M.—Skinner.  
**bimaculata** BELLARDI, *Saggio*, App., 10, f. 7.—Cosamalopam, Mex.  
 JOHNSON, *Trans. Amer. Ent. Soc.*, XXII, 245, transl. orig. desc.  
 WILLISTON, *Biologia*, *Dipt.*, I, 248, oc. in Yucatan, Mex.  
**bruneri** JOHNSON, *Trans. Amer. Ent. Soc.*, XXII, 233, pl. III, f. 7, 8.—Custer, S. D., in the Black Hills.  
**calopus** BIGOT, see *barbata*.  
**constans** LOEW, *Cent.*, X, 8.—Texas.  
 JOHNSON, *Trans. Amer. Ent. Soc.*, XXII, 244, pl. IV, f. 1, 2.—Blanco Co., Tex.  
**constricta** WALKER, *Trans. Ent. Soc.*, V, 268.—Mex.  
 JOHNSON, *Trans. Amer. Ent. Soc.*, XXII, 245, quotes orig. desc.  
**dentata** BIGOT, see *maculosa*.  
**diademata** BIGOT, see *barbata*.  
**discalis** LOEW, *Cent.*, VI, 14.—Ill.  
 JOHNSON, *Trans. Amer. Ent. Soc.*, XXII, 240, pl. III, f. 27, 28.—Utah, Nebr., Minn., Ill., Mich., Pa., W. Va., Mass., Col.  
 N. J.—Smith Cat.; Utah—Hart; Montreal—Chagnon.  
**euchlora** GERSTÆCKER, see *Odontomyia lefebvrei*.

- fenestrata** GERSTÄCKER, *Linnaea Ent.*, xi, 327.—Mex.
- gerstæckeri** BELLARDI, *Saggio*, i, 31, pl. i, f. 10.—Mexico.  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 245, transl. orig. desc.
- goniophora** SAY, *Jour. Acad. Sci. Phil.*, vi, 161; *Compl. Works*, ii, 356.—Mex.  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 247, quotes orig. desc.
- lacerata** BIGOT, see *maculosa*.
- laticeps** LOEW, *Cent.*, vii, 20.—Huds. Bay Terr.  
? WALKER, *List*, iii, 530 (*nymphis*).—Martin Falls, Canada. [O. S., with a ?]  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 234, pl. iii, f. 9.—Mont., Utah, Nev., Cal., Ore., Wash., Col.
- lativentris** LOEW, *Cent.*, vi, 8 and ii (the latter as *obesa*).—Lake Superior; Ill. [Johnson.]  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 233, pl. iii, f. 5, 6.—Ontario, N. Y., Pa., Mich., Ill., S. D.  
Montreal—Chagnon; Province of Quebec—Fyles.
- maculosa** LOEW, *Cent.*, vii, 19; x, 7 (the latter as *insignis*).—Cal.  
BIGOT, *Annales*, 1879, 210 and 211 (*dentata* and *lacerata*).—Cal.  
OSTEN SACKEN, *West. Dipt.*, 213, part. syn.  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 241, syn. and desc.—Cal., Utah, N. Idaho—J. M. A.
- meigenii** WIEDEMANN, *Auss. Zw.*, ii, 61, pl. viii, f. 7.—Savannah, Ga.  
? MACQUART, *Dipt. Exot.*, *Suppl.*, iv, 48, pl. iii, f. 5 (*lincolata*).—Va. [Johnson, with a doubt.]  
LOEW, *Cent.*, vi, 16 (*angularis*); 17 (*marginalis*).—Philadelphia. [Johnson.]  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 238, pl. iii, f. 21, 22.—Pa., N. J., Nebr., Kans., Tex., Mich., Ill. Montreal—Chagnon.
- melanostoma** LOEW, *Cent.*, vi, 10.—Cal.  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 232, pl. iii, f. 3, 4.—Cal., Ore.
- mutabilis** FABRICIUS, *Ent. Syst.*, iv, 266; *Syst. Antl.*, 81 (in both cases as *mutabilis* and *fasciata*).—Cayenne, S. A.  
WIEDEMANN, *Auss. Zw.*, ii, 63, pl. viii, f. a-d.—Cayenne and Brazil.  
PERTY, *Delectus Animal.*, pl. xxxviii, f. 14.  
BELLARDI, *Saggio*, i, 30.—Cuantla, Meztillan, Cuernavaca, in Mexico.  
SCHINER, *Novara*, 61.  
OSTEN SACKEN, *Biologia. Dipt.*, i, 37.—Mexico, several places: Guatemala; Costa Rica.  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 243, pl. iv, f. 3.  
WILLISTON, *Biologia. Dipt.*, i, 248, oc. in Guerrero, Vera Cruz and Yucatan. See also *subalba*.
- nevadæ** BIGOT, *Annales*, 1887, 24.—Nev.  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 237, transl. orig. desc.; doubtfully recognized from Cal.
- nigrifrons** WALKER, *List*, iii, 531.—Martin Falls, Canada.  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 247, quotes orig. desc.
- norma** WIEDEMANN, *Auss. Zw.*, 62.—N. A.  
JOHNSON, *Trans. Amer. Ent. Soc.*, xxii, 236, pl. iii, f. 17, 18.—Pa., Mich., Ind., Ill., Ia., Nebr.  
HART, *Bull. Ill. State Lab. Nat. Hist.*, iv, 249, full study of larva and pupa, with figs.  
Montreal—Chagnon; N. J.—Smith Cat.

- normula** LOEW, Cent., VI, 4, 5 and 18 (*quadrigemina*, *normula* and *notata*).—Conn., N. Y., Nebr. [Johnson, who recognizes *quadrigemina* and *notata* as varieties.]  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 235, pl. III, f. 16.—Ontario, N. Y., Mich., Ill., S. D., Nebr.  
 Quebec—Wulp; Montreal—Chagnon.
- obesa** LOEW, see *lativentris*.
- pinguis** WALKER, Trans. Amer. Ent. Soc., v, 270.—Mex.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 246, quotes orig. desc.
- quaternaria** LOEW, Cent., VI, 12.—Ill.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 241, pl. III, f. 25, 26.—Pa., Mich., Ill., Conn.
- robusta** WALKER, List, v, 37.—N. A.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 247, quotes orig. desc.
- senaria** LOEW, Cent., VI, 7.—Fla.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 237.—St. Augustine, Fla.
- simplex** BIGOT, Annales, 1887, 24.—Tex., Col.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 248, quotes orig. desc.
- subalba** WALKER, List, v, 43.—Para, S. A.  
 BELLARDI, Saggio, I, 231.—Tampico, Mex.  
 OSTEN SACKEN, Biologia, Dipt., I, 37.—Presidio, Mex.; Guatemala; Panama.  
 WILLISTON, Trans. Amer. Ent. Soc., XV, 256 (*mutabilis* Fabr., from S. A.); Biologia, Dipt., I, 248, notes and oc. in Vera Cruz, Mex., and Chapada, Brazil.
- trivittata** SAY, Jour. Acad. Sci. Phil., VI, 160; Compl. Works, II, 356, Mex.
- unilimbata** LOEW, Cent., VI, 6.—Wis.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 236, pl. III, f. 19, 20.—Mont., Wis., S. D., Nebr., Wyo., Col., Ill.

## ODONTOMYIA.

- MEIGEN, Klassifikation, 128, 1804.  
 MACQUART, Hist. Nat. Dipt., I, 245, 1834.  
 GERSTÄCKER, Linnæa Ent., XI, 317, 1857 (sub *Stratiomys*).  
 SCHINER, Fauna Austr., I, 16, 1862.  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 13, 1882.  
 DAY, Proc. Acad. Nat. Sci. Phil., 1882, 74, partial table of species, etc.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 248, complete revision, table of species, etc., 1895.  
 HART, Bull. Ill. State Lab. Nat. Hist., IV, 255, table of species.
- affinis** BELLARDI, Saggio, I, 35, pl. I, f. 12.—Puebla, Mex.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 274, transl. orig. desc.
- albomaculata** MACQUART, Dipt. Exot., I, 1, 189.—Hayti.  
 WALKER, List, v, 40 (*Stratiomys*).—San Domingo.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 276, transl. orig. desc.
- aldrichi** JOHNSON, Trans. Amer. Ent. Soc., XXII, 262, pl. IV, f. 17.—Riley Co., Kans.; Sand Hills and West Point, Nebr.
- americana** DAY, Proc. Acad. Nat. Sci. Phil., 1882, 77.—Cal.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 261.—Wash.
- arcuata** LOEW, Cent., X, 4.—Cal.  
 DAY, Proc. Acad. Nat. Sci. Phil., 1882, 80, transl. orig. desc.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 255, pl. III, f. 35 and IV, f. 7, 8.—Cal., Tex., Col., S. D., Nev.



**binotata** LOEW, see *truquii*.

? **calocephs** BIGOT, Annales, 1879, 217 (*Erochostoma*).—Col.

OSTEN SACKEN, Berl. Ent. Zeitsch., 1882, 369, gen. ref., with a doubt.

**canadensis** WALKER, List, v, 310.—Canada.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 277, quotes orig. desc.

**cincta** OLIVIER, Encycl. Méthodique, VIII, 432.—Carolina.

MACQUART, Dipt. Exot., I, 2, 189, type redesc.

DAY, Proc. Acad. Nat. Sci. Phil., 1882, 80 (*extremis*); 87, quotes orig. desc. of *cincta*.—Conn., Cal.

WILLISTON, Canad. Ent., XVII, 128, syn.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 253.—Fla. to Conn., and west to S. D. and Kans.

HART, Bull. Ill. State Lab. Nat. Hist., IV, 256, egg, larva, pupa, with figs.; larvæ aquatic.

Montreal—Chagnon; White Mts., N. H.—Slosson.

? **comma** WILLISTON, Biologia, Dipt., I, 247.—Guerrero, Mexico; gen. ref. with a doubt.

**concinata** WILLISTON, Biologia, Dipt., I, 247.—Guerrero, Mexico.

**dissimilis** BELLARDI, Saggio, I, 35, pl. I, f. 13, 14.—Mexico.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 274, transl. orig. desc.

**dorsalis** FABRICIUS, Syst. Antl., 82 (*Stratiomys*).—West Indies.

WIEDEMANN, Auss. Zw., II, 66 (id.).—S. A.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 254, pl. IV, f. 9.—San Domingo.

COQUILLET, Proc., U. S. N. M., XXII, 251, oc. in Porto Rico.

**emarginata** MACQUART, Dipt. Exot., I, I, 190.—Mex.

WALKER, List, v, 40 (*Stratiomys*).—Mex.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 275, transl. orig. desc.

**fallax** JOHNSON, Trans. Amer. Ent. Soc., XXII, 257.—S. Ga.

**femorata** BELLARDI, Saggio, I, 37.—Toluca, Mex.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 275, trans. orig. desc.

**flava** DAY, Proc. Acad. Nat. Sci. Phil., 1882, 76.—Wyo.

WILLISTON, Canad. Ent., XVII, 128, type redesc.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 256, quotes both desc.

**flavicornis** OLIVIER, Encycl. Méthodique, VIII, 433.—N. A.

MACQUART, Hist. Nat. Dipt., I, 248, type redesc.: 245 (*Stratiomys flaviceps*, from Philadelphia); Dipt. Exot., I, I, 180, pl. XXII, f. 2 (*Str. pulchella*, from Ga.); I, I, 181 (*Str. vicina*, from Philadelphia).

GUÉRIN, Iconographie, Text, 544, pl. XCVIII, f. 5 (*Str. coronata*).

LOEW, Cent., VI, 23 (*lasiophthalma*).—N. Y.

DAY, Proc. Acad. Nat. Sci. Phil., 1882, 81, transl. orig. desc.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 269, pl. IV, f. 21, preceding syn., etc.—Pa., Ill., N. Y., N. J., N. C.

Fla.—Johnson.

**flavifasciata** MACQUART, Dipt. Exot., Suppl., IV, 53.—Mex.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 275, transl. orig. desc.

**fratella** WILLISTON, Biologia, Dipt., I, 246.—Jalisco, Mex.

**hieroglyphica** OLIVIER, Encycl. Méthodique, VIII, 434.—Carolina.

DAY, Proc. Acad. Nat. Sci. Phil., 1882, 87, quotes orig. desc.

JOHNSON, Trans. Amer. Ent. Soc., XXII, 267, pl. IV, f. 4, 5.—Mass., Va., D. C., Pa., N. J.

HART, Bull. Ill. State Lab. Nat. Hist., IV, 256 (*suovi*).—Champaign Co., Ill. [Johnson.]

*hoodiana* BIGOT, Annales, 1887, 25.—Mt. Hood, Ore.

JOHNSON, Trans. Amer. Ent. Soc., xxii, 266.—Cal., Brit. Col., Idaho.  
*hydroleonoides* JOHNSON, Trans. Amer. Ent. Soc., xxii, 261, pl. iv, f. 10.—Toronto, Canada; Mich., Ill., Utah. Montreal—Chagnon.

*inæqualis* LOEW, Cent., vi, 24.—Huds. Bay Terr.—Fort Resolution.

JOHNSON, Trans. Amer. Ent. Soc., xxii, 254, quotes orig. desc.

*interrupta* OLIVIER, Encycl. Méthodique, viii, 433.—Carolina.

WIEDEMANN, Auss. Zw., ii, 64 (*intermedia*).—N. A. [Johnson.]

WALKER, List, v, 38 (*Stratiomys intermedia* Wied.).—N. A.

DAY, Proc. Acad. Nat. Sci. Phil., 1882, 88, 85, quotes Olivier and Wiedemann.

JOHNSON, Trans. Amer. Ent. Soc., xxii, 265, pl. iv, f. 29, 30.—Pa., Mass., N. H., N. Y., Ill., Nebr., Minn., S. D. Montreal—Chagnon.

*lefebvrei* MACQUART, Dipt. Exot., i, 1, 189.—Mex.

BELLARDI, Saggio, i, 33.—Orizaba and Toluca, Mex.

WALKER, List, v, 40, 311 (*Stratiomys*).—Mex.

GERSTÄCKER, Linnæa Ent., xi, 328 (*Strat. cuchlora*).—Mex. [Will.]

JËNNICKE, Neue Exot. Dipt., 16 (*prasina*).—Mex. [Will.]

JOHNSON, Trans. Amer. Ent. Soc., xxii, 272, quotes Macquart and transl. Bellardi.

WILLISTON, Biologia, Dipt., i, 245, syn. and oc. at Morelia, Mex.

? *limbipennis* MACQUART, Dipt. Exot., Suppl., ii, 30.—“America?”

WALKER, List, v, 39 (*Stratiomys*).—America.

OSTEN SACKEN, Cat., 225, note 57, on locality;—doubtful if North American.

*maculifrons* WALKER, List, iii, 536.—Honduras.

JOHNSON, Trans. Amer. Ent. Soc., xxii, 277, quotes orig. desc.

*mexicana* JOHNSON, Trans. Amer. Ent. Soc., xxii, 271.—Tehuantepec, Mex.

*microstoma* LOEW, Cent., vi, 28.—Mass. and N. Y.

DAY, Proc. Acad. Nat. Sci. Phil., 1882, 77.

JOHNSON, Trans. Amer. Ent. Soc., xxii, 264, pl. iv, f. 20.—N. J., Md., N. Y., Mass.

*nigerrima* LOEW, Cent., x, 6.—Middle States.

DAY, Proc. Acad. Nat. Sci. Phil., 1882, 82, transl., orig. desc.

? JOHNSON, Trans. Amer. Ent. Soc., xxii, 258, pl. iv, f. 25.—Kans.; recognized with a doubt.

*nigrirostris* LOEW, Cent., vi, 19.—N. Wis.

DAY, Proc. Acad. Sci. Phil., 1882, 83, transl. orig. desc.

JOHNSON, Trans. Amer. Ent. Soc., xxii, 257, pl. iii, f. 36, 37.—Mich., Col., S. D., Wyo.

COCKERELL, Jour. N. Y. Ent. Soc., vi, 206, oc. at Agency, Wyo.

*obscura* OLIVIER, Encycl. Méthodique, viii, 433, 434 (the latter as *brevipennis*).—Carolina. [Johnson.]

MACQUART, Dipt. Exot., i, 2, 189, type redesc.

? WALKER, List, v, 38 (*Stratiomys*). Query by Johnson.

DAY, Proc. Acad. Nat. Sci. Phil., 1882, 86, 88 (*brevipennis*).

JOHNSON, Trans. Amer. Ent. Soc., xxii, 270.—Fla., Car., Va.

*occipitalis* JOHNSON, Trans. Amer. Ent. Soc., xxii, 268, pl. iv, f. 23, 24.—Pa., Va.

*pilimanus* LOEW, Cent., vi, 27.—Ill.

DAY, Proc. Acad. Nat. Sci. Phil., 1882, 83, transl. orig. desc.

JOHNSON, Trans. Amer. Ent. Soc., xxii, 263, pl. iv, f. 11, 12.—Ill., Nebr., S. D.

- pilosa** DAY, Proc. Acad. Nat. Sci. Phil., 1882, 76 (*pilosus*).—Cal.  
BIGOT, Annales, 1887, 25 (*pyrrhostoma*).—Mt. Hood, Ore. [Johnson.]  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 258, pl. iv, f. 13, 14.—Cal.: Los Angeles, Santa Clara and Kern Cos.
- prasina** JENNICKE, see *lefebvrei*.
- pubescens** DAY, Proc. Acad. Nat. Sci. Phil., 1882, 77.—Mass., Cal.  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 264, pl. iv, f. 15, 16.—Col., Nebr., S. D., Ariz., Cal., Can., Mich., Mass., N. H., Me. Montreal—Chagnon.
- pyrrhostoma** BIGOT, see *pilosa*.
- quadrinaculata** BELLARDI, Saggio, i, 37, pl. i, f. 15.—Mex.  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 274, transl. orig. desc.  
WILLISTON, Biologia, Dipt., i, 246, oc. in Guerrero, Mex.
- rubicornis** MACQUART, Dipt. Exot., Suppl., i, 53.—Yucatan.  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 276, transl. orig. desc.  
WILLISTON, Biologia, Dipt., i, 247, oc. in Tabasco, Mex.
- rufipes** LOEW, Cent., vi, 25 and 26 (the latter as *scalaris*).—Cuba. [Coq.]  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 253, transl. orig. desc.
- similis** JOHNSON, Trans. Amer. Ent. Soc., xxii, 267, pl. iv, f. 6.—Col.
- snowi** HART, see *hieroglyphica*.
- texana** JOHNSON, Trans. Amer. Ent. Soc., xxii, 259 (*texasiana*).—Waco, Texas.
- trivittata** SAY, Jour. Acad. Sci. Phil., vi, 160; Compl. Works, ii, 356 (*Stratiomys*).—Mex.  
BELLARDI, Saggio, i, 38, pl. i, f. 17 (*tritaniata*).—Cuantla, Mex. [Johnson.]  
OSTEN SACKEN, Biologia, Dipt., i, 36 (id.).—Guatemala.  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 259, pl. iv, f. 19.—Fla., Col.  
WILLISTON, Biologia, Dipt., i, 245, oc. in Jalisco, Mex.
- truquii** BELLARDI, Saggio, i, 34, pl. i, f. 11.—Cuernavaca, Mex.  
LOEW, Cent., vi, 20 and 22 (*megacephala* and *binotata*).—Cal. and Ill.  
DAY, Proc. Acad. Nat. Sci. Phil., 1882, 78 (*bicolor*).—Cal.  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 251 (*binotata*).—U. S. generally.  
WILLISTON, Biologia, Dipt., i, 246, syn., etc.—Guerrero and Morelos, Mex.
- varipes** LOEW, Cent., vi, 21.—Carolina.  
DAY, Proc. Acad. Nat. Sci. Phil., 1882, 84, transl. orig. desc.  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 252, type redesc.
- vertebrata** SAY, Long's Exped., App., 369; Compl. Works, i, 251.—N. W. Terr.  
WIEDEMANN, Auss. Zw., ii, 73.  
WALKER, List, v, 39 (*Stratiomys*).—N. A.  
? BELLARDI, Saggio, i, 38.—Morelia, Mex.; query by Johnson.  
DAY, Proc. Acad. Nat. Sci. Phil., 1882, 78 and 85 (the former as *willistonii*).—N. Y. [Johnson.]  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 260, pl. iv, f. 26-28.—Pa., N. J., S. D., Mich., Mass., Mo.  
HART, Bull. Ill. State Lab. Nat. Hist., iv, 262, desc. and figs. of eggs, larva and pupa.  
Montreal—Chagnon.
- vicina** MACQUART, Dipt. Exot., i, 1, 188.—Cuba. *Note*.—There is another *vicina* of Macquart, D. E. i, 1, 181, which is a synonym of *O. flavicornis*.  
WALKER, List, v, 40.  
JOHNSON, Trans. Amer. Ent. Soc., xxii, 276, transl. orig. desc.
- virgo** WIEDEMANN, Auss. Zw., ii, 69 (*Stratiomys*).—Savannah, Ga.  
WALKER, List, iii, 536 (*paron*); v, 39 (*Stratiomys*).—Trenton Falls, N. Y.; N. A. [Johnson.]

- LOEW, Cent., x, 5 (*plebeia*).—Conn. [Johnson.]  
 DAY, Proc. Acad. Nat. Sci. Phil., 1882, 75 (*nigra*).—Kans. [Johnson.]  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 262, pl. iv, f. 31-35.—N. H. and  
 Ga. to Texas and Col. Montreal—Chagnon.  
*viridis* BELLARDI, Saggio, I, 36, pl. I, f. 16.—Cuantla, Mex.  
 JOHNSON, Trans. Amer. Ent. Soc., XXII, 270, pl. iv, f. 18.—Waco, Texas.  
 WILLISTON, Biologia, Dipt., I, 246, oc. in Teapa, Mex., and notes.

## MYXOSARGUS.

- BRAUER, Zweifl. d. Kaiserl. Mus., II, 21, 1882.  
*fasciatus* BRAUER, op. cit., 22.—Orizaba, Mex.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., 1882, 368.—Texas.  
 ROEDER, Entom. Nachrichten, XII, 139, 1886.—Ga.  
 GIGLIO-TOS, Ditt. del Mess., I, 13.—Mex.  
 WILLISTON, Trans. Amer. Ent. Soc., XV, 254, oc. in N. C.; Biologia, Dipt.,  
 I, 251, note.  
*scutellatus* WILLISTON, Biologia, Dipt., I, 251.—Teapa, Mex.

## NOTHOMYIA.

- LOEW, Cent., VIII, 4, 1869.  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 13, 1882.  
*calopus* LOEW, Cent., VIII, 5.—Cuba.  
*scutellata* LOEW, Cent., VIII, 4.—Cuba.

## EUPARYPHUS.

- GERSTÆCKER, Linnæa Ent., XI, 314, 1857.  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 11, 1882.  
 OSTEN SACKEN, Biologia, Dipt., I, 39, tables of N. A. species.  
 ADAMS, Kans. Univ. Sci. Bull., II, 28, 1903, table of species.  
*albipilus* ADAMS, Kans. Univ. Sci. Bull., II, 30.—Flagstaff, Ariz., and Colorado  
 Springs, Colo.  
*amplus* COQUILLET, Proc. U. S. N. M., XXV, 100.—Chimney Gulch, Col.  
*apicalis* COQUILLET, Proc. U. S. N. M., XXV, 99.—Siskyou Co., Cal.  
*atriventris* COQUILLET, Proc. U. S. N. M., XXV, 100.—Greeley, Col.  
*bellus* LOEW, Cent., VII, 18.—Mass.  
 WILLISTON, Canad. Ent., XVII, 127.—Pa.  
 Montreal—Chagnon.  
*brevicornis* LOEW, Cent., VII, 16.—D. C.  
*carbonarius* GIGLIO-TOS, Boll. R. Univ. Torino, VI, no. 102, 1891; Ditt. dei Mess.,  
 I, 12, pl. I, f. 5.—Mex.  
*crucigerus* COQUILLET, Pr. U. S. N. M., XXV, 99.—Colo.  
 ? *decemmaculatus* OSTEN SACKEN, Biologia, Dipt., I, 40.—N. Sonora, Mex.;  
 gen. ref. with a doubt.  
*elegans* WIEDEMANN, Auss. Zw., II, 58 (*Cyphomyia*).—Mex.  
 GERSTÆCKER, Linnæa Ent., XI, 316.—Mex.  
*elongatulus* WILLISTON, Biologia, Dipt., I, 249.—Guerrero, Mex.  
*limbocutris* WILLISTON, published by Adams, Kans. Univ. Sci. Bull., II, 31.  
 WILLISTON, Canad. Ent., XVII, 126 (*Euparyphus* sp.).—Wash.  
*mutabilis* ADAMS, Kans. Univ. Sci. Bull., II, 29.—Lusk, Wyo., and Colorado Spr.,  
 Colo.  
*niger* BIGOT, Annales, 1879, 204.—Cal.  
*ornatus* WILLISTON, Canad. Ent., XVII, 126.—Wash.

- septemmaculatus* ADAMS, Kans. Univ. Sci. Bull., II, 31.—Palo Alto, Calif.  
*stigmatalis* LOEW, Cent., VII, 17.—D. C. West. N. Y.—O. S.  
*tahoensis* COQUILLET, Pr. U. S. N. M., XXV, 98.—L. Tahoe, Cal.  
*tetraspilus* LOEW, Cent., VII, 15.—New York. Quebec—O. S.  
*tricolor* OSTEN SACKEN, Biologia, Dipt., I, 40.—N. Sonora, Mex.

**EURYNEURA.**

- SCHINER, Verh. Zool.-Bot. Ges., 1867, 308; Novara, 56, 1868.  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 11, 1882.  
 WILLISTON, Biologia, Dipt., I, 250, notes, 1900.  
*propinqua* SCHINER, Novara, 57.—Colombia.  
 GIGLIO-TOS, Ditt. del Mess., I, 15.—Orizaba, Mex.  
*pygmæa* BELLARDI, Saggio, App., 12, f. 5 (*Clitellaria*).—Tuxpango, Mex.  
 SCHINER, Novara, 56, gen. ref.  
 GIGLIO-TOS, Ditt. del Mess., I, 15, note on types.

**CLITELLARIA.**

- MEIGEN, Illig. Mag., II, 265, 1803; Syst. Besch., III, 119, 1822.  
 ZETTERSTEDT, Dipt. Scand., IX, 3709, 1850.  
 SCHINER, Fauna Austr., I, 8, 1862.  
*anchialis* WALKER, List, III, 522; IV, 1157, says may be var. of *chalybea* WIED., for which see *Neorondania*.—Jamaica.  
*argentata* WILLISTON, Canad. Ent., XVII, 127.—Ariz.  
*fenestrata* MACQUART, Dipt. Exot., Suppl., I, 54 (*Ephippium*).—Yucatan; gen. ref. in O. S. Cat.  
*halala* WALKER, List, III, 523.—Honduras.  
*lata* LOEW, Cent., X, 9.—Cal. Wash.—Williston.  
*obesa* WALKER, Trans. Ent. Soc., V, 270.—Mex.  
*rustica* OSTEN SACKEN, West. Dipt., 213.—Sonoma, Marin and Sierra Cos., Cal. N. Ida.—J. M. A.  
*stigma* GIGLIO-TOS, Boll. R. Univ. Torino, VI, no. 102; Ditt. del Mess., I, 13.—Mex.  
*subulata* LOEW, Cent., VI, 29.—Va.

**NEMOTELUS.**

- GEOFFROY, Hist. Nat. Ins., II, 542, 1764.  
 MEIGEN, Syst. Besch., III, 113, 1822.  
 ZETTERSTEDT, Dipt. Scand., I, 146, 1842.  
 SCHINER, Fauna Austr., I, 3, 1862.  
 MELANDER, Psyche, 1903, 171-174, table of species.  
*abdominalis* ADAMS, Kans. Univ. Sci. Bull., II, 221.—Englewood, Kans.  
*acutirostris* LOEW, Cent., III, 13.—Cuba.  
 MELANDER, Psyche, 1903, 181, transl. of desc.  
 St. Augustine, Fla.—Johnson.  
*albirostris* MACQUART, Dipt. Exot., Suppl., IV, 55, pl. III, f. 8.—Va.  
 MELANDER, Psyche, 1903, 182, pl. IV, transl. of desc.  
*arator* MELANDER, Psyche, 1903, 179, pl. IV.—San Diego Co., Cal.  
*bellulus* MELANDER, Psyche, 1903, 183, pl. IV.—Galveston, Tex.  
*bruesii* MELANDER, Psyche, 1903, 179, pl. IV.—Austin, Tex.  
*canadensis* LOEW, Cent., III, 12.—Ft. Resolution, Huds. Bay Terr.  
 MELANDER, Psyche, 1903, 175, transl. of desc.

- carbonarius** LOEW, Cent., VIII, 6.—Mass.  
 MELANDER, Psyche, 1903, 177, transl. of desc.  
 N. J.—Smith Cat.; St. Augustine and Charlotte Harbor, Fla.—Johnson.
- carneus** WALKER, List, III, 521.—Martin Falls, Canada.  
 MELANDER, Psyche, 1903, 178, quotes desc.
- crassus** LOEW, Cent., III, 10.—R. I.  
 MELANDER, Psyche, 1903, 175, pl. iv, transl. of desc.  
 W. Kansas—Williston; N. J.—Smith Cat.
- flavicornis** JOHNSON, Proc. Acad. Nat. Sci. Phil., 1894, 272.—Jamaica.  
 MELANDER, Psyche, 1903, 180, quotes desc.
- glaber** LOEW, Cent., X, 10.—Texas.  
 MELANDER, Psyche, 1903, 177, transl. of desc.
- immaculatus** JOHNSON, Proc. Acad. Nat. Sci. Phil., 1895, 304.—St. Augustine, Fla.  
 MELANDER, Psyche, 1903, 181, quotes desc.
- kansensis** ADAMS, Kans. Univ. Sci. Bull., II, 221.—Englewood, Kans.
- nigrinus** FALLÉN, Stratiomydæ, 6.—Europe.  
 CURTIS, British Ent., 729.  
 MEIGEN, Syst. Besch., III, 117.  
 MACQUART, Hist. Nat. Dipt., I, 266.  
 ZETTERSTEDT, Ins. Lapp., 575; Dipt. Scand., I, 151.  
 SCHINER, Fauna Austr., I, 5.  
 VAN DER WULP, Tijdschr. v. Ent., X, 126, oc. in Wis.  
 Montreal—Chagnon.
- pallipes** SAY, Jour. Acad. Sci. Phil., III, 29; Compl. Works, II, 52.—Pa.  
 WIEDEMANN, Auss. Zw., II, 45.  
 MELANDER, Psyche, 1903, 178, quotes Say.
- polyposus** SAY, Jour. Acad. Sci. Phil., VI, 160; Compl. Works, II, 356.—Mex.  
 WILLISTON, Biologia, Dipt., I, 251, oc. at Mexico City, and note.  
 MELANDER, Psyche, 1903, 178, quotes desc.
- slossonæ** JOHNSON, Proc. Acad. Nat. Sci. Phil., 1895, 304.—Charlotte Harbor, Fla.  
 MELANDER, Psyche, 1903, 181, quotes desc.
- triotatus** MELANDER, Psyche, 1903, 180, pl. iv.—Austin, Texas.
- tristis** BIGOT, Annales, 1887, 30.—Cal.  
 MELANDER, Psyche, 1904, 177, transl. of desc.
- unicolor** LOEW, Cent., III, 11.—Ill.  
 WILLISTON, Canad. Ent., XVII, 128, oc. in Pa.; Biologia, Dipt., I, 251, oc. in Teapa, Mex., with a doubt.  
 MELANDER, Psyche, 1903, 176, pl. iv.—Ill.
- wheeleri** MELANDER, Psyche, 1903, 182, pl. iv.—Galveston, Texas.

#### OXYCERA.

- MEIGEN, Illig. Mag., II, 265, 1803; Syst. Besch., III, 123, 1822.  
 MACQUART, Hist. Nat. Dipt., I, 249, 1834.  
 ZETTERSTEDT, Dipt. Scand., I, 141, 1842.  
 SCHINER, Fauna Austr., I, 9, 1862.  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 11, 1882.
- centralis** LOEW, Cent., III, 14.—Red R. of the North.
- crotchi** OSTEN SACKEN, West. Dipt., 212.—Cal.
- liburna** WALKER, List, III, 528.—Jamaica.



*maculata* OLIVIER, Encycl. Méthodique, viii, 600.—Carolina.

MACQUART, Dipt. Exot., i, 2, 190, type redesc.

D. C. and Mass.—O. S.; N. J.—Smith Cat.

*metallica* WIEDEMANN, Auss. Zw., ii, 60.—St. Thomas, W. I.

Perhaps a *Nothomyia*—Loew, in O. S. Cat.

*picta* VAN DER WULP, Tijdschr. v. Ent., x, 133.—Wis.

LOEW, Zeitsch. f. Ges. Naturwiss., xxxvi, 117.

*unifasciata* LOEW, Cent., iii, 15.—Pa.

*variegata* OLIVIER, Encycl. Méthodique, vii, 600.—Carolina.

MACQUART, Dipt. Exot., i, 2, 191.—Carolina.

#### AOCHLETUS.

OSTEN SACKEN, Biologia, Dipt., i, 38, 1886.

WILLISTON, Dipt. St. Vincent, 300, 1896.

*bistriatus* WILLISTON, Dipt. St. Vincent, 300, pl. x, f. 76.—St. Vincent, W. I.

*cinctus* OSTEN SACKEN, Biologia, Dipt., i, 38.—N. Sonora, Mex.

*obscurus* COQUILLET, Pr. U. S. N. M., xxv, 98.—S. Cal. and Ariz.

#### PELAGOMYIA.

WILLISTON, Manual of N. A. Dipt., 48, 1896.

*albitalus* WILLISTON, Dipt. St. Vincent, 299, pl. x, f. 75.—St. Vincent, W. I.

#### NEOCHAUNA.

WILLISTON, Manual of N. A. Dipt., 48, change of name.

LOEW, Stett. Ent. Zeit., viii, 370, 1847 (*Chauna*, preoc.).

GERSTÆCKER, Linnæa Ent., xi, 338, 1857 (*id.*).

BRAUER, Zweifl. d. Kaiserl. Mus., ii, 7, 1882.

*variabilis* LOEW, Stett. Ent. Zeit., viii, 370, pl. i, f. 11-15.—Cuba.

GERSTÆCKER, Linnæa Ent., xi, pl. iii, f. 7 (*ferruginca*).—Cuba.

Syn. by Loew, Berl. Ent. Zeitsch., ii, 349.

#### ACANTHINA.

WIEDEMANN, Auss. Zw., ii, 50, 1830.

GERSTÆCKER, Linnæa Ent., xi, 335, 1857.

BRAUER, Zweifl. d. Kaiserl. Mus., ii, 7, 1882.

*argentea* OSTEN SACKEN, Biologia, Dipt., i, 41.—Costa Rica, Colombia.

WILLISTON, Biologia, Dipt., i, 249, oc. in Atoyac, Mex.

? *bellardii* GIGLIO-TOS, Boll. R. Univ. Torino, vi, no. 102, 1891; Ditt. del Mess., i, 14.—Tehuacan, Mex.; gen. ref. with a doubt.

*inornata* WILLISTON, Biologia, Dipt., i, 249, pl. iv, f. 17.—Atoyac, Mex.

*nana* BELLARDI, Saggio, App., 9.—Tuxpango, Mex.

*ornata* MACQUART, Dipt. Exot., Suppl., i, 51, pl. v, f. 5.—Mex.

BELLARDI, Saggio, i, 28.—Mexico City.

#### CYNIPIMORPHA.

BRAUER, Zweifl. d. Kaiserl. Mus., ii, 19, 1882.

*bilimeki* BRAUER, op. cit., 19.—Cuernavaca and Orizaba, Mex.

*minuta* WILLISTON, Biologia, Dipt., i, 252, pl. iv, f. 19, 19a.—Chilpancingo, Mex.

**PACHYGASTER.**

MEIGEN, Illig. Mag., II, 266, 1803; Syst. Besch., III, 102, 1822.

MACQUART, Hist. Nat. Dipt., I, 264, 1834.

ZETTERSTEDT, Dipt. Scand., I, 151, 1842.

SCHINER, Fauna Austr., I, 3, 1862.

BRAUER, Zweifl. d. Kaiserl. Mus., II, 9, 1882.

**maculicornis** HINE, Ohio Naturalist, II, 228, 1902.—Onaga, Kans.; generic ref. slightly doubtful.

**pulcher** LOEW, Cent., III, 16.—D. C.

TOWNSEND, Trans. Amer. Ent. Soc., XXII, 55, oc. at Las Cruces, N. M., and notes.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

*Note.*—Loew's description of the female should be ignored. I examined the types at the request of Mr. Kahl, and as he expected, found one female of a *Pachygaster*, and both the male and female of a species belonging to a different genus, the eyes of the male being separated. These are all referred to in one way or another under the description of the female, which consequently becomes useless to science.

**LOPHOTELES.**

LOEW, Berl. Ent. Zeitsch., 1858, 110.

WILLISTON, Ent. News, VII, 185, reports the genus from N. A. (*Lolphoteles*, a misprint.)

**pallidipennis** WILLISTON, Biologia, Dipt., I, 250, pl. IV, f. 16.—Atoyac, Mex.

**ZABRACHIA.**

COQUILLET, Bull. 47, N. Y. State Museum, 585, 1901.

**polita** COQUILLET, op. cit.—Saranac Inn, N. Y.

**TABANIDÆ.**

LOEW, Dipterenfauna Südafrika's, 14, extended discussion of family and genera.

BIGOT, Bull. Soc. Zool. France, XII, 412, extensive table of genera of the world.

HART, Bull. Ill. State Lab. Nat. Hist., IV, 225, keys to some genera by eggs, larvæ and pupæ.

HOWARD, Bull. 20, n. ser., Div. Ent., 24, a Russian method of destroying.

HINE, Tabanidæ of Ohio (Ohio Acad. Sci. special papers, no. 5, 1903). 63 pp., 2 pl.; redescribes all Ohio species; considerable biological matter; table of N. A. genera.

**DICLISA.**

SCHINER, Verh. Zool.-Bot. Ges., 1867, 311.

**maculipennis** SCHINER, Novara, 102, pl. II, f. 17.—S. A.

OSTEN SACKEN, Biologia, Dipt., I, 47.—Panama, Vera Cruz; oc. and note.

**miseria** OSTEN SACKEN, Biologia, Dipt., I, 47.—Guatemala.

**PANGONIA.**

LATREILLE, Hist. Nat. Crust. et Ins., III, 437, 1802.

MEIGEN, Syst. Besch., II, 15, 1820.

MACQUART, Hist. Nat. Dipt., I, 191, 1834.

SCHINER, Fauna Austr., I, 43, 1862.

BELLARDI, Saggio, I, 46, partial table of species.

OSTEN SACKEN, Prodrome, I, 365, partial table of species.

- BIGOT, Bull. Ent. Soc. France, 1879, No. 6 (*Sackenimyia*, in part).  
 WILLISTON, Biologia, Dipt., 1, 252, table of Mexican species.  
 HINE, Tabanidæ of Ohio, 45, 1903, table of three eastern spp.
- atrifera* WALKER, Trans. Ent. Soc., v, 272.—Mex.  
*aurulans* WIEDEMANN, AUSS. ZW., II, 620.—Mex.  
*californica* BIGOT, Mém. Soc. Zool. France, v, 618 (*Diatomineura*).—Cal.  
*caustica* OSTEN SACKEN, Biologia, Dipt., 1, 44.—Durango, Mex.  
*chrysocoma* OSTEN SACKEN, see *Goniops*.  
*dives* WILLISTON, Kans. Acad. Sci., x, 130.—Cal.  
*fera* WILLISTON, Kans. Acad. Sci., x, 130.—Mt. Hood, Ore.  
*flavohirta* BELLARDI, Saggio, 1, 49.—Mex.  
 WILLISTON, Biologia, Dipt., Suppl., 254, oc. in Guerrero, Mex.; note.  
*fulvithorax* WIEDEMANN, AUSS. ZW., 1, 89.—Brazil.  
 BIGOT, R. de la Sagra, 797, oc. in Cuba; this identification should be verified.
- fusiformis* WALKER, Dipt. Saund., 19.—N. A.  
*hera* OSTEN SACKEN, West. Dipt., 214.—San Francisco.  
*illota* WILLISTON, Biologia, Dipt., 1, 254.—Ruatan Id., Honduras.  
*incerta* BELLARDI, Saggio, 1, 52.—Mex.  
*incisuralis* SAY, Jour. Acad. Sci. Phil., III, 31; Amer. Ent., pl. xxxiv; Compl. Works, 1, 75.—Arkansas.  
 WIEDEMANN, AUSS. ZW., 1, 90 (name changed to *incisa*).  
 WILLISTON, Kans. Acad. Sci., x, 130.—Col., N. M.
- isabellina* WIEDEMANN, AUSS. ZW., 1, 112 (*Silvius*).—N. A.  
 OSTEN SACKEN, Cat., 225.—may be a pale *pigra*.  
*macroglossa* WESTWOOD, Lond. and Edinb. Philosoph. Mag., 1835.—Ga.  
 OSTEN SACKEN, Prodrome, 368, quoted.  
*nigronotata* MACQUART, Dipt. Exot., Suppl., IV, 27, pl. II, f. 5.—Mex.  
 BELLARDI, Saggio, 1, 51, 52 (the latter *P. certa*) [Will.].  
 WILLISTON, Biologia, Dipt., Suppl., 254.—Guerrero and Orizaba, Mex.
- pavida* WILLISTON, Biologia, Dipt., 1, 253.—Guerrero, Mex.  
*pigra* OSTEN SACKEN, Prodrome, 1, 367.—N. Y., Ky. N. J.—Smith Cat.  
*planiventris* MACQUART, Dipt. Exot., Suppl., IV, 26.—Mex.  
*prasiniiventris* MACQUART, Dipt. Exot., Suppl., 1, 29, pl. III, f. 9.—Colombia.  
 SCHINER, Novara, 100.—S. A.  
 OSTEN SACKEN, Biologia, Dipt., 1, 45, oc. in Panama.
- pyrausta* OSTEN SACKEN, Biologia, Dipt., 1, 43.—Panama.  
 WILLISTON, Kans. Univ. Quart., III, 189, oc. in Mazatlan, Mex.; Biologia, Dipt., 1, 253, oc. in Tepic, Mex., and note.
- rasa* LOEW, Cent., VIII, 7.—N. Wis.  
 OSTEN SACKEN, Prodrome, 1, 366.—Ill., N. Y.  
 WILLISTON, Kans. Acad. Sci., x, 130, oc. in Conn. and notes.  
 HINE, Ohio Nat., II, 169, oc. in Medina, O., and note on male.  
 HINE, Tabanidæ of Ohio, 45.—Ohio.
- rhizophora* BELLARDI, Saggio, 1, 46, pl. II, f. 1.—Mex.  
*rostrifera* BELLARDI, Saggio, 1, 47.—Mex.  
 WILLISTON, Biologia, Dipt., Suppl., 253, oc. in Misantla and Teapa, Mex.
- ruficornis* BIGOT, Mém. Soc. Zool. France, v, 615 (*Corisoneura*).—Cal.  
*sallei* BELLARDI, Saggio, 1, 50.—Mex.  
*saussurei* BELLARDI, Saggio, 1, 49, pl. II, f. 4.—Mex.  
 WILLISTON, Biologia, Dipt., 1, 254, oc. in Guerrero and Orizaba, Mex.
- semiflava* WIEDEMANN, AUSS. ZW., II, 622.—Mex.

- MACQUART, Dipt. Exot., Suppl., iv, 27 (*bicolor*).—Mex. [Bellardi.]  
 WILLISTON, Biologia, Dipt., Suppl., 253, oc. in Guerrero, several places.  
*seminuda* COQUILLET, Jour. N. Y. Ent. Soc., x, 137.—Chihuahua, Mex.  
*tenuirostris* WALKER, Trans. Ent. Soc., v, 272.—Mex.  
*tranquilla* OSTEN SACKEN, Prodrôme, I, 367.—Pa., Mass., N. H., Quebec.  
 WILLISTON, Kans. Acad. Sci., x, 130, oc. in N. Y.; notes.  
*velutina* BIGOT, Mém. Soc. Zool. France, v, 615 (*Corizonewra*).—Cal.  
*wiedemanni* BELLARDI, Saggio, I, 48.—Mex.  
 WIEDEMANN, Auss. Zw., II, 621 (*basilaris*, preoc.).—Mex.  
 WALKER, List, v, 120 (id.).—Mex.  
 WILLISTON, Biologia, Dipt., Suppl. 254, oc. in Guerrero; note.

## GONIOPS.

- ALDRICH, Psyche, March, 1892, 236.  
 HINE, Tabanidæ of Ohio, 45, 1903, note.  
*chrysocoma* OSTEN SACKEN, Prodrôme, I, 368 (*Pangonia*).—Trenton Falls, N. Y.; Delaware.  
 WILLISTON, Kans. Acad. Sci., x, 130, notes (*Pangonia*).  
 ALDRICH, Psyche, March, 1892, 236, figs. (*hippoboscoides*).—Pa.  
 HINE, Ent. News, XI, 392, synonymy and habits; oc. in Ohio.  
 ALDRICH, Ent. News, XI, 531, acknowledges synonymy.  
 HINE, Ohio Nat., II, 168, habits; Tabanidæ of Ohio, 45.—Ohio.  
 N. J.—Smith Cat.

*Note*.—The validity of the genus *Goniops* is a question which should be taken up in connection with the status of a considerable number of other related genera of Pangoninæ; I allow it to stand pending such an investigation.

## APATOLESTES.

- WILLISTON, Entom. Americana, I, 12, 1885.  
*comastes* WILLISTON, loc. cit.—Cal.  
 ? TOWNSEND, Proc. Cal. Acad. Sci., IV, 596, oc. in Lower Cal., with a doubt.  
 ? *eiseni* TOWNSEND, Proc. Cal. Acad. Sci., IV, 596.—Lower Cal.; generic reference with a doubt.

## SILVIUS.

- MEIGEN, Syst. Besch., II, 27, 1820.  
 MACQUART, Hist. Nat. Dipt., I, 213, 1834.  
 LOEW, Wien. Ent. Monat., 1858, 350.  
 SCHINER, Fauna Austr., I, 43.  
*gigantulus* LOEW, Cent., x, 12 (*Chrysops*).—Cal.  
 OSTEN SACKEN, Prodrôme, I, 395 (*trifolium*); West. Dipt., 215.—Vancouver Id. and Wash.; Cal. and Col., and synonymy.  
 TOWNSEND, Proc. Cal. Acad. Sci., IV, 595.—Cal.  
 WILLISTON, Kans. Acad. Sci., x, 131, notes; adds Idaho and N. M. to the localities.  
*pollinosus* WILLISTON, Trans. Conn. Acad. Sci., IV, 244; Kans. Acad. Sci., x, 131, notes and generic characters.—Western Kans.  
*quadrivittatus* SAY, Jour. Acad. Sci. Phil., III, 33; Compl. Works, II, 54 (*Chrysops*).—Near Rocky Mts.  
 WIEDEMANN, Auss. Zw., I, 200.  
 WILLISTON, Kans. Acad. Sci., x, 131.—Cal.

BIGOT, Mém. Soc. Zool. France, v, 623 (*Diachlorus notatus*) [J. M. A.]—Cal.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 57.—notes; S. D., N. M., Kans.

### CHRYSOPS.

MEIGEN, Illig. Mag., ii, 1803, 267; Syst. Besch., ii, 50, 1820.

MACQUART, Hist. Nat. Dipt., i, 214, 1834.

ZETTERSTEDT, Dipt. Scand., i, 123, 1842.

LOEW, Verh. Zool.-Bot. Ges., 1858, 613.

SCHINER, Fauna Austr., i, 39, 1862.

OSTEN SACKEN, Prodrôme, i, 369, 1875, table of U. S. species.

WILLISTON, Kans. Acad. Sci., x, 131, table of species, supplementary to O. S.

HINE, Tabanidæ of Ohio, 32, 1903. Tables of males and females of Ohio species.

**æstuans** VAN DER WULP, Tijdsch. v. Ent., x, 135; pl. iii, f. 8, 9.—Wis.

? WALKER, List, i, 201 (*marcens*).—Nova Scotia [O. S., with a doubt].

OSTEN SACKEN, Prodrôme, i, 378.—Red R. of the North, Ill., Dak.

LUGGER, 2d Rept., Ent. Minn., 169, mention and good figure.—Minn.

HART, Bull. Ill. State Lab. Nat. Hist., iv, 227, egg described.—Ill.

HINE, Ohio Nat., ii, 168, oc. in Ohio.

HINE, Tabanidæ of Ohio, 41 (*marcens*).—Ohio.

Montreal—Chagnon.

**affinis** BELLARDI, Saggio, i, 70, pl. ii, f. 14.—Mex.

**altivagus** OSTEN SACKEN, Biologia, Dipt., i, 45, pl. i, f. 6, 7.—Durango, Mex.

**apicalis** BELLARDI, Saggio, i, 73.—Mex.

**atricornis** BIGOT, see *proclivis*.

**atropis** OSTEN SACKEN, Prodrôme, i, 372.—Florida, Wekiva and Indian Rivers.

? WALKER, List, i, 204 (*divisus*) [O. S., with a doubt].—Fla.

Florida, several places—Johnson.

**brunneus** HINE, Tabanidæ of Ohio, 34.—Sandusky, O.

**callidus** OSTEN SACKEN, Prodrôme, i, 379.—N. J., Del., Conn., Mich., Ill.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 56, notes.—Va.

HINE, Tabanidæ of Ohio, 35.—Ohio; egg-laying mentioned, p. 4.

Wash.—Williston; Ill.—Hart; Montreal—Chagnon; Fla.—Johnson.

**celer** OSTEN SACKEN, Prodrôme, i, 376.—Middle States, Mass.

HINE, Tabanidæ of Ohio, 36.—Ohio.

Quebec—Wulp; N. J.—Smith Cat.; Montreal—Chagnon.

**ceras** TOWNSEND, Psyche, March, 1897, 38.—Gila R., N. M.

**coloradensis** BIGOT, Mém. Soc. Zool. France, v, 605.—Col.

**costatus** FABRICIUS, Ent. Syst., iv, 373 (*Tabanus*); Syst. Antl., 112.—S. A.

PALISOT, Ins. Dipt., 223, pl. iii, f. 7.

WIEDEMANN, Dipt. Exot., 104; Auss. Zw., i, 198.—S. A.

MACQUART, Dipt. Exot., i, 1, 160.—Cuba.

BIGOT, Sagra's Cuba, 798.—Cuba.

GUÉRIN, Iconog., text, iii, 542; pl. xcvi (called *molestus* on the plate—O. S.).

? DEGEER, Mémoires, iv, pl. xxx, f. 7 (*Tabanus variegatus*). [O. S. with a doubt.]

RONDANI, Esame, etc., 44 (*vulneratus*). [O. S.]

WILLISTON, Kans. Acad. Sci., x, 134.—San Domingo, Cuba, Jamaica.

OSTEN SACKEN, Biologia, Dipt., i, 46, oc. in Guatemala and Nicaragua.

WILLISTON, Biologia, Dipt., i, 255, oc. Vera Cruz and Tabasco.

- TOWNSEND, Trans. Amer. Ent. Soc., xxii, 56; Annals and Mag. Nat. Hist., xix, 18.—Jamaica and Vera Cruz.
- Porto Rico—Roeder.
- crassicornis** VAN DER WULP, Wien. Ent. Zeit., iii, 141, 1884.—Guanaxuato, Mex.
- crucians** WIEDEMANN, Auss. Zw., i, 211.—Brazil.
- JÄNNICKE, Neue Exot. Dipt., 41.—Cuba.
- cuclux** WHITNEY, Canad. Ent., xi, 35.—Milford, N. H.
- cursim** WHITNEY, see *puclucus*.
- delicatulus** OSTEN SACKEN, Prodrôme, i, 380.—N. Conway, N. H.
- discalis** WILLISTON, Trans. Conn. Acad. Sci., iv, 245.
- excitans** WALKER, Dipt. Saund., 72.—Cape Breton.
- OSTEN SACKEN, Prodrôme, i, 373.—Anticosti to Yukon R., N. Y., N. H.
- WILLISTON, Kans. Acad. Sci., x, 132, oc. Wash.
- Ill.—Hart; Montreal—Chagnon; Axton, N. Y.—M. & H.
- facialis** TOWNSEND, Psyche, March, 1897, 39.—Gila R., N. M.
- fallax** OSTEN SACKEN, Prodrôme, i, 392.—Mass., N. Y., Del., Md.
- HINE, Tabanidæ of Ohio, 36.—Ohio.
- N. J.—Smith Cat.
- flavidus** WIEDEMANN, Dipt. Exot., i, 105; Auss. Zw., i, 199.—Savannah.
- BELLARDI, Saggio, i, 73, pl. II, f. 16 (*pallidus*) [O. S.].—Mex.
- ? WALKER, List, i, 197 (*canifrons*) [O. S., with a doubt].—Fla.
- OSTEN SACKEN, Prodrôme, i, 385.—R. I., Md., Brit. Amer., N. Y.
- HINE, Tabanidæ of Ohio, 37.—Ohio.
- N. J.—Smith Cat.; Ill.—Hart; Florida, several places—Johnson.
- frazari** WILLISTON, Kans. Acad. Sci., x, 133.—San Domingo.
- frigidus** OSTEN SACKEN, Prodrôme, i, 384; II, 474.—Quebec to Great Slave Lake, N. Y., Mass.
- HINE, Tabanidæ of Ohio, 37.—Ohio.
- frontalis** MACQUART, Dipt. Exot., i, 1, 160.—San Domingo.
- WALKER, List, v, 284, oc. in Brazil.
- fugax** OSTEN SACKEN, Prodrôme, i, 375.—Maine, N. H., Canada, divide between Idaho and Montana; Yukon R.
- ? WALKER, List, i, 203 (*carbonarius*, in part) [O. S., with a doubt].—Nova Scotia.
- ? MACQUART, Dipt. Exot., Suppl., iv, 40 (*ater*) [O. S., with a doubt].—Newfoundland.
- WILLISTON, Kans. Acad. Sci., x, 132, notes; oc. in Anticosti, Mass., and Col.
- N. J.—Smith Cat.; Montreal—Chagnon; Axton, N. Y.—M. & H.
- fulvaster** OSTEN SACKEN, West. Dipt., 221.—Col., Utah.
- WILLISTON, Kans. Acad. Sci., x, 134.—Cal., Col., Mont.
- geminatus** WIEDEMANN, Auss. Zw., i, 205, no locality.
- MACQUART, Dipt. Exot., Suppl., iv, 39.—Mex.
- hilaris** OSTEN SACKEN, Prodrôme, i, 391.—Pa., Mass., N. H., Can., Kans.
- indus** OSTEN SACKEN, Prodrôme, i, 383.—Cayuga Lake, N. Y., Montreal.
- HINE, Ohio Nat., II, 168, habits of male; oc. in Ohio.
- HINE, Tabanidæ of Ohio, 38.
- N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- inornatus** WALKER, List, i, 198.—Brazil; in his Prodrôme and Catalogue, Osten Sacken adds "West Indies," but I know not on what authority.
- lateralis** WIEDEMANN, Auss. Zw., i, 209, no locality.
- WALKER, List, i, 200; v, 286, oc. in Honduras and S. A.; this needs confirmation.



- latifasciatus** BELLARDI, Saggio, 1, 71, pl. II, f. 15.—Mex.  
OSTEN SACKEN, Biologia, Dipt., 1, 46, oc. in Mex., Guatemala, Costa Rica.  
? WILLISTON, Biologia, Dipt., 1, 256, oc. in Jalapa, Mex., with a query.
- lugens** WIEDEMANN, Dipt. Exot., 1, 109; Auss. Zw., 1, 212.—Ga.  
HINE, Tabanidæ of Ohio.—Medina, Ohio.
- megaceras** BELLARDI, Saggio, 1, 74, pl. II, f. 18.—Mex.
- mitis** OSTEN SACKEN, Prodrôme, 1, 374.—Canada to Yukon R.; Lake Superior.  
? WALKER, Dipt. Saund., 73 (*provocans*) [O. S., with a doubt].—Cape Breton.  
Ill.—Hart; Axton, N. Y.—M. & H.
- mæchus** OSTEN SACKEN, Prodrôme, 1, 387.—D. C., Ga., Ky., Mo.  
HINE, Ohio Nat., II, 168, habits and oc. in Ohio.  
HINE, Tabanidæ of Ohio, 39.  
N. J.—Smith Cat.
- montanus** OSTEN SACKEN, Prodrôme, 1, 382.—Catskills, N. Y.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 57, notes and oc. in Vt.  
HINE, Tabanidæ of Ohio, 40, Ohio.  
N. J.—Smith Cat.; Ill.—Hart.
- morosus** OSTEN SACKEN, Prodrôme, 1, 389; II, 474.—Md., Fla., Tex.  
? MACQUART, Dipt. Exot., 1, 1, 161 (*trinotatus*) [O. S., with a doubt].—Philadelphia.  
N. J.—Smith Cat.; St. Augustine and Georgiana, Fla.—Johnson.
- neglectus** WILLISTON, Biologia, Dipt., 1, 156, pl. IV, f. 20.—Tabasco, Mex.
- niger** MACQUART, Dipt. Exot., 1, 1, 161.—N. A.  
? WALKER, List, 1, 203 (*carbonarius*, var. B) [O. S., with a doubt].—Nova Scotia.  
OSTEN SACKEN, Prodrôme, 1, 377.—Middle and Northern States and British Possessions.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 57, notes, Va.  
HINE, Tabanidæ of Ohio, 41.—Ohio.  
N. J.—Smith Cat.; Ill.—Hart; Montreal—Chagnon; Quebec—Wulp; Axton, N. Y.—M. & H.
- nigribimbo** WHITNEY, Canad. Ent., XI, 35.—Milford, N. H.
- nigripes** ZETTERSTEDT, Ins. Lapp., 519; Dipt. Scand., 1, 125.—N. Europe.  
LOEW, Verh. Zool.-Bot. Ges., 1858, 623, oc. in N. A.—Sitka.  
OSTEN SACKEN, Prodrôme, 1, 394, note.  
Alaska—Coq.
- nigriventris** BIGOT, Mém. Soc. Zool. France, v, 604.—Wash.
- noctifer** OSTEN SACKEN, West. Dipt., 220.—Sierra Nevada, Cal.  
Beulah, N. M.—Skinner.
- obsoletus** WIEDEMANN, Dipt. Exot., 1, 108; Auss. Zw., 1, 211.—N. A.  
OSTEN SACKEN, Prodrôme, 1, 393; Cat., 225, note 68, on types.—Pa., Md., N. Y., Mass., N. H.  
HINE, Tabanidæ of Ohio, 42.—Ohio.  
N. J.—Smith Cat.; Montreal—Chagnon.
- pachycera** WILLISTON, Kans. Acad. Sci., x, 134.—Cal.  
TOWNSEND, Proc. Cal. Acad. Sci., IV, 596, notes on male; oc. in Lower Cal.
- pertinax** WILLISTON, Kans. Acad. Sci., x, 132.—Wash.
- plangens** WIEDEMANN, Dipt. Exot., 1, 109, Auss. Zw., 1, 210 (both *fuliginosus*; the female is described as *plangens*, Auss. Zw., 1, 210. I do not know any reason for discarding *fuliginosus*, which is undoubtedly prior, but I follow Osten Sacken, leaving the question open).—Savannah, Ga.

- N. J.—Smith Cat.; Fla.—Johnson.
- proclivis** OSTEN SACKEN, West. Dipt., 222, Marin Co., Cal.  
BIGOT, Mém. Soc. Zool. France, v, 604 (*atricornis*).—Col. [Hine.]  
HINE, Canad. Ent., xxxv, 244, oc. at Oak Creek Canyon, Ariz.  
Wash. and Mt. Hood, Ore.—Williston.
- pudicus** OSTEN SACKEN, Prodrôme, I, 381; II, 474.—Mass., Fla.  
WHITNEY, Canad. Ent., XI, 36 (*cursum*) [Williston].—Milford, N. H.  
N. J.—Smith Cat.
- sackeni** HINE, Tabanidæ of Ohio, 42.—Sandusky, Ohio.
- scalaratus** BELLARDI, Saggio, I, 72, pl. II, f. 19.—Mex.
- sepulchralis** FABRICIUS, of Kirby, see Osten Sacken's note, Cat., 54.
- sequax** WILLISTON, Kans. Acad. Sci., x, 133.—W. Kans.
- sordidus** OSTEN SACKEN, Prodrôme, I, 376.—White Mts., N. H.  
WALKER, List, I, 202 (*niger* Macquart) [O. S.].—N. Y.  
WILLISTON, Kans. Acad. Sci., x, 134, note and correction.  
Axton, N. Y.—M. & H.
- striatus** OSTEN SACKEN, Prodrôme, I, 391.—D. C., Ill.  
? WALKER, List, I, 199 (*furcatus*) [O. S., with a doubt].—Martin Falls,  
Canad.  
? BELLARDI, Saggio, I, 74 (*vittatus* Wied.) [O. S., with a doubt].—Mex.  
HINE, Tabanidæ of Ohio, 43.—Ohio.  
N. J.—Smith Cat.
- subcæcutiens** BELLARDI, Saggio, I, 69, pl. II, f. 13.—Mex.
- surdus** OSTEN SACKEN, West. Dipt., 223.—Sierra Nevada.  
WILLISTON, Kans. Acad. Sci., x, 134, notes.—Wash.
- tanycerus** OSTEN SACKEN, Biologia, Dipt., I, 46.—Costa Rica.
- univittatus** MACQUART, Dipt. Exot., Suppl., v, 36.—N. A.  
? MACQUART, Hist. Nat. Dipt., I, 216 (*fascipennis*) [O. S., with a doubt].  
—Philadelphia.  
PETTIT, Bull. 186, Mich. Ex. Sta., oc. at Chatham, Mich.  
HINE, Tabanidæ of Ohio, 44.—Ohio.  
Ill.—Hart; N. J.—Smith Cat.; Fla.—Johnson.
- virgulatus** BELLARDI, Saggio, I, 71, pl. II, f. 17.—Cuantla, Mex.  
VAN DER WULP, Wien. Ent. Zeit., III, 141 (*crassicornis*). [Will.]  
MACQUART, Dipt. Exot., Suppl., IV, 39 (*geminatus*, preoc.) [Will.].—Mex.  
WILLISTON, Biologia, Dipt., I, 255.—Jalisco and Guerrero, Mex.
- vittatus** WIEDEMANN, Dipt. Exot., 106; Auss. Zw., I, 200.—N. A.  
MACQUART, Dipt. Exot., Suppl. v, 37.—Baltimore.  
WALKER, List, I, 197 (*arcolatus*) [O. S.].—N. Y.  
JÆNNICKE, Neue Exot. Dipt., 26 (*lineatus*) [O. S.].—Ill.  
OSTEN SACKEN, Prodrôme, I, 390.—Middle and Northern States.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 57, note.—Kans.  
HART, Bull. Ill. State Lab. N. H., IV, 228, figs. and desc. of larva and  
pupa.  
HINE, Tabanidæ of Ohio, 44.—Ohio.  
N. J.—Smith Cat.; Fla., several places—Johnson; Montreal—Chagnon.

## LEPIDOSELAGA.

- MACQUART, Dipt. Exot., I, 1, 153, 1838 (*Lepisclaga*).  
PERTY, Delectus Anim., 182, 1834 (*Hadrus*, preoc.).  
LOEW, Dipt. Südafrika's, 31, 1860.  
WILLISTON, Biologia, Dipt., I, 262, 1901.

**lepidota** WIEDEMANN, Auss. Zw., 1, 193 (*Tabanus*).—Brazil.

FABRICIUS, Syst. Antl., 108 (*Hæmatopota crassipes*) [Loew].—S. A.

PERTY, Delectus Anim., 183, pl. XXXVI. f. 9 (*Hadrus*).—Brazil.

MACQUART, Dipt. Exot., 1, 1, 154, pl. XVIII, f. 3.—Guiana and Brazil.

BELLARDI, Saggio, 1, 75 (*Hadrus*).—Mex.

LOEW, Cent., VIII, 8 (*recta*) [Will.].—Mex.

SCHINER, Novara, 96 (*Hadrus*).—S. A.

OSTEN SACKEN, Biologia, Dipt., 1, 57 (*recta*).—Guatemala.

WILLISTON, Kans. Univ. Quart., III, 192 (*Hadrus*); Biologia, Dipt., 1, 262, oc. in Jalisco, Mex.

TOWNSEND, Annals and Mag. Nat. Hist., XIX, 19, oc. in Vera Cruz.

#### HÆMATOPOTA.

MEIGEN, Illig. Mag., II, 267, 1803; Syst. Besch., II, 58, 1820.

SCHINER, Fauna Austr., 1, 37, 1862.

**americana** OSTEN SACKEN, Prodrôme, 1, 395.—Fort Resolution, Huds. Bay Terr.; Lake Superior, Dakota, Mont., Br. Col.

WILLISTON, Kans. Acad. Sci., X, 135, probably same as *punctulata*.

**punctulata** MACQUART, Dipt. Exot., 1, 1, 163.—Carolina.

N. J.—Smith Cat.

#### DIACHLORUS.

OSTEN SACKEN, Prodrôme, II, 475, 1876, change of name.

MACQUART, Hist. Nat. Dipt., 1, 207, 1834; Dipt. Exot., 1, 1, 150, 1838 (both *Diabasis*, preoc.).

**ferrugatus** FABRICIUS, Syst. Antl., III (*Chrysops*).—Carolina.

PALISOT DE BEAUVAIS, Dipt., pl. III, f. 6 (*Tabanus americanus*).

WIEDEMANN, Dipt. Exot., 94 (*Tabanus*); Auss. Zw., 1, 186 (id.).—Carolina.

MACQUART, Dipt. Exot., 1, 1, 152 (*Diabasis atenia*).—Carolina and Brazil.

WALKER, List, 1, 198 (*Chrysops approximatus* and *convergens*).—Fla. and Honduras.

BELLARDI, Saggio, 1, 68, pl. II, f. 11 (*Tabanus rondanii*).—Mex.

OSTEN SACKEN, Prodrôme, 1, 396; II, 475; Cat., 55, synonymy.

WILLISTON, Biologia, Dipt., Suppl., 263, oc. in Teapa, Mex.

**guttatulus** TOWNSEND, see *Tabanus*.

**notatus** BIGOT, see *Silvius quadricittatus*.

#### STIBASOMA.

SCHINER, Verh. Zool.-Bot. Ges., XVII, 310, 1867; Novara, 93, 1868.

**fulvohirtum** WIEDEMANN, Auss. Zw., 1, 155 (*Tabanus*).—Brazil.

SCHINER, Novara, 94.—Colombia.

WALKER, List, v, 222 (*Tabanus compactus*) [O. S.].—Amazon.

OSTEN SACKEN, Biologia, Dipt., 1, 57.—Panama.

**pachycephalum** BIGOT, Mém. Soc. Zool. France, v, 636.—Mex.

#### DICHELACERA.

MACQUART, Dipt. Exot., 1, 1, 112, 1838.

**abiens** WALKER, List, 1, 191.—W. Indies.

**cervicornis** FABRICIUS, Syst. Antl., 100 (*Tabanus*).—S. A.

WIEDEMANN, Dipt. Exot., 79; Auss. Zw., 1, 157 (*Tabanus*).—S. A.

OSTEN SACKEN, Biologia, Dipt., 1, 58, oc. in Cent. Am. and Panama.

WILLISTON, Biologia, Dipt., 1, 263, oc. in Guerrero, Mex., several places.

*fasciata* WALKER, is South American; see Osten Sacken, Cat., 55.

*pachypalpus* BIGOT, Mém. Soc. Zool. France, v, 631.—Mex.

*pulchra* WILLISTON, Biologia, Dipt., I, 263, pl. IV, f. 22.—Guerrero, Mex., several places.

*scapularis* MACQUART, Dipt. Exot., Suppl. II, 15.—Mex.

BELLARDI, Saggio, I, 53, pl. II, f. 12.—Mex.

#### PITYOCERA.

GIGLIO-TOS, Boll. R. Univ. Torino, XI, No. 224, 1896.

*festæ* GIGLIO-TOS, loc. cit., page 4.—Darlen. Same, XII, No. 276, 1897.

#### TABANUS.

LINNÉ, Fauna Suec., 2d ed., 462, 1761.

FABRICIUS, Syst. Antl., 92, 1805.

MEIGEN, Syst. Besch., II, 22, 1820.

MACQUART, Hist. Nat. Dipt., I, 197, 1834.

ZETTERSTEDT, Dipt. Scand., I, 105, 1842.

LOEW, Verh. Zool.-Bot. Ges., 1858, 573; Dipt. Südafrika's, 31.

SCHINER, Fauna Austr., I, 28, 1862.

OSTEN SACKEN, Prodrôme, II, 421, 1875, table of species; Biologia, Dipt., I, 51, brief table of black species.

BRAUER, Zweifl. d. Kaiserl. Mus., I, 15-112, 6 pl.; a modern revision of the European species.

WILLISTON, Kans. Acad. Sci., x, 135, table of species, supplementary to O. S.; Biologia, Dipt. Suppl., 257, table of Mexican spp.

HART, Bull. Ill. State Lab. N. H., IV, 230, keys to part of the species by larvæ and pupæ.

HINE, Tabanidæ of Ohio, 46, 1903, table of Ohio species.

*Note.*—For the reasons set forth by Brauer and Williston, loc. cit., I have not preserved Osten Sacken's subgeneric or quasi-generic terms *Atylotus* and *Theriopectes*.

*abdominalis* FABRICIUS, Syst. Antl., 96.—Carolina.

? PALISOT DE BEAUVAIS, Ins., 101, pl. II, f. 4. [O. S., with a doubt.]

OSTEN SACKEN, Prodrôme, II, 434; Suppl., 557; Cat., 227, note 76, on types.—Ill., Ky., Ga.

Ill., common—Hart; N. J.—Smith Cat.; Fla.—Johnson.

*actæon* OSTEN SACKEN, Prodrôme, II, 443.—Mass., Conn., Wis., Minn., Can.

*acutus* BIGOT, Mém. Soc. Zool. France, v, 660.—New Orleans.

*ægrotus* OSTEN SACKEN, West. Dipt., 219.—Cal.

WILLISTON, Kans. Acad. Sci., x, 139, notes; Ore.

*affinis* KIRBY, Fauna Boreali-Amer., IV, 313.—Canada. Republished in Canad. Ent., XIII, 166.

WALKER, List, v, 183 (*triligatus*) [O. S.]—Arctic Amer.

OSTEN SACKEN, Prodrôme, II, 466.—N. U. S. and Br. Amer.

WILLISTON, Kans. Acad. Sci., x, 137, note.—Col.

N. J.—Smith Cat.; Montreal—Chagnon; Ohio—Hine.

*albiscutellatus* MACQUART, Dipt. Exot., Suppl. IV, 34, pl. II, f. 9.—Mex.

*albonotatus* BELLARDI, Saggio, I, 56, pl. II, f. 5.—Mex.

WALKER, List, I, 157 (*oculus*); 158 (*bipartitus*) [O. S.]—Honduras and Colombia.

OSTEN SACKEN, Biologia, Dipt., I, 55.—Brit. Honduras.

WILLISTON, Biologia, Dipt., I, 260, oc. in Teapa, Mex.

- alcis** WILLISTON, Dipt. St. Vincent, 302, pl. x, f. 77.—St. Vincent, W. I.
- alene** TOWNSEND, Trans. Amer. Ent. Soc., xxii, 59.—Jamaica.
- allynii** MARTEN, Canad. Ent., xv, 110.—N. C.  
WILLISTON, Kans. Acad. Sci., x, 136, pt. desc.
- alteripennis** WALKER, Trans. Ent. Soc., v, 274.—Mex.
- americanus** FORSTER, Nov. Spec., Cent., i, 100, 1771.  
DRURY, Ins., i, pl. XLIV, f. 2 (*plumbeus*).  
FABRICIUS, Syst. Ent., 789; Ent. Syst., iv, 365; Syst. Antl., 96 (*ruficornis*).  
—America.  
WIEDEMANN, Dipt. Exot., 62; Auss. Zw., i, 112 (*ruficornis*).—N. A.  
PALISOT DE BEAUVAIS, Ins. Dipt., pl. i, f. 2 (*limbatus*).  
OSTEN SACKEN, Prodrôme, II, 457.—Middle and Southern States.  
Ill.—Hart; N. J.—Smith Cat.; Fla.—Johnson.
- angustifrons** TOWNSEND, Trans. Amer. Ent. Soc., xxii, 59.—Jamaica.
- annulatus** SAY, Jour. Acad. Sci. Phil., III, 32; Compl. Works, II, 53.—Mo.  
WIEDEMANN, Auss. Zw., i, 185.  
OSTEN SACKEN, Prodrôme, Suppl., 555.—Ky., Ga., Kans., La.  
WILLISTON, Kans. Acad. Sci., x, 142, note.
- astutus** OSTEN SACKEN, Prodrôme, II, 471.—N. Y., Conn., White Mts., N. H.  
Montreal—Chagnon.
- atratus** FABRICIUS, Syst. Ent., 789; Ent. Syst., iv, 366; Syst. Antl., 96.—W. I.  
PALISOT DE BEAUVAIS, Ins. Dipt., 54, pl. i, f. i (*niger*).  
DRURY, Ins., i, pl. XLIV, f. 3 (*americanus*, preoc.).  
WIEDEMANN, Dipt. Exot., 63; Auss. Zw., i, 114; loc. cit., 113 (*validus*).—  
N. A.; Pa.  
MACQUART, Dipt. Exot., i, 1, 142.—Mex., Ga.  
BELLARDI, Saggio, i, 58.—Mex.  
HARRIS, Ins. of New Eng., 3d ed., 602.  
WALSH, Proc. Bost. Soc. N. H., IX, 304, desc. of larva, which feeds on  
snails (undetermined).  
RILEY, 2d Mo. Rept., 128, figs., desc. of larval habits, etc., and identifica-  
tion of Walsh's larva.  
OSTEN SACKEN, Prodrôme, II, 454.—Southern Canada to Mexico, east of  
the Rocky Mts.  
HART, Bull. Ill. State Lab. N. H., iv, 242, desc. and figs. of larva and pupa.  
TOWNSEND, Trans. Amer. Ent. Soc., xxii, 60, notes; Jour. N. Y. Ent. Soc.,  
vi, 50, oc. in Texas.  
WILLISTON, Biologia, Dipt., i, 259, oc. in Chihuahua, Mex.  
HINE, Tabanidæ of Ohio, 45, egg-laying; 48, desc.—Ohio.
- aurantiacus** BELLARDI, Saggio, i, 67, pl. II, f. 9.—Mex.  
WILLISTON, Biologia, Dipt., i, 259.—Guadalajara, San Blas, and Orizaba,  
Mex.
- baal** TOWNSEND, Trans. Amer. Ent. Soc., xxii, 58.—Dixie Landing, Va.
- bicolor** WIEDEMANN, Dipt. Exot., 96; Auss. Zw., i, 188.—N. A.  
MACQUART, Dipt. Exot., Suppl. v, 35 (*ruficeps*).—Baltimore.  
WALKER, List, i, 171 (*fulvescens*).—Mass.  
OSTEN SACKEN, Prodrôme, II, 460.—N. Y., Pa., Ill., Quebec.  
HINE, Tabanidæ of Ohio, 48.—Ohio.  
N. J.—Smith Cat.; Montreal—Chagnon.
- bifenestratus** OSTEN SACKEN, Biologia, Dipt., i, 52, pl. i, f. 9.—Durango, Mex.
- bigoti** BELLARDI, Saggio, i, 58.—Mex.  
MACQUART, Dipt. Exot., Suppl. II, 20 (*apicalis*, preoc.). [Bell.]

- SCHINER, Novara, 89, changes Macquart's name to *macquarti*.—Colombia.
- OSTEN SACKEN, *Biologia*, Dipt., 1, 48.—Nicaragua.
- calens* LINNÉ, is unrecognizable; O. S. Cat., 61.
- caliginosus* BELLARDI, *Saggio*, 1, 68, pl. II, f. 10.—Mex.
- WILLISTON, *Biologia*, Dipt., Suppl., 259, oc. in Vera Cruz and Omealca, Mex.; see *T. ebrius*.
- campechianus* TOWNSEND, *Canad. Ent.*, XXIX, 197.—Campeche, Mex.
- CARNEUS BELLARDI, *Saggio*, 1, 62.—Mex.
- carolinensis* MACQUART, *Dipt. Exot.*, 1, 1, 145.—Carolina.
- OSTEN SACKEN, *Prodrome*, II, 473, note; Cat. 226, note 72, on type.
- HINE, *Tabanidæ of Ohio*, 49.—Ohio, several places.
- cerastes* OSTEN SACKEN, see *hirtioculatus*.
- chionostigma* OSTEN SACKEN, *Biologia*, Dipt., 1, 54, pl. 1, f. 11.—Guatemala.
- WILLISTON, *Biologia*, Dipt., 1, 259.—Teapa, Mex.
- cinctus* FABRICIUS, *Ent. Syst.*, IV, 366; *Syst. Antl.*, 97.—Va.
- MEIGEN, *Syst. Besch.*, II, 42, erroneously supposed to be from Europe.
- WIEDEMANN, *Dipt. Exot.*, 67; *Auss. Zw.*, 1, 119.—Va.
- HARRIS, *Inis. New Eng.*, 3d ed., 602, f. 261.
- OSTEN SACKEN, *Prodrome*, II, 464.—White Mts., N. H., to Ga.
- WILLISTON, *Kans. Acad. Sci.*, x, 138, notes.
- cingulatus* MACQUART, *Dipt. Exot.*, 1, 1, 144.—Phil.
- circumfusus* WIEDEMANN, *Auss. Zw.*, II, 624.—Mex.
- coffeatus* MACQUART, *Dipt. Exot. Suppl.*, II, 23.—Philadelphia.
- ? WIEDEMANN, *Auss. Zw.*, 1, 142 (*nigripes*) [O. S., with a doubt].—Savannah.
- OSTEN SACKEN, *Prodrome*, II, 441.—Mass. to Fla.
- N. J.—Smith Cat.
- comastes* WILLISTON, *Kans. Acad. Sci.*, x, 137.—Wash.; Mt. Hood, Ore.
- TOWNSEND, *Trans. Amer. Ent. Soc.*, XXII, 58 (Col., Cal.): *Proc. Cal. Acad. Sci.*, IV, 397, notes.—Lower Cal.
- comes* WALKER, *List*, 1, 172 (*inscitus*, preoc.): v, 173, change of name.—Martin Falls, Canada. Unrecognizable—O. S.
- commixtus* WALKER, see *lineola*.
- completus* WALKER, *List*, 1, 185.—St. Thomas, W. I.
- confusus* WALKER, *List*, 1, 147.—Ga. Unrecognizable—O. S.
- conterminus* WALKER, *Dipt. Saund.*, 24.—U. S. Unrecognizable—O. S.
- corone* OSTEN SACKEN, *Biologia*, Dipt. 1, 57.—Guatemala.
- costalis* WIEDEMANN, *Auss. Zw.*, 1, 173.—Ky.
- MACQUART, *Dipt. Exot.*, Suppl. v, 34 (*baltimorensis*).—Baltimore.
- WALKER, *List*, 1, 137 (*vicarius*).—Honduras and Mass.
- ? BELLARDI, *Saggio*, 1, 63.—Mex. (Query by O. S.)
- OSTEN SACKEN, *Prodrome*, II, 450.—Eastern and Middle States; Fla.
- HART, *Bull. Ill. State Lab. N. H.*, IV, 236, desc. and figs. of larva and pupa.
- HINE, *Tabanidæ of Ohio*, 50.—Ohio.
- craverii* BELLARDI, *Saggio*, 1, 60.—Mex.
- cribellum* OSTEN SACKEN, *Biologia*, Dipt., 1, 52, pl. 1, f. 10.—Presidio, Mex.
- cymatophorus* OSTEN SACKEN, *Prodrome*, II, 444.—Ky. Ill.—Hart.
- de filippii* BELLARDI, *Saggio*, 1, 57.—Mex.
- derivatus* WALKER, *List*, 1, 151.—N. A.
- OSTEN SACKEN, *Cat.*, 62, note.
- dodgei* WHITNEY, *Canad. Ent.*, XI, 37.—Glencoe, Nebr.
- WILLISTON, *Kans. Acad. Sci.*, x, 135, pt. desc.
- dorsifer* WALKER, *Trans. Ent. Soc.*, v, 273.—Mex.



- dorsonotatus** MACQUART, Dipt. Exot., Suppl., II, 22.—Carolina. Unrecognizable—O. S.
- duplex** WALKER, List, I, 173 (*imitans*, preoc.); v, 173, change of name.—Martin Falls, Canada. Unrecognizable—O. S.
- ebrius** OSTEN SACKEN, Biologia, Dipt., I, 49, pl. 1, f. 8.—Costa Rica, Panama.  
WILLISTON, Biologia, Dipt., Suppl., 259, thinks may be only a pale var. of *caliginosus* BELL.
- endymion** OSTEN SACKEN, Prodrôme, Suppl., 556.—Ga.
- epistates** OSTEN SACKEN, Prodrôme, II, 467 (*socius*, preoc.); Suppl., 555, name changed.—Fort Simpson, Northwest Canada.  
HINE, Tabanidæ of Ohio, 50.—Ohio.  
N. J.—Smith Cat.
- erebus** OSTEN SACKEN, Biologia, Dipt., I, 50.—Nicaragua, Panama.
- erythræus** BIGOT, Mém. Soc. Zool. France, v, 661.—Mex.
- erythrocephalus** BIGOT, Mém. Soc. Zool. France, v, 668.—Panama.
- exul** OSTEN SACKEN, Prodrôme, Suppl., 557.—D. C., Md., Pa., N. J.  
WIEDEMANN, Auss. Zw., I, 116; Dipt. Exot., 65 (*abdominalis* Fabr.).  
[O. S.]  
WILLISTON, Kans. Acad. Sci., x, 138, note.  
JOHNSON, Ent. News, IX, 126, may be a synonym of *abdominalis*.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 60, notes. III.—Hart.
- fenestra** WILLISTON, Kans. Acad. Sci., x, 141.—San Domingo.
- ferrifer** WALKER, Dipt. Saund., 30.—W. I. ("Barbadoes?")
- ferrugineus** PALISOT DE BEAUVAIS, Ins. Recu., pl. III, f. 221.
- filiolus** WILLISTON, Biologia, Dipt., I, 261.—N. Yucatan.  
? MACQUART, Dipt. Exot., I, 1, 141 (*rufiventris*, preoc.) [Will., with a ?].  
—Cuba.
- flavipes** WIEDEMANN, Auss. Zw., I, 137.—Labrador.  
OSTEN SACKEN, Prodrôme, II, 462.—Labrador.  
BRAUER, Zw. Kaiserl. Mus., I, 37.—East Siberia.
- fratellus** WILLISTON, Kans. Acad. Sci., x, 140.—Wash.
- frenchii** MARTEN, Canad. Ent., xv, 111.—Mont.  
WILLISTON, Kans. Acad. Sci., x, 136, note.
- frontalis** WALKER, List, I, 172.—Nova Scotia. Unrecognizable—O. S.
- fronto** OSTEN SACKEN, Prodrôme, II, 431.—Ga.  
? RONDANI, NUOVO Ann. d. Sci. Nat. di Bologna (*cheilopterus*); reproduced by OSTEN SACKEN, Prodrôme, II, 472; see also O. S. Cat., note 79, on type.—Carolina.  
WILLISTON, Kans. Acad. Sci., x, 138.—Fla.  
St. Augustine and Charlotte Harbor, Fla.—Johnson.
- fulvofrater** WALKER, List, I, 181.—Ill. Unrecognizable—O. S.
- fulvulus** WIEDEMANN, Auss. Zw., I, 153.—"Amerika?"  
OSTEN SACKEN, Prodrôme, II, 451.—Mid. States, Ky.  
N. J.—Smith Cat.; Ill.—Hart.
- fur** WILLISTON, Kans. Acad. Sci., x, 139 (Fla.); Biologia, Dipt., I, 261, oc. in Misantla, Mex.
- furunculus** WILLISTON, Biologia, Dipt., I, 260.—Guerrero and Jalisco, Mex.
- fuscicrura** BIGOT, Mém. Soc. Zool. France, v, 662.—Mex.
- fuscipalpis** BIGOT, Mém. Soc. Zool. France, v, 681.—Wash.
- fuscopunctatus** MACQUART, Dipt. Exot., Suppl. IV, 34.—Ga.  
WALKER, List, I, 146 (*imitans*).—Ga.  
OSTEN SACKEN, Prodrôme, II, 432; Suppl. 559; Cat., 228, note 80, on Walker's desc.—Fla., S. C., Ga.

- giganteus** DEGEER, Ins., VI, 226, pl. XXX, f. 1.  
 FABRICIUS, Spec. Ins., II, 455; Ent. Syst., IV, 363; Syst. Antl., 94 (*lineatus*).  
 —N. A.  
 WIEDEMANN, Dipt. Exot., 63; Auss. Zw., I, 115 (*lineatus*).—N. A.  
 MACQUART, Dipt. Exot., Suppl. II, 21 (*bicolor*); v, 32 (*casiofasciatus*)  
 [O. S.].—S. C. and Baltimore.  
 WILLISTON, Kans. Acad. Sci., X, 139, oc. and injury to cattle at Vandalia,  
 Ill.  
 Fla.—Johnson; N. J.—Smith Cat.  
 HINE, Tabanidæ of Ohio, 51.—Ohio.
- gilanus** TOWNSEND, Psyche, 1897, 92.—N. M.
- gracilis** WIEDEMANN, Auss. Zw., I, 156.—Ga.  
 OSTEN SACKEN, Cat., note 81, on type.  
 WILLISTON, Kans. Acad. Sci., X, 140.—Fla.
- guttatulus** TOWNSEND, Kans. Acad. Sci., XIII, 134 (*Diachlorus*); Psyche, Dec.,  
 1897, 148, refers to *Tabanus*.—Las Cruces, N. M.
- hæmagogus** WILLISTON, Biologia, Dipt., 261.—N. Yucatan.
- hæmatopotooides** BIGOT, Mém. Soc. Zool. France, v, 224 (*Diatomincura*?).—  
 Wash. I refer to this genus, from the description.
- hirtiocolatus** MACQUART, Dipt. Exot., Suppl., v, 33.—Baltimore.  
 OSTEN SACKEN, Prodrôme, II, 462 and 473 (*cerastes*); Cat., 227, note 79,  
 on types of Macq.—Ky., Wis. Ill.—Hart.  
 HINE, Tabanidæ of Ohio, 49 (*cerastes*).—Ohio.
- hirtulus** BIGOT, Mém. Soc. Zool. France, v, 641.—Wash.
- hyalinipennis** HINE, Canad. Ent., XXXV, 244.—Oak Creek Canyon, Ariz.
- illotus** OSTEN SACKEN, Prodrôme, II, 469.—Canada, Labrador to Yukon R.
- incisus** WALKER, Dipt. Saund., 26.—Cape Breton. Unrecognizable—O. S.
- insuetus** OSTEN SACKEN, West. Dipt., 219.—Webber Lake, Cal.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 407, oc. in Alaska.
- intensivus** TOWNSEND, Psyche, 1897, 93.—West Fork Gila R., N. M.
- intermedius** WALKER, List, I, 173.—Martin Falls, Canada. Unrecognizable—  
 O. S.
- lasiophthalmus** MACQUART, Dipt. Exot., I, 1, 143; Suppl., II, 23 (the latter *punc-*  
*tipennis*).—Carolina and Philadelphia.  
 WALKER, List, I, 166 (*notabilis*).—N. Y. and Ga.  
 OSTEN SACKEN, Prodrôme, II, 465, 473.—Quebec; Maine to Ill.  
 PETTIT, Bull. 186, Mich. Ex. Sta., oc. at Chatham, N. Mich.  
 HINE, Tabanidæ of Ohio, 51.—Ohio.  
 Ill.—Hart; N. J.—Smith Cat.; White Mts.—Slosson; Montreal—Chag-  
 non; Axton, N. Y.—M. & H.
- leucomelas** WALKER, List, I, 175.—Ga. Unrecognizable—O. S.
- leucophorus** BIGOT, Mém. Soc. Zool. France, v, 640.—Mt. Hood, Ore.
- lineola** FABRICIUS, Ent. Syst., IV, 369; Syst. Antl., 102.—N. A.  
 COQUEBERT, Illust. Iconographica, 112, pl. XXV, f. 6.  
 WIEDEMANN, Dipt. Exot., 81; Auss. Zw., I, 170.—N. A.  
 ? PALISOT DE BEAUVAIS, Dipt., pl. II, f. 6 [O. S., with a doubt].  
 HARRIS, Ins. New Eng., 3d ed., 602, f. 262.  
 WALKER, List, I, 182 (*simulans*); Dipt. Saund., 27 (*scutellaris*); Trans.  
 Ent. Soc., v, 273 (*compactus*).—Nova Scotia, N. A., and Mexico, re-  
 spectively; the synonymy is by Osten Sacken, the last two being some-  
 what doubtful; see Biologia, Dipt., I, 56.  
 OSTEN SACKEN, Prodrôme, II, 448.—Canada, U. S., Mex.; common.

- HART, Bull. Ill. State Lab. N. H., iv, 235, figs. and desc. of larva and pupa.
- LUGGER, 2d Rept. Ent. Minn., 1896, 168, mention and good figure.
- WILLISTON, Biología, Dipt., i, 260, oc. in Guerrero, Mex.; *propinquus* BELLARDI may be the same.
- HINE, Tabanidæ of Ohio, 51.—Ohio.
- longiappendiculatus** MACQUART, Dipt. Exot., Suppl., v, 32.—Honduras.
- longus** OSTEN SACKEN, Prodrôme, II, 447; Suppl., 559.—Middle States.
- HINE, Tabanidæ of Ohio, 52.—Ohio.
- Fla.—Johnson.
- lucidulus** WALKER, List, I, 188.—Jamaica.
- lugubris** MACQUART, Dipt. Exot., I, 1, 145.—Carolina.
- PALISOT DE BEAUVAIS, Ins. Dipt., pl. II, f. 5 (*ater*, preoc.). [O. S.]
- WIEDEMANN, Dipt. Exot., 74; Auss. Zw., I, 136 (*ater*; the latter only in part—O. S.).—Savannah.
- OSTEN SACKEN, Prodrôme, II, 456.—S. C.
- luteoflavus** BELLARDI, Saggio, I, 60.—Mex.
- maculifer** BIGOT, Mém. Soc. Zool. France, v, 641.—Wash.
- maculosus** COQUILLET, Jour. N. Y. Ent. Soc., x, 138.—Chihuahua, Mex.
- maritimus** TOWNSEND, Ent. News, IX, 167.—Padre Id., Texas; may be same as *nanus* MCQ.
- megerlei** WIEDEMANN, Auss. Zw., I, 132, no locality.
- OSTEN SACKEN, Prodrôme, II, 457.—Fla.
- WILLISTON, Kans. Acad. Sci., x, 138, female.—Fla.
- melanocerus** WIEDEMANN, Auss. Zw., I, 122.—Ky.
- ? LINNÉ, Syst. Nat., II, 1000 (*cræstians*) [O. S., with a doubt].—Surinam.
- OSTEN SACKEN, Prodrôme, II, 440.—Fla. to Ky.
- N. J.—Smith Cat.
- ? WILLISTON, Kans. Acad. Sci., x, 139, notes.
- melanorhinus** BIGOT, Mém. Soc. Zool. France, v, 642.—Wash.
- mexicanus** LINNÉ, Syst. Nat., II, 1000.—Mex.
- DEGEER, Ins., VI, 230, pl. xxx, f. 6 (*olivaceus*) [Fab.].
- FABRICIUS, Spec. Ins., II, 457; Ent. Syst., IV, 367 and 368 (the latter *punctatus* and *inanis*); Syst. Antl., 98.—Cayenne, S. A., and synonymy.
- WIEDEMANN, Dipt. Exot., 76; Auss. Zw., I, 147.—S. A.
- PALISOT DE BEAUVAIS, Ins., 222, pl. III, f. 3 (*sulphureus*).
- MEIGEN, Syst. Besch., II, 62 (*ochroleucus*; by mistake as a European species—Wied.).
- MACQUART, Hist. Nat. Dipt., I, 200 (*flavus*); Dipt. Exot., I, 1, 143.—U. S.
- GUÉRIN and PERCHERON, Genera, Dipt., II (*flavus*).
- WALKER, Newman's Zoology, VIII, App. LXVI (*viridiflavus*; thus quoted "fide Walker," by Bellardi, Saggio, I, 59).
- OSTEN SACKEN, Prodrôme, II, 459.—Fla., S. C., N. J., Mo.
- TOWNSEND, Annals and Mag. Nat. Hist., XX, 21, with table of varieties.—Vera Cruz.
- microcephalus** OSTEN SACKEN, Prodrôme, II, 470.—N. Y., Mass., N. H.
- molestus** SAY, Jour. Acad. Sci. Phil., III, 31; Compl. Works, II, 53.—Mo.
- WIEDEMANN, Auss. Zw., I, 125.
- OSTEN SACKEN, Prodrôme, II, 438.—D. C., Ky., Ga., Mo.
- N. J.—Smith Cat.; Fla., Tick Id.—Johnson.
- mutatus** WALKER, Dipt. Saund., 23.—U. S. Unrecognizable—O. S.
- nanus** MACQUART, Dipt. Exot., Suppl. I, 42.—Texas. Unrecognizable—O. S.

- nebulosus** PALISOT DE BEAUVAIS, Ins. Recu., 222, pl. II, f. 4 and 5.  
Unrecognizable—O. S.
- nigrescens** PALISOT DE BEAUVAIS, Dipt., 100, pl. II, f. 2.—N. A.  
WIEDEMANN, Auss. Zw., I, 116, translates desc.  
OSTEN SACKEN, Prodrôme, II, 453.—Va., N. Y., Mass., N. J., Pa., Md.,  
Tenn., Can.  
HART, Bull. Ill. State Lab. N. H., IV, 238, desc. of pupa.—Ill.
- nigrovittatus** MACQUART, Dipt. Exot., Suppl. II, 24.—Nova Scotia.  
OSTEN SACKEN, Prodrôme, II, 449.—Mass., R. I., N. Y., N. J.  
N. J.—Smith Cat., "The common 'greenhead' of the seashore"; Mon-  
treal—Chagnon; Fla., St. Augustine—Johnson.
- nivosus** OSTEN SACKEN, Prodrôme, II, 445.—N. J.  
HINE, Tabanidæ of Ohio, 52.—Ohio.
- novæ-scotiæ** MACQUART, Dipt. Exot., Suppl. II, 24.—Nova Scotia.  
OSTEN SACKEN, Cat., 61, note on type.
- obesus** BIGOT, Mém. Soc. Zool. France, v, 660.—Mex.
- obliquus** WALKER, Dipt. Saund., 28.—Jamaica.
- ohioensis** HINE, Canad. Ent., 1900, 248 (*pruinus*, preoc.); 1901, 28, change of  
name; Tabanidæ of Ohio, 53.—Ohio.
- orion** OSTEN SACKEN, Prodrôme, II, 442.—Mass., Conn., N. Y., Quebec.  
N. J.—Smith Cat.; Montreal—Chagnon.
- pallidus** PALISOT DE BEAUVAIS, Ins. Recu., 100, pl. III, f. 3.—N. A.  
Unrecognizable—O. S.
- palpinus** PALISOT DE BEAUVAIS, Ins. Recu., 221, pl. III, f. 1.—N. A.  
Unrecognizable—O. S.
- parallelus** WALKER, List, I, 187.—W. I.
- parvidentatus** MACQUART, Dipt. Exot., I, I, 142.—Antilles.
- parvulus** WILLISTON, Kans. Acad. Sci., x, 141.—San Domingo.
- patulus** WALKER, List, I, 175.—Ga.
- phænops** OSTEN SACKEN, West. Dipt., 217.—Sierra Nevadas, Cal.  
TOWNSEND, Proc. Cal. Acad. Sci., IV, 597, notes.
- picticornis** BIGOT, Mém. Soc. Zool. France, v, 662.—Hayti.
- politicus** JOHNSON, Ent. News, XI, 325.—Merchantville, N. J.
- procyon** OSTEN SACKEN, West. Dipt., 216.—Marin and Sonoma Counties, Cal.
- propinquus** BELLARDI, Saggio, I, 65.—Mex. Preoccupied; Williston thinks this  
may be the same as *lincola*.
- proximus** WALKER, List, I, 147.—Fla. Unrecognizable—O. S.
- pruinus** BIGOT, Mém. Soc. Zool. France, v, 683.—Mex.
- pruinus** HINE, see *ohioensis*.
- psammophilus** OSTEN SACKEN, Prodrôme, II, 445.—Ft. Capron, Fla.  
Lake Worth, Fla.—Johnson.
- pumilioides** WILLISTON, Biologia, Dipt., I, 260, pl. IV, f. 21.—Guerrero, Mex.
- pumilus** MACQUART, Dipt. Exot., I, I, 146.—Carolina.  
OSTEN SACKEN, Prodrôme, II, 448.—Md., N. Y., Fla.  
HINE, Tabanidæ of Ohio, 53.—Ohio.  
N. J.—Smith Cat.; Fla., several places—Johnson.
- punctifer** OSTEN SACKEN, Prodrôme, II, 453; West. Dipt., 220.—Utah, Cal., Col.,  
and Sonora, Mex.  
WILLISTON, Kans. Acad. Sci., x, 139, notes.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 60, oc. in N. M. and Lower Cal.  
Idaho and Wash.—J. M. A.
- purus** WALKER, Trans. Ent. Soc., v, 274.—Mex.
- pygmæus** WILLISTON, Kans. Acad. Sci., x, 141.—Fla.

- quadripunctatus** FABRICIUS, Syst. Antl., 99.—S. A.  
 WIEDEMANN, Dipt. Exot., 77; Auss. Zw., 1, 151.—Brazil.  
 BELLARDI, Saggio, 1, 67, pl. II, f. 8 (*nigròpunctatus*).—Mex. [O.S.]  
 SCHINER, Novara, 86, additional desc.—S. A.  
 OSTEN SACKEN, Biologia, Dipt., 1, 48.—Mex., Guatemala, Costa Rica.  
 WILLISTON, Biologia, Dipt., 1, 259, oc. in Guerrero and Guanajuato, Mex.
- quinquevittatus** WIEDEMANN, Dipt. Exot., 84; Auss. Zw., 1, 173.—Mex.  
 BELLARDI, Saggio, 1, 65.—Mex.  
 OSTEN SACKEN, Cat., 228, note 88.
- recedens** WALKER, List, 1, 147.—Fla.  
 OSTEN SACKEN, Prodrôme, II, 433 (*catenatus* Walk.)—Conn., N. Y., Pa.,  
 Md., S. C. Catalogue, 227, note 77, explains the mistake about Walk-  
 er's types, and calls the species *catenatus* O. S.  
 WILLISTON, Kans. Acad. Sci., x, 138, prefers *recedens*.  
 N. J.—Smith Cat.
- reinwardtii** WIEDEMANN, Auss. Zw., 1, 130.—Pa.  
 WALKER, Dipt. Saund., 25, pl. II, f. 1 (*erythrotelus*).—Bolton, U. S.  
 [O. S.]  
 OSTEN SACKEN, Prodrôme, II, 461.—Canada; Vt. to Ia.  
 TOWNSEND, Psyche, 1897, 92, note.  
 LUGGER, 2d Rept. Ent. Minn., 1896, 168, mention and good figure.—Minn.  
 HINE, Tabanidæ of Ohio, 54.—Ohio.  
 N. J.—Smith Cat.; Montreal—Chagnon; Ill.—Hart.
- rhombicus** OSTEN SACKEN, Prodrôme, II, 472; West. Dipt., 218, notes.—Col.  
 WILLISTON, Kans. Acad. Sci., x, 137, notes.—Col.  
 N. M.—Coq.; Beulah, N. M.—Skinner.
- rubescens** BELLARDI, Saggio, App., 15.—Mex.
- rufiventris** MACQUART, Dipt. Exot., 1, 1, 141.—Cuba.  
 WALKER, List, 1, 180, oc. in Jamaica.  
 BIGOT, in Sagra's Cuba, 798, oc.  
 See *filiolus*.
- rufrofrater** WALKER, Dipt. Saund., 26.—Ga. Unrecognizable—O. S.
- rufus** PALISOT DE BEAUVAIS, Dipt., 100, pl. II, f. 1.  
 WIEDEMANN, Auss. Zw., 1, 117, transl. desc.; 119 (*fumipennis*). [O. S.]  
 OSTEN SACKEN, Prodrôme, II, 456; Suppl., 559.—S. C., Ga., Fla.  
 Fla., several places—Johnson.
- sagax** OSTEN SACKEN, Prodrôme, II, 452.—Ill., Minn.  
 N. J.—Smith Cat.
- sallei** BELLARDI, Saggio, 1, 61, pl. II, f. 7.—Mex.
- scitus** WALKER, List, 1, 181.—Ga. Unrecognizable—O. S.
- septentrionalis** LOEW, Verh. Zool.-Bot. Ges., 1858, 593.—Labrador.  
 OSTEN SACKEN, Prodrôme, II, 467.—Labrador.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 406, oc. in Alaska.  
 Montreal—Chagnon.
- sequax** WILLISTON, Kans. Acad. Sci., x, 137.—Mt. Hood, Ore.
- sexvittatus** BIGOT, Mém. Soc. Zool. France, v, 682.—Mex.
- sodalis** WILLISTON, Kans. Acad. Sci., x, 139.—U. S., no locality.  
 N. J.—Smith Cat.
- sonomensis** OSTEN SACKEN, West. Dipt., 216; Marin and Sonoma counties, Cal.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 407, oc. in Alaska.
- sparus** WHITNEY, Canad. Ent., XI, 38.—Milford, N. H.  
 WILLISTON, Kans. Acad. Sci., x, 140.—Conn., Mass.  
 N. J.—Smith Cat.; Inverness, Fla.—Johnson.

- stigma** FABRICIUS, Syst. Antl., 104.—W. I.  
 WIEDEMANN, Dipt. Exot., 92; Auss. Zw., 1, 180.—S. A. and St. Thomas.
- stygius** SAY, Jour. Acad. Sci. Phil., III, 33; Compl. Works, II, 54.—Ark.  
 WIEDEMANN, Auss. Zw., 1, 131.  
 OSTEN SACKEN, Prodrôme, II, 454.—Conn. to Ia.; Fla.  
 HART, Bull. Ill. State Lab. N. H., IV, 239, desc. and figs. of larva and pupa;  
 oc. in Ill.  
 HINE, Tabanidæ of Ohio, 4, 5, egg-laying; 54, desc.—Ohio.  
 Georgiana, Fla.—Johnson; N. J.—Smith Cat.
- subruber** BELLARDI, Saggio, I, 55, change of name; Mex.  
 MACQUART, Dipt. Exot., Suppl. I, 42 (*ruber*, preoc.)—Mex.  
 WILLISTON, Biologia, Dipt., 1, 260, oc. in Teapa, Amula, and Atoyac, Mex
- subs similis** BELLARDI, Saggio, I, 66.—Mex.
- subtilis** BELLARDI, Saggio, App., 14, f. 9.—Mex.
- sulcifrons** MACQUART, Dipt. Exot., Suppl., v, 33.—Baltimore.  
 OSTEN SACKEN, Prodrôme, II, 436 (*tectus*) [O. S.]—Md., Pa.  
 WILLISTON, Kans. Acad. Sci., x, 138, notes; oc. in La.  
 RILEY and HOWARD, Ins. Life, VI, 34, extr. cor. on habits.—Mo. (*tectus*).  
 HINE, Ohio Nat., II, 168, oc. in O.; note on male.  
 HINE, Tabanidæ of Ohio, 9, anatomy, with plate; 54, desc.—Ohio.  
 N. J.—Smith Cat.; Ill.—Hart.
- sumichrasti** BELLARDI, Saggio, I, 56.—Mex.
- superjumentarius** WHITNEY, Canad. Ent., XI, 37.—Milford, N. H.  
 HINE, Tabanidæ of Ohio, 55, redesc.—Akron and Cincinnati, Ohio.
- susurrus** MARTEN, Canad. Ent., XV, III.—Mont.
- tener** OSTEN SACKEN, Prodrôme, II, 440.—Ga., Fla.  
 ? MACQUART, Dipt. Exot., Suppl., II, 22.—Carolina (*unicolor*; the type is  
 unrecognizable, and the name preoccupied—O. S.).  
 Ormond and Indian River, Fla.—Johnson.
- tennessensis** BIGOT, Mém. Soc. Zool. France, v, 660.—Tenn.
- tetricus** MARTEN, Canad. Ent., XV, III.—Mont.
- tetropsis** BIGOT, Mém. Soc. Zool. France, v, 681.—Ga.
- thoracicus** HINE, Canad. Ent., 1900, 248.—Oswego, N. Y.
- tinctus** WALKER, Dipt. Saund., 29.—“St. Thomas?” West Indies—O. S.
- trijunctus** WALKER, List, v, 182.—Fla.  
 OSTEN SACKEN, Prodrôme, II, 432.—Ft. Capron, Fla.
- trilineatus** LATREILLE, in Humboldt et Bonpland's Recueil d'obs., Fasc. x, 116,  
 pl. XI, f. 6.—Brazil.  
 WIEDEMANN, Dipt. Exot., 84; Auss. Zw., 1, 168.—Brazil.  
 BELLARDI, Saggio, I, 63.—Mex.
- trimaculatus** PALISOT DE BEAUVAIS, Dipt., 56, pl. I, f. 5.—S. A.  
 WIEDEMANN, Auss. Zw., 1, 137 (transl. desc.); 132 (his own description,  
 perhaps not of the same species).  
 MACQUART, Hist. Nat. Dipt., 1, 200 (*quinquelincatus*); Dipt. Exot., I, 1,  
 142.—Ga., Carolina.  
 OSTEN SACKEN, Prodrôme, II, 439.—Delaware to Ill. and Miss.  
 HINE, Tabanidæ of Ohio, 55.  
 N. J.—Smith Cat.; Ill.—Hart.
- trispilus** WIEDEMANN, Auss. Zw., 1, 150.—Ky.  
 OSTEN SACKEN, Prodrôme, II, 464.—White Mts., N. H.; Mass., Conn., N.  
 Y., Ill.  
 N. J.—Smith Cat.; Montreal—Chagnon.
- truquii** BELLARDI, Saggio, I, 64, pl. II, f. 6.—Mex.



- turbidus** WIEDEMANN, Auss. Zw., I, 124.—Ky.  
 ? MACQUART, Dipt. Exot., I, 1, 147 (*fuscoconvosus*).—No locality. [O. S., with a doubt.]  
 WALKER, List, I, 148 (*catenatus*; Osten Sacken found that one of the two type specimens belongs here, and the other to *giganteus*;—Cat. 227, note 77).  
 OSTEN SACKEN, Prodrôme, II, 430; Cat., 78, note 84, on type.—Ga., Ky., Ill.  
 WILLISTON, Kans. Acad. Sci., X, 138, notes; Ala.
- variegatus** FABRICIUS, Syst. Antl., 95.—N. A.  
 WIEDEMANN, Dipt. Exot., 67; Auss. Zw., I, 120.—N. A.  
 OSTEN SACKEN, Prodrôme, II, 437; Cat., 228, note 86, on type.—D. C., Md.  
 HINE, Tabanidæ of Ohio, 56.—Ohio.
- venenatus** OSTEN SACKEN, Biologia, Dipt., I, 54.—Guatemala, Panama.
- venustus** OSTEN SACKEN, Prodrôme, II, 444.—Dallas, Tex.  
 HINE, Tabanidæ of Ohio, 56.—Ohio.  
 Ill.—Hart; Kans.—J. M. A.
- vicinus** MACQUART, Dipt. Exot., I, 1, 143.—Carolina.
- villosulus** BIGOT, Mém. Soc. Zool. France, V, 684.—Cal.
- vivax** OSTEN SACKEN, Prodrôme, II, 446.—N. Y., Me.  
 ? FABRICIUS, Syst. Antl., 99 (*marginalis*). [O. S., with a doubt.]  
 WIEDEMANN, Auss. Zw., I, 166, redesc. of Fabricius's type, and additions.—N. A.  
 OSTEN SACKEN, Cat., 228, note 87—types of Fabricius and Wiedemann cannot be found.  
 HINE, Tabanidæ of Ohio, 56; Ohio Nat., IV, Nov., 1903, life history.—Ohio.
- wiedemannii** OSTEN SACKEN, Prodrôme, II, 455; Suppl., 559.—Fla., Ga., Ky.  
 WIEDEMANN, Auss. Zw., I, 136 (*ater* Pal. Beauv.).—Savannah.  
 Fla., several places—Johnson.
- yucatanus** TOWNSEND, Canad. Ent., XXIX, 198.—Yucatan.
- zonalis** KIRBY, Fauna Bor.-Amer., IV, 314.—Canada. Republished in Canad. Ent., XIII, 167.  
 WALKER, List, I, 156 (*tarandi*).—Martin Falls, Can.; Newfoundland.  
 MACQUART, Dipt. Exot., Suppl. IV, 35 (*terra-nova*).—Newfoundland.  
 BELLARDI, Saggio, I, 61 (*flavocinctus*, but probably not from Mex.;—O. S.).  
 OSTEN SACKEN, Prodrôme, II, 463.—Newfoundland to N. W. Brit. Amer.; Me., Wash.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 58, notes.  
 Axton, N. Y.—M. & H.

## ACANTHOMERIDÆ.

See an important discussion of this family by Osten Sacken, Biologia, Dipt., I, 63-66. Also Bigot, Annales Soc. ent. de France, 1882, 452, synopsis of genera and species.

## ACANTHOMERA.

- WIEDEMANN, Dipt. Exot., 60, 1821; Auss. Zw., I, 107, 1828.  
 THUNBERG, Acta Gothob., III, 1819 (*Pantophthalmus*).  
 MACQUART, Hist. Nat. Dipt., I, 217, 1834.  
 BIGOT, Bull. Soc. ent. de France, 1880, no. 1, p. 5; Annales, 1882, 455 (*Megalomyia*, in part). [O. S.]

- argyropasta** BIGOT, Bull. Soc. ent. de France, 1880, no. 1, p. 5; Annales, 1882, 455 (*Megalemyia*).—Panama.
- OSTEN SACKEN, Biologia, Dipt. 1, 64, says this is the male of *Acanthomera seticornis*, but as Bigot, in Bull. Soc. ent. France, 1886, CLXVIII, still maintains both the species and the genus *Megalemyia*, I allow the former to stand.
- bellardii** BIGOT, described by Bellardi, Saggio, App., 16, f. 11, from Mexico, seems never to have been published by Bigot.
- bigoti** BELLARDI, Saggio, App., 16, f. 10.—Oaxaca, Mex.
- championi** OSTEN SACKEN, Biologia, Dipt., 1, 67, pl. III, f. 16.—Nicaragua and Panama.
- BELLARDI, Saggio, 1, 76 (*picta* WIEDEMANN).—Mexico. [O. S.]
- TOWNSEND, Proc. Cal. Acad. Sci., IV, 595.—Costa Rica.
- crassipalpis** MACQUART, Dipt. Exot., Suppl. II, 27, pl. I, f. 3.—Guatemala.
- picta** WIEDEMANN, is not known from North America; for Bellardi's reference see *A. championi*.
- rubriventris** BIGOT, Bull. Soc. ent. de France, no. 1, p. 5; Annales, 1882, 456.—Guatemala.
- seticornis** WIEDEMANN, Auss. Zw., 1, 108.—Brazil.
- MACQUART, Dipt. Exot., 1, 1, 168, pl. XX, f. 1; Suppl. II, 27.—Brazil; Guatemala; may be the male of *crassipalpis*. See also *argyropasta*.
- tabaninus** THUNBERG, Acta Soc. Gothob., III, 1819, III, pl. VII, f. 2 (*Pantophthalmus*).—West Indies.
- WIEDEMANN, Auss. Zw., 1, 110, quotes orig. desc.

#### RHAPHIORHYNCHUS.

- WIEDEMANN, Dipt. Exot., 59, 1821; Auss. Zw., 1, 105, 1828.
- planiventris** WIEDEMANN, Dipt. Exot., 60; Auss. Zw., 1, 106, pl. I, f. 4; II, 622.—Surinam, Guiana.
- MACQUART, Dipt. Exot., 1, 1, 170, pl. XX, f. 3; Suppl. II, 27, pl. I, f. 3 (*Ac. crassipalpis*, in the latter place).—Brazil and Guatemala. [O. S.]
- BELLARDI, Saggio, App., 16, f. 10 (*Ac. bigoti*).—Oaxaca, Mex. [O. S.]
- BIGOT, Annales, 1882, 458 (*crassipalpis* MACQ.).
- OSTEN SACKEN, Biologia, Dipt., 1, 66.—Panama.

Note to the Family Acanthomeridæ.—There exists no reason known to me for maintaining the name *Acanthomera* against the apparently prior name *Pantophthalmus*, the adoption of which would involve a change of the family name to correspond. But I have not access to Thunberg's work, and it seems a very good rule to give the benefit of the doubt to current names.

#### LEPTIDÆ.

(Inclusive of Xylophagidæ and Cœnomyidæ.)

- BIGOT, Bull. Soc. Zool. France, XII, 4, 1887, table of genera of the world, restricted sense.
- JOHANSEN, Bull. 68, N. Y. State Mus., fig. and desc. of undet. larva.

#### CHIROMYZA.

- WIEDEMANN, Dipt. Exot., 114, 1821; Auss. Zw., 1, 237, 1828.
- SCHINER, Novara, 76, 1868.
- BRÄUER, Zweiflüger d. Kaiserl. Mus., II, 15, 1882.
- OSTEN SACKEN, Berl. Ent. Zeitsch., XXV, 296, 1883; Biologia, Dipt., 1, 60, 1886.

- fuscana** WIEDEMANN, Dipt. Exot., 115; Auss. Zw., 1, 238.—Brazil.  
OSTEN SACKEN, Biologia, Dipt., 1, 60. oc. in Guatemala and Costa Rica.

## CENOMYIA.

- LATREILLE, Précis. d. Caract. gén. Ins., 1797; Hist. Nat. Crust. et Ins., III, 439, 1802; XIV, 326, 1804.  
FABRICIUS, Syst. Antl., 75, 1805, and earlier writings (*Sicus*, preoc.).  
FALLÉN, Xylophagei, 1817 (*Sicus* F.).  
MEIGEN, Syst. Besch., II, 18, 1820.  
MACQUART, Hist. Nat. Dipt., I, 225, 1834.  
ZETTERSTEDT, Dipt. Scand., I, 130, 1842 (*Sicus* F.).  
SCHINER, Fauna Austr., I, 27, 1862.  
OSTEN SACKEN, Cat., 223, note on *Sicus*.  
**cinereibarbis** BIGOT, Annales, 1879, 194.—Md.  
WILLISTON, Canad. Ent., XVII, 122.—Conn.  
**ferruginea** SCOPOLI, Ent. Carniolica, 913, 1763 (*Musca*).—Europe.  
FABRICIUS, Spec. Ins., II, 459 (*Tabanus bidentatus* and *bispinosus*); Ent. Syst., IV, 263 (*Stratiomys errans*); 264 (*Stratiomys crucis*, from West Indies); Suppl., 555 (*Sicus ferrugineus* and *bicolor*); Syst. Antl., 75, 76 (*Sicus testaceus*, *ferrugineus*, *bicolor*, *errans*, and *crucis*).—South America, West Indies, Europe.  
PANZER, Fauna Insect. Germanicæ, IX, 20 (*Stratiomys macroleon*); XII, 22 (*Stratiomys unguiculata*); LVIII, 17 (*S. errans*).  
SCHRANK, Fauna Boica, III, 2373-75 (*Strat. grandis*, *major*, and *palatina*).  
MEIGEN, Klassifikation, 122, 1804 (*Sicus unicolor*, *bicolor* and *aureus*); Syst. Besch., II, 19, pl. XII, f. 25, syn.  
FALLÉN, Xylophagei, 12 (*Sicus*).  
SAY, Long's Exped., App., 339; Compl. Works, I, 42, pl. XX; Amer. Entomol., pl. XX (*pallida*).—Upper Mississippi Valley.  
WIEDEMANN, Auss. Zw., I, 86 (id.).  
HARRIS, Ins. New England, 407 (id.).  
MACQUART, Hist. Nat. Dipt., I, 225; Dipt. Exot., Suppl. v, 38 (the latter as *pallida*).  
SCHINER, Fauna Austr., I, 27.  
LOEW, Silliman's Jour., XXXVII, 317. syn. of *pallida*.  
HART, Bull. Ill. State Lab. Nat. Hist., IV, 267, desc. of pupa-skin, and ref. to Beling, Verh. Zool.-Bot. Ges., 1880, 343, for desc. of larva.  
Atlantic States—O. S.; Montreal—Chagnon; Minn. and Pa.—J. M. A.

## ARTHROPEAS.

- LOEW, Stett. Ent. Zeit., 1850, 302.  
BRAUER, Zweifl. d. Kaiserl. Mus., II, 17, 1882; Offenes Schreiben, 6.  
OSTEN SACKEN, Berl. Ent. Zeitsch., XXVI, 369, 1882.  
**americana** LOEW, Cent., I, 16.—N. Wis. Mass.—O. S. See *Xylomyia fasciata*.  
**leptis** OSTEN SACKEN, Cat., 1878, note 48; Berl. Ent. Zeitsch., 1882, 365, discusses generic relations—should form a new genus.—White Mts. White Mts., N. H.—Slosson (*Arthroceras*).

## RHACHICERUS.

- HALIDAY, in Walker's List, v, 103, 1854.  
BRAUER, Zweifl. d. Kaiserl. Mus., II, 17, 1882.  
**bellus** OSTEN SACKEN, Biologia, Dipt., I, 62.—Panama.

**fulvicollis** HALIDAY, in Walker's List, I, 124; V, 104.—Ga.

Tick Id., Fla.—Johnson.

**honestus** OSTEN SACKEN, West. Dipt., 211.—Cal.

**nigripalpus** LOEW, Berl. Ent. Zeit., 1874, 379.—Mex.

**nitidus** JOHNSON, Ent. News, 1903, 22.—Overbrook, Pa. Early stages briefly mentioned: larvæ in a decayed log.

**obscuripennis** LOEW, Cent., III, 6.—Ill. Mich.—O. S.

**varipes** LOEW, Cent., III, 7.—Cuba.

#### XYLOPHAGUS.

MEIGEN, Illig. Mag., II, 266, 1803; Syst. Besch., II, 7, 1820.

ZETTERSTEDT, Dipt. Scand., I, 127, 1842.

SCHINER, Fauna Austr., I, 26, 1862.

BRAUER, Zweifl. d. Kaiserl. Mus., II, 73, 1882.

**abdominalis** LOEW, Cent., IX, 64.—Texas.

JOHNSON, Ent. News, IX, 158, records rearing larvæ found under bark of decaying pine at Riverton, N. J.; XIV, 22, desc. of larva and pupa, with figures.

**decorus** WILLISTON, Canad. Ent., XVII, 121.—Wash.

**fasciatus** WALKER, List, I, 128.—Martin Falls, Canada.

Montreal—Chagnon.

**gracilis** WILLISTON, Canad. Ent., XVII, 121.—Wash., Ore.

**longicornis** LOEW, Cent., IX, 62.—Mass.

**lugens** LOEW, Cent., III, 8.—Ill.

JOHNSON, Ent. News, XIV, 23, bred from decayed oak and chestnut trees at Riverton, N. J.; notes on larvæ and pupæ.

Pa. and N. H.—O. S. Cat.

**persequus** WALKER, Dipt. Saund., I.—N. A.

N. J.—Smith Cat.; Axton, N. Y.—M. & H. (“=*rufipes* Lw.?”).

**reflectens** WALKER, List, I, 129.—N. Y.

**rufipes** LOEW, Cent., IX, 63.—Mass.

Canada—O. S. Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.

See *persequus*.

**triangularis** SAY, Jour. Acad. Sci. Phil., III, 30; Compl. Works, II, 52.—Mo.

WIEDEMANN, Auss. Zw., I, 85.

MACQUART, Dipt. Exot., I, 171, suspects this to be a *Subula*.

#### XYLOMYIA.

RONDANI, Dipt. Ital. Prod., IV, 11, 1861, change of name.

MEIGEN, Syst. Besch., II, 15, 1820 (*Subula*, preoc.).

SCHINER, Fauna Austr., I, 25, 1862 (*Subula*).

BRAUER, Zweifl. d. Kaiserl. Mus., II, 17, 1882 (*Subula*).

OSTEN SACKEN, Biologia, Dipt., I, 22 (*Subula*).

WILLISTON, Biologia, Dipt., I, 230.

BIGOT, Annales, 1879, 187 (*Macroceromys*). [O. S.]

**americana** WIEDEMANN, Dipt. Exot., 51; Auss. Zw., I, 84 (*Xylophagus*).—N. A.

WILLISTON, Biologia, Dipt., I, 230, oc. in Mexico, several places.

JOHNSON, Ent. News, XIV, 24.—Ill. and Pa.

**aterrima** JOHNSON, Ent. News, XIV, 24.—N. Ill. and Franconia, N. H.

**elongata** OSTEN SACKEN, Biologia, Dipt., I, 22 (*Subula*).—Guatemala.

**fasciata** SAY, Jour. Acad. Sci. Phil., VI, 155; Compl. Works, II, 353 (*Xylophagus*).—Ind. Perhaps same as *Arthropeas americana*—O. S.

- fulviventris** BIGOT, Annales, 1879, 187 (*Macroccromys*).—Mex.  
**pallipes** LOEW, Cent., III, 9 (*Subula*).—Ill., Wis.  
 WILLISTON, Canad. Ent., XVII, 122, oc. in Mont. and S. Cal. (id.).  
 TOWNSEND, Ent. News, IV, 163, puparium, habits, etc. (id.).  
 BAKER, Ent. News, VI, 173, note on habits—larvæ in numbers under bark of fallen cottonwood tree.—Trinidad, Col. (id.).  
 Atlantic States—O. S.; N. J.—Smith Cat.  
**parens** WILLISTON, Canad. Ent., XVII, 122 (*Subula*).—Wash.  
**tenthredinoides** VAN DER WULP, Tijdsch. v. Ent., X, 132, pl. III, f. 5 (*Subula*).—Wis.  
 JOHNSON, Ent. News, XIV, 24.—Ill. and Pa.

#### BOLBOMYIA.

- LOEW, Bernstein und Bernstein-fauna, 39, 1850, transl. in Silliman's Jour., XXXVII, 313, and O. S. Cat., 223, note 46.  
**nana** LOEW, Cent., II, 5.—D. C.

#### GLUTOPS.

- BURGESS, Proc. Bost. Soc. Nat. Hist., 1878, 320.  
 BRAUER, Zweifl. d. Kaiserl. Mus., II, 17, 1882.  
**singularis** BURGESS, op. cit., figs.—Springfield, Mass.

#### ARTHROCERAS.

- WILLISTON, Ent. Americana, II, 107, 1886.  
**leptis**, of Mrs. Slosson's List, see *Arthropcas*.  
**pollinosum** WILLISTON, Ent. Americana, II, 108.—Wash., Col.

#### DIALYSIS.

- WALKER, Dipt. Saundersiana, 4, 1856.  
 OSTEN SACKEN, Cat., 43, notes, 1878.  
 WILLISTON, Entomologica Americana, II, 106, 1886; Kans. Univ. Quart., III, 263, 1895, full discussion.  
 BERGROTH, Wien. Ent. Zeit., VIII, 296, 1889, tables of N. A. spp., but not in Williston's sense.  
 TOWNSEND, Proc. Ent. Soc. Wash., II, 117, 1891.  
**aldrichi** WILLISTON, Kans. Univ. Quart., III, 165.—Craig's Mt., Idaho (not Craig Mts.).  
**dispar** BIGOT, Annales, 1879, 197.—Cal.  
 OSTEN SACKEN, Berl. Ent. Zeitschr., XXVII, 295, note on type; refers to *Triptotricha*.  
**elongata** SAY, Jour. Acad. Sci. Phil., III, 41; Compl. Works, II, 58 (*Stygia*).—Pa.  
 WIEDEMANN, Auss. Zw., I, 315 (*Anthrax*); 561 (*Lomatia*).  
 WALKER, List, I, 128 (*Xylophagus americanus* WIED. with a doubt); Dipt. Saund., 4, syn. (*Dialysis dissimilis*).—N. A. [Will.]  
 OSTEN SACKEN, Berl. Ent. Zeitschr., XXVII, 295 (*Triptotricha dissimilis*).  
 JOHNSON, Ent. News, VIII, 117, variation in venation.  
 N. J.—Smith Cat.; Montreal—Chagnon.  
**fasciventris** LOEW, Berl. Ent. Zeitschr., 1874, 380 (*Triptotricha*).—Pa.  
 JOHNSON, Ent. News, VIII, 118.—N. C.

- rufithorax** SAY, Jour. Acad. Sci. Phil., III, 36; Compl Works, II, 56 (*Leptis*).—Pa.  
 WIEDEMANN, Auss. Zw., I, 223 (id.).  
 JOHNSON, Ent. News, VIII, 118, variation in venation. N. J.—Smith Cat.

### TRIPTOTRICHA.

- LOEW, Cent., X, 15, 1872; Berl. Ent. Zeitschr., 1874, 381, note.  
 OSTEN SACKEN, Berl. Ent. Zeitschr., 1883, 295.  
 WILLISTON, Kans. Univ. Quart., III, 263, 1895.  
**discolor** LOEW, Berl. Ent. Zeitschr., 1874, 379.—San Francisco, Cal.  
**disparilis** BERGROTH, Wien. Ent. Zeit., VIII, 296 (*Dialysis*).—Vancouver Id.  
**lauta** LOEW, Cent., X, 15; Berl. Ent. Zeitschr., 1874, 382.—Cal.

### PHENEUS.

- WALKER, Dipt. Saund., 155, 1856.  
 WILLISTON, Kans. Univ. Quart., IV, 108, 1895 (*Arthrostylum*); Biologia, Dipt., I, 264, 1901.  
**tibialis** WALKER, Dipt. Saund., 156, pl. IV, f. 3.—Jamaica.  
 OSTEN SACKEN, Cat., 63, note.  
 WILLISTON, Kans. Univ. Quart., IV, 108 (*Arthrostylum fascipennis*); Biologia, Dipt., I, 264, syn., etc.—Guerrero, Mex.

### LEPTIS.

- FABRICIUS, Syst. Antl., 69, 1805.  
 MEIGEN, Syst. Besch., II, 65, 1820.  
 MACQUART, Hist. Nat. Dipt., I, 425, 1834.  
 SCHINER, Fauna Austr., I, 171, 1862.  
**albibarbis** BIGOT, Bull. Soc. Zool. France, XII, 18.—Wash.  
**albicornis** SAY, Jour. Acad. Sci. Phil., III, 38; Amer. Entomology, pl. XIII; Compl. Works, I, 27.—No locality.  
 WIEDEMANN, Auss. Zw., I, 223.—Pa.  
 S. C.—O. S.; St. Augustine, Fla.—Johnson.  
**bitæniata** BELLARDI, Saggio, App., 26, f. 14.—Mex.  
**boscii** MACQUART, Dipt. Exot., II, I, 30.—Carolina.  
 Province of Quebec—Fyles.  
 ? **cinerea** BELLARDI, Saggio, II, 95.—Mex.  
 OSTEN SACKEN, Cat. 229, note 94;—not a *Leptis*, type nearly destroyed.  
**costata** LOEW, Cent., II, 4.—Cal.  
 OSTEN SACKEN, West. Dipt., 223, oc. in Marin and Sonoma Cos., Cal.  
**dimidiata** LOEW, Cent., III, 17.—Sitka, Alaska.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 406, oc. at Juneau, Alaska.  
**hirta** LOEW, Cent., I, 21.—Ill. N. J.—Smith Cat.; Quebec—Wulp; White Mts., N. H.—Slosson; Montreal—Chagnon.  
**hoodiana** BIGOT, Bull. Soc. Zool. France, XII, 19.—Mt. Hood, Ore.  
**incisa** LOEW, Cent., X, 16.—Cal.  
 OSTEN SACKEN, West. Dipt., 223.—Marin Co., Cal.  
 White Mts., N. H.—Slosson.  
**intermedia** WALKER, List, I, 212 (*Rhagio*).—Martin Falls, Canada.  
**limbipennis** BIGOT, Bull. Soc. Zool. France, XII, 10 (*Leptipalpus*).—Rocky Mts.  
**maculifer** BIGOT, Bull. Soc. Zool. France, XII, 17.—Wash.



- mystacea** MACQUART, Dipt. Exot., II, 1, 30, pl. III *bis*, f. 2.—N. A.  
 ? WALKER, List, I, 212; IV, 1153.—Nova Scotia; Trenton Falls, N. Y.;  
 ident. doubtful.  
 N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson;  
 Axton, N. Y.—M. & H.
- obscuripennis** BIGOT, Bull. Soc. Zool. France, XII, 11 (*Leptipalpus*).—Rocky  
 Mts.
- ochracea** LOEW, Cent., II, 3.—N. Y. N. J.—Smith Cat.
- plumbea** SAY, Jour. Acad. Sci. Phil., III, 39; Compl. Works, II, 56.—Pa.  
 WIEDEMANN, AUSS. ZW., I, 228.  
 VAN DER WULP, Tijdschr. v. Ent., X, 142, pl. IV, f. 5 (*griscola*).—Wis.  
 [Lw.] N. J.—Smith Cat.
- polytæniata** BELLARDI, Saggio, App., 27.—Mex.
- pruinosa** BIGOT, Bull. Soc. Zool. France, XII, 19.—Mt. Hood, Ore.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 406, oc. on Popoff Id., Alaska.
- punctipennis** SAY, Jour. Acad. Sci. Phil., III, 34; Compl. Works, II, 55.—Pa.  
 WALKER, List, I, 219 (*Atherix filia*; "either *pictipennis* or *plumbea*"—  
 O. S.).—N. Y. and Trenton, N. J.  
 WIEDEMANN, AUSS. ZW., I, 227.
- scapularis** LOEW, Cent., I, 22.—Ill. N. J., D. C.—O. S.
- stigmatias** BIGOT, Bull. Soc. Zool. France, XII, 10 (*Leptipalpus*).—Cuba.
- terminalis** LOEW, Cent., I, 20.—N. Y.
- vertebrata** SAY, Jour. Acad. Sci. Phil., III, 38; Amer. Entomology, pl. XIII;  
 Compl. Works, I, 27.—Fla. Montreal—Chagnon; Province of Quebec  
 —Fyles.
- vertebrata** BIGOT, Bull. Soc. Zool. France, XII, 12 (*Leptipalpus*).—Havti.

#### CHRYSOPILA.

- MACQUART, Dipt. du Nord de la France, 403, 1827; Hist. Nat. Dipt., I, 429,  
 1834.
- SCHINER, Fauna Austr., I, 175, 1862.
- anthracina** BIGOT, Bull. Soc. Zool. France, XII, 9.—Cal.
- aterrima** WILLISTON, Biologia, Dipt., I, 264.—Guerrero, Mex.
- atra** WILLISTON, Dipt. St. Vincent, 304, pl. X, f. 78 *bis*.—St. Vincent, W. I.
- apicalis** VAN DER WULP, Tijdschr. v. Ent. XXV, 119.—Guadeloupe.
- basilaris** SAY, Jour. Acad. Sci. Phil., III, 36; Compl. Works, II, 55 (*Leptis*).—  
 Pa.  
 WIEDEMANN, AUSS. ZW., I, 228.  
 ? WILLISTON, Biologia, Dipt., I, 265, oc. in Vera Cruz, with a doubt.  
 N. J.—Smith Cat.; St. Augustine and Charlotte Harbor, Fla.—Johnson.
- basalis** WALKER, Trans. Ent. Soc., v, 285.—Mex.
- fasciata** SAY, Jour. Acad. Sci. Phil., III, 37; Amer. Entomology, pl. XIII; Compl.  
 Works, I, 28 (*Leptis*).—Pa.  
 WIEDEMANN, AUSS. ZW., I, 225 (id.).  
 WALKER, List, I, 215 (*Leptis par*).—N. A. [O. S.]  
 N. J.—Smith Cat.
- flavida** BIGOT, Bull. Soc. Zool. France, XII, 8.—Canada. Montreal—Chagnon.
- fœda** LOEW, Cent., I, 18.—Ill.  
 COQUILLET, Canad. Ent., XV, 112, describes larva and pupa; larva lives  
 in the earth.
- griffithi** JOHNSON, Ent. News, VIII, 119.—Boykins, Va.; Hertford Co., N. C.;  
 Tifton, Ga.

- humilis* LOEW, Berl. Ent. Zeitschr., 1874, 379.—San Francisco.  
OSTEN SACKEN, West. Dipt., 223, transl. of orig. desc.
- invalida* WILLISTON, Biologia, Dipt., 1, 265.—Guerrero, Mex.
- jamaicensis* JOHNSON, Proc. Acad. Nat. Sci., 1894, 273.—Jamaica.
- latifrons* WILLISTON, Biologia, Dipt., 1, 266.—Guerrero, Mex.
- ludens* LOEW, Wien. Ent. Monatschr., v, 34.—Cuba.  
WILLISTON, Dipt. St. Vincent, 303, notes.—St. Vincent, W. I.
- mexicana* BELLARDI, Saggio, II, 96.—Mex.
- modesta* LOEW, Cent., x, 14.—Texas.  
JOHNSON, Ent. News, VIII, 120, oc. in Indiana.
- nana* WILLISTON, Biologia, Dipt., 1, 265.—Teapa, Mex.
- nigra* BELLARDI, Saggio, App., 27.—Mex.
- ornata* SAY, Jour. Acad. Sci. Phil., III, 34; Amer. Entomology, pl. XIII; Compl. Works, I, 26, and II, 54 (*Leptis*).—No locality.  
WIEDEMANN, Auss. Zw., I, 221 (id.).—Pa.  
? WALKER, List, I, 213.—Trenton Falls, N. Y.; identification with a doubt.  
GUÉRIN, Iconographie du règne animal, etc., III, 541, pl. xcvi, f. 3 (*Leptis serveillei*). [O. S., Cat., 229, note 92.]  
HINE, Ohio Naturalist, II, 170, notes on larva and pupa, found under rotten wood. A common species from the Mississippi Valley east—J. M. A.
- plebeia* WILLISTON, Biologia, Dipt., 1, 264.—Guerrero, Mex.
- propinqua* WALKER, List, I, 215 (the male as *simillima*, with a query as to the identity).—Trenton Falls, N. Y.  
N. J.—Smith Cat.; Montreal—Chagnon.
- proxima* WALKER, List, I, 214 (*Leptis*).—Nova Scotia. Montreal—Chagnon.
- puella* WILLISTON, Biologia, Dipt., 1, 265.—Teapa, Mex.
- quadrata* SAY, Jour. Acad. Sci. Phil., III, 35; Compl. Works, II, 55 (*Leptis*); the female.—U. S.  
WIEDEMANN, Auss. Zw., I, 226 (id.).—Pa.  
WALKER, List, I, 216 (*Leptis reflexa*).—Ohio, Nova Scotia. [O. S.]  
VAN DER WULP, Tijdsch. v. Ent., x, 143, pl. IV, f. 6-11 (*dispar.*).—Wis. [O. S.]  
SAY, Jour. Acad. Sci. Phil., III, 37 (*Leptis fumipennis*); Compl. Works, II, 56; the male.—Pa. [J. M. A.]  
WIEDEMANN, Auss. Zw., I, 227.—Pa.  
WALKER, List, I, 217 (id.).—Nova Scotia to Ga.  
A very common species from the Mississippi Valley to the Atlantic.—J. M. A.
- rotundipennis* LOEW, Cent., I, 19.—Ga.  
JOHNSON, Ent. News, VIII, 120, oc. in Pa., N. C., Va. N. J.—Smith Cat.
- testaceipes* BIGOT, Bull. Soc. Zool. France, XII, 9.—Wash.
- thoracica* FABRICIUS, Syst. Antl., 70 (*Leptis*).—Carolina.  
WIEDEMANN, Auss. Zw., I, 222 (id.).  
MACQUART, Dipt. Exot., II, I, 32, pl. III, bis., f. 3.—N. A.  
"Eastern North America, common."—O. S.
- tomentosa* BIGOT, Bull. Soc. Zool. France, XII, 8.—Col., Wash.
- trifasciata* WALKER, Trans. Ent. Soc., v, 284.—Mex.
- velutina* LOEW, Cent., I, 17.—Ill.  
Ky.—O. S.; St. Augustine, Fla.—Johnson.

## SPANIA.

- MEIGEN, Syst. Besch., vi, 335, 1830.  
 MACQUART, Hist. Nat. Dipt., i, 430, 1834.  
 ZETTERSTEDT, Dipt. Scand., i, 226, 1842 (*Ptiolina*).  
 FRAUENFELD, Verh. Zool.-Bot. Ges., 1867, 495 (*Ptiolina*).  
 STROBL, Wiener Ent. Zeit., xi, 121, 1892, syn., etc.  
**edeta** WALKER, List, iii, 489.—Martin Falls, Canada.  
 OSTEN SACKEN, Cat., 229, note 95.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 406, oc. at Muir Inlet and Sitka,  
 in Alaska, and in White Mts., N. H.  
**fasciata** LOEW, Cent., ix, 65 (*Ptiolina*).—Canada.  
**majuscula** LOEW, Cent., ix, 66 (*Ptiolina*).—Canada.

## ATHERIX.

- MEIGEN, Illig. Mag., ii, 271, 1803; Syst. Besch., ii, 79, 1820.  
 MACQUART, Hist. Nat. Dipt., i, 431, 1834.  
 ZETTERSTEDT, Dipt. Scand., i, 225, 1842.  
 SCHINER, Fauna Austr., i, 177, 1862.  
 RILEY and HOWARD, Insect Life, ii, 386, note on eggs of *Atherix* sp.  
**concinna** WILLISTON, Biologia, Dipt., i, 266.—Guerrero, Mex.  
**latipennis** BELLARDI, Saggio, ii, 93.—Mex.  
 WILLISTON, Biologia, Dipt., i, 166.—Mexico, several places.  
**longipes** BELLARDI, Saggio, ii, 94. pl. ii, f. 17.—Mex.  
 ? OSTEN SACKEN, Biologia, Dipt., i, 62.—Costa Rica, Panama.  
**pachypus** BIGOT, Bull. Soc. Zool. France, xii, 21.—Wash.  
**varicornis** LOEW, Cent., x, 13.—Cal.  
**variegata** WALKER, List, i, 218.—Martin Falls, Canada.  
 IVES, Ent. News, i, 39, egg-laying habits.  
 "Northern States and British Possessions."—O. S.; Montreal—Chagnon.  
**vidua** WALKER, List, iv, 1153.—Martin Falls, Canada.

## SYMPHOROMYIA.

- FRAUENFELD, Verh. Zool.-Bot. Ges., 1867.  
 COQUILLET, Jour. N. Y. Ent. Soc., ii, 53, table of species.  
**cinerea** JOHNSON, Ent. News, xiv, 25.—Long Branch, N. J.  
**cruenta** COQUILLET, Jour. N. Y. Ent. Soc., ii, 55.—S. Cal.  
**fera** COQUILLET, Jour. N. Y. Ent. Soc., ii, 56.—Col.  
**fulvipes** BIGOT, see *latipalpis*.  
**hirta** JOHNSON, Ent. News, viii, 120.—Pa.  
**johnsoni** COQUILLET, Jour. N. Y. Ent. Soc., ii, 54.—Wash.; Brit. Col.  
**latipalpis** BIGOT, Bull. Soc. Zool. France, xii, 13.—Wash.  
 BIGOT, op. cit., 14 (*fulvipes*).—Mt. Hood, Ore. [Coq.]  
 Beulah, N. M.—Skinner (*fulvipes*).  
**modesta** COQUILLET, Jour. N. Y. Ent. Soc., ii, 54.—Cal.  
**pachyceras** WILLISTON, Trans. Amer. Ent. Soc., xiii, 287.—Col.  
 BIGOT, Bull. Soc. Zool. France, xii, 13 and 15 (*trivittata*, *atripes* and *comata*).—Col.; Mt. Hood, Ore.; Cal. Syn. of first by Bigot, the others by Coquillett.  
**plangens** WILLISTON, Trans. Amer. Ent. Soc., xiii, 287.—Wash.; Mt. Hood, Ore.  
 BIGOT, Bull. Soc. Zool. France, xii, 13 (*picticornis*).—Wash. [Bigot.]

- pullata* COQUILLET, Jour. N. Y. Ent. Soc., II, 56.—Col. and N. H. Also at Sitka—Coq.  
*trucis* COQUILLET, Jour. N. Y. Ent. Soc., II, 55.—S. Cal.

#### HILARIMORPHA.

- SCHINER, Wien. Ent. Monatsch., IV, 54, 1860; Fauna Austr., I, 116, 1862.  
 MIK, Verh. Zool.-Bot. Ges., 1881, 327.  
 WILLISTON, Psyche, 1888, 99.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., XXXV, 303, 1890.  
 COQUILLET, Revision Empidæ, 388, note.  
 MELANDER, Mon. Empidæ, 338, 1902, note on position.  
*mikii* WILLISTON, Psyche, 1888, 100.—III.  
*obscura* BIGOT, Annales, 1889, 129.—Cal.

#### MYTHICOMYIA.

- COQUILLET, Ent. News, IV, 209, 1893; Revis. Empid., 409, 1896, table of species.  
 WILLISTON, Manual, 73, note, would place in Leptidæ.  
 MELANDER, Mon. Empid., I, 337, 1902, places in Leptidæ.  
*pictipes* COQUILLET, Revis. Empidæ, 103.—Williams, Ariz.  
*rileyi* COQUILLET, Ent. News, IV, 209, fig.—Cal.  
 MELANDER, Mon. Empid., I, 338.—Mesilla Park, N. M.  
*scutellata* COQUILLET, Proc. U. S. N. M., XXV, 102.—Williams, Ariz.  
*tibialis* COQUILLET, Revis. Empid., 409.—Los Angeles Co., Cal.  
 MELANDER, Mon. Empid., I, 338.

#### NEMESTRINIDÆ.

- BIGOT, Annales, 1881, 15, table of genera of the world.  
 WILLISTON, Canad. Ent., XV, 69, 1883, synopsis of the North American species.

#### HIRMONEURA.

- MEIGEN, Syst. Besch., II, 132, 1820.  
 SCHINER, Fauna Austr., I, 46, 1862.  
 PHILIPPI, Verh. Zool.-Bot. Ges., 1865, 655 (*Hermoneura*).  
 BIGOT, Bull. Soc. Ent. France, 1879, no. 8; Annales, 1881, 15 (*Parasymictus*) [Will.].  
*brevirostris* MACQUART, Dipt. Exot., Suppl., I, 101, pl. XX, f. 1.—Yucatan, Mex.  
 WILLISTON, Canad. Ent., XV, 69.  
*clausa* OSTEN SACKEN, West. Dipt., 225.—Texas.  
 BIGOT, Bull. Soc. Ent. France, 1879, no. 8; Annales, 1881, 15 (*Parasymictus*).  
 BRAUER, Offenes Schreiben, 8, refers to *Rhynchocephalus*.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., XLII, 1897, corrects Brauer.  
*flavipes* WILLISTON, Trans. Amer. Ent. Soc., XIII, 292.—U. S.  
*psilotes* OSTEN SACKEN, Biologia, Dipt., I, 74.—Mex.

#### RHYNCHOCEPHALUS.

- FISCHER, Mém. Soc. Imp. de Moscow, I, 217, 1806.  
 SCHINER, Fauna Austr., I, 45, 1862.  
 WILLISTON, Canad. Ent., XXIV, 70, 1892.

- sackeni** WILLISTON, Trans. Conn. Acad. Sci., iv, 243; Canad. Ent., xv, 71; Ent. News, v, 47, habits.—Wash.
- volaticus** WILLISTON, Canad. Ent., xv, 71; Trans. Amer. Ent. Soc., xiii, 293, correction.—Fla.  
St. Augustine, Fla.—Johnson.
- OSTEN SACKEN, Biologia, Dipt., i, 73 (*Rhynch. sp.*).—Guatemala. [Will.]
- WILLISTON, Biologia, Dipt., i, 269, oc. in Guerrero, Mex.

## CYRTIDÆ.

- BIGOT, Annales, 1889, 315, table of all genera.
- OSTEN SACKEN, Berl. Ent. Zeitsch., xli, 1896, 323, discussion of generic characters, etc.
- WILLISTON, Manual N. A. Dipt., 70, on habits—parasitic on spiders and their eggs.

## PTERODONTIA.

- GRAY, in Griffith's Animal Kingd., xv, 779, pl. cxxvii, f. 3, 1832.
- ERICHSON, Entomographien, 1840, 161.
- SCHNER, Fauna Austr., i, 72, 1862.
- MELANDER, Ent. News, xiii, 179, 1902, table of species.
- analis** WESTWOOD, Trans. Ent. Soc., v, 97.—Ga. (Preoc.—Osten Sacken.)
- MELANDER, Ent. News, xiii, 179, oc. at Wood's Hole, Mass.; notes.
- flavipes** GRAY, in Griffith's Animal Kingd., pl. cxxviii, f. 3.
- WESTWOOD, Trans. Ent. Soc., v, 96.—Ga.  
Montreal—Chagnon; Province of Quebec—Fyles.
- misella** OSTEN SACKEN, West. Dipt., 277.—Ore.
- WILLISTON, Trans. Amer. Ent. Soc., xiii, 295, probably same as *flavipes*.  
Alameda Co., Cal.—Melander; Wash.—in coll. O. B. Johnson.
- vix** TOWNSEND, Proc. Cal. Acad. Sci., iv, 607.—S. Cal.

## NOTHRA.

- WESTWOOD, Trans. Ent. Soc. Lond., 1876, 514.
- americana** BIGOT, Annales, 1889, 320.—Wash.

## ONCODES.

- LATREILLE, Précis d. Caract. génér. d. Ins., 154, 1796 (*Ogcodes*).
- MEIGEN, Klassifikation, 150, 1804 (*Henops*).
- ERICHSON, Entomographien, 169, 1840; Archiv. f. Naturgeschichte, Berlin, 1846, 288;—reprinted by Roeder, Wien. Ent. Zeit., ii, 95.
- GERSTÆCKER, Stett. Ent. Zeit., 1856, 353.
- SCHNER, Fauna Austr., i, 73, 1862.
- ædon** TOWNSEND, Proc. Cal. Acad. Sci., iv, 608.—Baja Pisisima, Lower Cal.
- costatus** LOEW, Cent., ix, 67.—Mass.
- MELANDER, Ent. News, xiii, 178, notes; oc. in Wis. and Ont.  
N. J.—Smith Cat.; Montreal—Chagnon.
- dispar** MACQUART, Dipt. Exot., Suppl., v, 67, pl. ii, f. 12 (*Henops*).—Baltimore.
- eugonatus** LOEW, Cent., x, 18.—Texas.
- MELANDER, Ent. News, xiii, 178, oc. at Austin, Tex., and notes.
- humeralis** OSTEN SACKEN, Biologia, Dipt., i, 164.—N. Sonora, Mex.
- incultus** OSTEN SACKEN, West. Dipt., 179.—White Mts., N. H.  
N. J.—Smith Cat.

**melampus** LOEW, Cent., x, 17.—Cal.

TOWNSEND, Proc. Cal. Acad. Sci., iv, 609.—San Francisco Mts., Ariz., fir zone.

**pallidipennis** LOEW, Cent., vi, 32.—Pa.

TOWNSEND, Proc. Cal. Acad. Sci., iv, 609, notes; oc. in Va. and D. C. N. J.—Smith Cat.

#### PHILOPOTA.

WIEDEMANN, Auss. Zw., II, 17, pl. IX, f. 1, 1830.

ERICHSON, Entomographien, 152, 1840.

**truquii** BELLARDI, Saggio, I, 77, pl. II, f. 20.—Cuazimalpa, Mex.

#### OPSEBIUS.

COSTA, Rendiconto d. Soc. R. Borbon d. Sc., v, 20, 1856.

LOEW, Wien. Ent. Monatschr., I, 33, 1857 (*Pithogaster*); Besch. Europ.

Dipt., II, 64, 1871.

SCHINER, Fauna Austr., I, 75, 1862.

OSTEN SACKEN, Cat., 240, 1878, table of species.

MELANDER, Ent. News, XIII, 180, 1902, table of species.

**agelenæ** MELANDER, see *pterodontinus*.

**diligens** OSTEN SACKEN, West. Dipt., 278.—Vancouver Id.

**gagatinus** LOEW, Cent., vi, 34.—Pa.

**paucus** OSTEN SACKEN, West. Dipt., 279.—Cal.

**pterodontinus** OSTEN SACKEN, Berl. Ent. Zeitsch., XXVII, 299, 1883.—Dallas, Texas. Montreal—Chagnon.

MELANDER, Ent. News, XIII, 6 (*agelenæ*).—Austin, Tex., and Rochester, Wis.; parasitic on *Agelena navia* Bosc. [Adams, Kans. Univ. Sci. Bull., II, 32.]

**sulphuripes** LOEW, Cent., IX, 68.—Sharon Spr., N. Y.

MELANDER, Ent. News, XIII, 180, oc. in Alameda Co., Cal., and notes.

#### ACROCERA.

MEIGEN, Illig. Mag., II, 266, 1803; Syst. Besch., III, 94, 1822.

ERICHSON, Entomographien, 164, 1840.

GERSTÆCKER, Stett. Ent. Zeit., 1856, 347.

SCHINER, Fauna Austr., I, 72, 1862.

MONTGOMERY, Proc. Acad. Nat. Sci. Phil., 1903, 68; note on habits.

EMERTON, Psyche, v, 404, 1890, fig.; note on habits.

**bimaculata** LOEW, Cent., vi, 33.—D. C.

**bullata** WESTWOOD, Trans. Ent. Soc., v, 98.—N. Y.

**fasciata** WIEDEMANN, Auss. Zw., II, 16.—Ga.

ERICHSON, Entomographien, 166, 1840.

JOHNSON, Ent. News, XIV, 64, mentions the rearing of this from *Lycosa stonei*.

**fumipennis** WESTWOOD, Trans. Ent. Soc., v, 98.—Ga.

**liturata** WILLISTON, Trans. Amer. Ent. Soc., XIII, 294.—Wash.

**nigrina** WESTWOOD, Trans. Ent. Soc., v, 98.—Ga.

**obsoleta** VAN DER WULP, Tijdschr. v. Ent., x, 139, pl. III, f. 17.—Wis.

**subfasciata** WESTWOOD, Trans. Ent. Soc., v, 98.—N. Y.

**unguiculata** WESTWOOD, Trans. Ent. Soc., v, 98.—Ga.



## APPELEIA.

BELLARDI, Saggio, App., 19, 1862.

*vittata* BELLARDI, op. cit., fig. 12.—Playa Vicente, Mex.

## OCNÆA.

ERICHSON, Entomographien, 155, 1840.

*grossa* OSTEN SACKEN, Biologia, Dipt., 1, 163, pl. III, f. 7.—Costa Rica.

*helluo* OSTEN SACKEN, West. Dipt., 278.—Dallas, Texas.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 294, note.

MELANDER, Ent. News, XIII, 182, oc. at Marble Falls, Texas, and notes.

*micans* ERICHSON, Entomographien, 155, 1840.—Mex.

*trichocera* OSTEN SACKEN, Biologia, Dipt., 1, 164.—Panama.

## LASIA.

WIEDEMANN, Analecta Ent., II, 1824; Auss. Zw., 1, 329, 1828.

ERICHSON, Entomographien, 142, 1840.

*kletti* OSTEN SACKEN, in "Explorations and Surveys west of the One Hundredth Meridian," vol. v, Zoology, 804 (Washington, 1875), woodcuts.—Camp Apache, Ariz.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 294, oc. in N. M.; doubts if it be a Lasia.

*scribæ* OSTEN SACKEN, Biologia, Dipt., 1, 166.—Guatemala.

## EULONCHUS.

GERSTÆCKER, Stett. Ent. Zeit., 1856, 359.

*marginatus* OSTEN SACKEN, West. Dipt., 277.—Napa Val., Cal.

*sapphirinus* OSTEN SACKEN, West. Dipt., 276.—Webber L. and Calaveras, Cal. Marin Co., Cal.—Melandar.

*smaragdinus* GERSTÆCKER, Stett. Ent. Zeit., 1856, 360.—Cal.

OSTEN SACKEN, West. Dipt., 276, oc. at San Francisco, and notes.

Marin Co., Cal., Melander; Utah—J. M. A.

*tristis* LOEW, Cent., x, 19.—Coast Mts., Cal.

MELANDER, Ent. News, XIII, 181, oc. in N. Idaho, and in Marin Co., Cal.; part. desc.

## PIALOIDEA.

WESTWOOD, Trans. Ent. Soc. Lond., 1876, 514.

*magna* WALKER, List, III, 511 (*Cyrtus*).—Ga.

*metallica* WILLISTON, Biologia, Dipt., 1, 165.—Guatemala.

## BOMBYLIIDÆ.

## COQUILLETIA.

WILLISTON, Manual N. A. Dipt., 65, 1896.

*vandykei* COQUILLET, Trans. Amer. Ent. Soc., XXI, 94 (*Spogostylum*).—Mariposa Co., Cal.

## SPOGOSTYLUM.

MACQUART, Dipt. Exot., II, 1, 53, 1841.

SCHINER, Wien. Ent. Monatsch., IV, 51, 1860 (*Argyromaba*); Fauna Austr., 1, 52, 1862 (id.).

LOEW, Beschr. Europ. Dipt., 1, 228, 1869 (*Argyromaba*); Cent., vol. II, p. 290, amends to *Argyromaba*.

- WILLISTON, Manual N. A. Dipt., 65, 1896.
- OSTEN SACKEN, West. Dipt., 241, 1877, table of species; *Biologia*, Dipt., 1, 98, 1886, table and full discussion (*Argyramaba*).
- WILLISTON, Manual, 65, 1896; *Biologia*, Dipt., 1, 275, 1901.
- COQUILLET, Trans. Amer. Ent. Soc., XXI, 95, table of species (*Argyramaba*).
- BEZZI, Zeitschr. f. Hymenopt. und Dipterologie, 1902, 192, proposes a revolution in the nomenclature of this and other genera of the family, with which I do not agree, as it seems based too much on guess-work as to the types.
- acroleuca** WIEDEMANN, Auss. Zw., 1, 312, note (*Anthrax*).—S. A.
- MACQUART, Dipt. Exot., 1, 1, 64, pl. XX, f. 11 (*Anthrax gideon* FABR.).—S. A.
- SCHINER, Novara, 122 (id.).
- OSTEN SACKEN, *Biologia*, Dipt., 1, 101, syn., etc. (*Argyramaba*).—Guatemala.
- WILLISTON, *Biologia*, Dipt., 1, 275, oc. in Atoyac, Mex. (*Argyramaba*).
- albofasciatum** MACQUART, Dipt. Exot., II, 1, 67 (*Anthrax*).—Ga.
- LOEW, Cent., VIII, 47 (*Arg. obsoleta*).—Mo. [Coq.]
- N. J.—Smith Cat.; Lake Worth, Fla.—Johnson.
- albosparsum** BIGOT, see *argyropyga*.
- anale** SAY, Jour. Acad. Sci. Phil., 111, 45; Compl. Works, II, 60 (*Anthrax*).—Ga.
- WIEDEMANN, Auss. Zw., 1, 313 (id.).
- ? MACQUART, Hist. Nat. Dipt., 1, 406 (*Anthrax georgica*); Dipt. Exot., II, 1, 68 (id.); Dipt. Exot., II, 1, 67, doubtful oc. of *analis* in Brazil. [O. S. with a doubt.]
- OSTEN SACKEN, *Biologia*, Dipt., 1, 101, doubtful oc. in Mex.
- N. J.—Smith Cat.; St. Augustine, Fla.—Johnson; Montreal—Chagnon; Atlantic States and Canada—O. S. Cat.
- ? **angustipennis** MACQUART, Dipt. Exot., II, 1, 64, pl. XXI, f. 9 (*Anthrax*).—Guiana.
- ? WILLISTON, *Biologia*, Dipt., 1, 275, doubtful oc. in Acapulco, Mex.
- argyropyga** WIEDEMANN, Auss. Zw., 1, 313 (*Anthrax*).—No locality.
- LOEW, Cent., VIII, 50 (*Arg. contigua*).—Va. [O. S.]
- ? BIGOT, Annales, 1892, 348 (*Arg. albosparsa*).—Col. [Coq., with a doubt.]
- Ga.—O. S. Cat.; N. J.—Smith Cat.; Fla.—Johnson.
- cephus** FABRICIUS, Syst. Antl., 124 (*Anthrax*).—S. A.
- WIEDEMANN, Auss. Zw., 1, 297 (id.).
- MACQUART, Dipt. Exot., II, 1, 59 (id.).—Ga.
- Va.—O. S. Cat.; St. Augustine, Fla.—Johnson.
- cybele** COQUILLET, Trans. Amer. Ent. Soc., XXI, 96 (*Argyramaba*).—Ariz.
- daphne** OSTEN SACKEN, *Biologia*, Dipt., 1, 104, pl. II, f. 6 (*Argyramaba*).—N. Sonora, Mex.
- ? WILLISTON, Dipt. of Death Valley Exped., 254, note, doubtful oc. in Panamint Val., Cal.
- delila** LOEW, Cent., VIII, 45 (*Argyramaba*).—Cal.
- ? **disjunctum** WIEDEMANN, Auss. Zw., II, 639 (*Anthrax*).—Mex. Query in O. S. Cat.
- euplanes** LOEW, Cent., VIII, 49 (*Argyramaba*).—Cuba.
- fur** OSTEN SACKEN, West. Dipt., 244 (*Argyramaba*); *Biologia*, Dipt., 1, 105 (id.).—Texas; N. Sonora, Mex.

- ? **gideon** FABRICIUS, Syst. Antl., 125 (*Anthrax*).—S. A.  
 WIEDEMANN, Auss. Zw., 311 (id.).—S. A.  
 ? WALKER, List, II, 257, doubtful oc. in Jamaica.
- latelimbata** BIGOT, of Johnson, Dipt. Fla., see *Anthrax*.
- leucothoa** WIEDEMANN, see *Anthrax*.
- limatulus** SAY, Jour. Acad. Sci. Phil., VI, 157; Compl. Works, II, 354 (*Anthrax*).  
 —Ind.  
 WALKER, Dipt. Saund., 193 (*Anth. anteccedens*).—U. S. [Coq.]  
 ? OSTEN SACKEN, West. Dipt., 243, doubtful oc. in Col. and Cal.  
 N. J.—Smith Cat.; Lake Worth, Fla.—Johnson.
- melanopogon** BIGOT, Annales, 1892, 348 (*Argyromaba*).—N. A.
- œdipus** FABRICIUS, Syst. Antl., 123 (*Anthrax*).—West Indies.  
 WIEDEMANN, Dipt. Exot., 124; Auss. Zw., I, 262 (id.).—Ky. and Pa.  
 SAY, Jour. Acad. Sci. Phil., III, 46; Compl. Works, II, 61 (*Anthrax irrorata*).—Rocky Mts.  
 MACQUART, Dipt. Exot., II, I, 60, pl. XX, f. 6 (*Anthrax irrorata*).—Car. and Ga.  
 SCHINER, Novara, 121 (*Argyromaba*).—S. A.  
 WALKER, Dipt. Saund., 192 (*Anthrax æqua*).—S. A.  
 WALKER, List, II, 253 (*Anthrax punctum*).—Brazil.  
 F. LYNCH A., El Nat. Argentina, I, 243, oc. in Argentina.  
 OSTEN SACKEN, Biologia, Dipt., I, 101, syn., etc. (*Argyromaba*); oc. from Brit. Possessions to Argentine Republic.  
 TOWNSEND, Amer. Naturalist, Jan., 1893, desc. of puparium (id.).  
 BAKER, Ent. News, VI, 173, reared from nests of *Odynerus*, several species. at Ft. Collins, Col.; "a true external parasite."  
 Beulah, N. M.—Skinner.
- pauper** LOEW, Cent., VIII, 48 (*Argyromaba*).—Ill. N. J.—Smith Cat.
- pluto** WIEDEMANN, Auss. Zw., I, 261 (*Anthrax*).—Ky.  
 OSTEN SACKEN, West. Dipt., 244 (*Argyromaba*).—Canada to Texas.  
 VAN DER WULP, Tijdschr. v. Ent., XXV, 85, pl. IX, f. 10.  
 OSTEN SACKEN, Biologia, Dipt., I, 102, quotes West. Dipt., etc. (*Argyromaba*).
- seriepunctatum** OSTEN SACKEN, Biologia, Dipt., I, 103, pl. II, f. 5 (*Argyromaba*).  
 —N. Sonora and Tehuacan, Mex.
- simson** FABRICIUS, Syst. Antl., 49 (*Anthrax*).—S. A.  
 DEGEER, Mém. pour Serv. Hist. Nat. Ins., VI, pl. XXIX, f. II (*Nemotclus tigrinus*). [Wied.]  
 SAY, Jour. Acad. Sci. Phil., III, 43; Compl. Works, II, 59 (*Anthrax scripta*).—Pa. [Wied.]  
 WIEDEMANN, Dipt. Exot., 122; Auss. Zw., I, 259, pl. III, f. 2 (id.).—Pa.  
 SCHINER, Novara, 120, oc. in Colombia.  
 OSTEN SACKEN, Biologia, Dipt., I, 100, syn., etc.; "said to be a parasite in nests of *Xylocopa virginica* in U. S."  
 WILLISTON, Biologia, Dipt., I, 275, oc. in Guerrero, Mex.  
 DAVIDSON, Ent. News, IV, 153, in nests of *Xylocopa opifera*.—Los Angeles, Cal.  
 N. J.—Smith Cat.; St. Augustine, Fla.—Johnson.
- stellans** LOEW, Cent., VIII, 46 (*Argyromaba*).—Ore.
- varium** FABRICIUS, Ent. Syst., IV, 259 (*Anthrax*); Syst. Antl., 122 (id.).—France.  
 MEIGEN, Syst. Besch., II, 124 (*Anthrax*).

SCHINER, Fauna Austr., I, 54 (id.).

COQUILLET, Trans. Amer. Ent. Soc., XXI, 96, oc. in Cal.; compared with European specimens.

? *varicolor* BIGOT, Annales, 1892, 347 (*Argyramaba*).—"Amérique du Nord; Colombie, 1 spécimen." [I take this to mean South America.]

#### ALDRICHIA.

COQUILLET, Trans. Amer. Ent. Soc., XXI, 93, 1894.

*ehrmanni* COQUILLET, loc. cit.—Pa.

#### HYPERALONIA.

RONDANI, Archivio per la Zool. Modena, III, p. 1, 1864.

OSTEN SACKEN, Biologia, Dipt., I, 89, 1886.

COQUILLET, Canad. Ent., 1886, 158 (*Velocia*). [Coq.]

WILLISTON, Biologia, Dipt., I, 273, 1901, notes.

*albiventris* MACQUART, Dipt. Exot., Suppl., III, 33, pl. III, f. 15 (*Exoprosopa*).—Rio Negro, Brazil.

VAN DER WULP, Tijdschr. v. Ent., XXIV, 164, pl. xv, f. 11.—Venezuela.

ERICHSON, in Schomburgk's Reise in Brit. Guiana (*Anthrax hela*).

OSTEN SACKEN, Biologia, Dipt., I, 89, desc. and extended notes.—N. Sonora, Mex.

*cerberus* FABRICIUS, Ent. Syst., IV, 256 (*Anthrax*); Syst. Antl., 118 (id.).—West Indies.

WIEDEMANN, Dipt. Exot., 118; Auss. Zw., I, 258 (id.).—S. A.

Porto Rico—Roeder; Jamaica—Johnson.

*didò* OSTEN SACKEN, Biologia, Dipt., I, 91, pl. I, f. 17.—Tres Marias Ids., Mex.

*gazophylax* LOEW, Cent., VIII, 18 (*Exoprosopa*).—Cal.

COQUILLET, Trans. Amer. Ent. Soc., XXI, 93, corrects orig. desc. and refers to this genus.

*kaupii* JÆNNICKE, Neue Exot. Dipt., 32, pl. II, f. 17.—Mex.

OSTEN SACKEN, Biologia, Dipt., I, 94, note.—Tehuacan, Mex.

WILLISTON, Biologia, Dipt., I, 273, oc. in Amula, Mex.

*latreillei* WIEDEMANN, Auss. Zw., II, 633 (*Anthrax*).—Mex.

OSTEN SACKEN, Biologia, Dipt., I, 94, pl. I, f. 18, and pl. II, f. 1.—Guatemala and Panama.

*pilatei* MACQUART, Dipt. Exot., Suppl., I, 110, pl. XX, f. 2 (*Anthrax*).—Yucatan, Merida.

OSTEN SACKEN, Biologia, Dipt., I, 90, pl. I, f. 16.—Tres Marias Ids., Mex.

*proserpina* WIEDEMANN, Auss. Zw., I, 257 (*Anthrax*); II, 632 (*Anthrax klugii*).

—No locality; Cassapava, Brazil. [Schiner.]

MACQUART, Dipt. Exot., II, I, 38, pl. XVI, f. 5 (*Exoprosopa cerberus* FAB.).

—Brazil. [Will.]

BIGOT, in Sagra's Cuba, 793.

WALKER, List, III, 238 (*Anthrax rufescens*).—No locality. [O. S.]

SCHINER, Novara, 117 (*Exoprosopa*).

F. LYNCH A., El. Nat. Argentina, I, 266 (*Exoprosopa*), oc. in Argentina.

VAN DER WULP, Tijdschr. v. Ent., XXIV, 165, pl. xv, f. 12 (*Exoprosopa*).

—S. A.

OSTEN SACKEN, Biologia, Dipt., I, 92.—Guatemala; Costa Rica.

WILLISTON, Biologia, Dipt., I, 273, oc. in Teapa, Mex.

Jamaica—Johnson.

[*serveillei* MACQUART, identified by Coquillett from Porto Rico and Bahamas in Proc. U. S. N. M., xxii, 251, was never described; Macquart has a figure of a wing with the name *Exoprosopa serveillei*, on pl. xvi, Dipt. Exot., II. As there is no locality, and the other figures on the plate are from all parts of the world, it seems to me undesirable to try to resurrect the species.]

## EXOPROSOPA.

- MACQUART, Dipt. Exot., II, I, 35, 1840; op. cit., 78 (*Litorhynchus*).  
 MULSANT, Mém. Acad. de Lyon., 1852, 18 (*Trinaria*).  
 RONDANI, Dipt. Ital. Prod., I, 156, 1856; Archivio per la Zool. Modena, III, 1864 (*Argyrospila*).  
 SCHINER, Fauna Austriaca, I, 54, 1862.  
 COQUILLETT, Canad. Ent., XIX, 13, 1887 (*Exoptata*, in part); XXIV, 123, 1892, table of species.  
 OSTEN SACKEN, Biologia, Dipt., I, 77, 1886, full discussion.  
 WILLISTON, Biologia, Dipt., I, 269, 1901, syn. of *Exoptata*, etc.
- agasizii* LOEW, Cent., VIII, 24.—Cal.  
*anthracoides* JÆNNICKE, Neue Exot. Dipt., 32, pl. II, f. 18.—Mex.  
 LOEW, Cent., VIII, 20 (*trabalis*).—Jalapa, Mex. [O. S.]  
 OSTEN SACKEN, Biologia, Dipt., I, 85, notes.
- bifurca* LOEW, Cent., VIII, 23.—Cal.  
*blanchardiana* JÆNNICKE, Neue Exot. Dipt., 33, pl. II, f. 20.—Mex.  
*brevirostris* WILLISTON, Biologia, Dipt., I, 272.—Jalisco, Mex.  
*brevistylata* WILLISTON, Biologia, Dipt., I, 272.—Acapulco, Mex.  
*caliptera* SAY, Jour. Acad. Sci. Phil., III, 46; Compl. Works, II, 62 (*Anthrax*).—Ark.  
 OSTEN SACKEN, West. Dipt., 233; Biologia, Dipt., I, 81, pl. I, f. 12.—Wyo and N. M.; N. Sonora, Mex.; *capucina* may be the female.  
 COCKERELL, Jour. N. Y. Ent. Soc., VI, 206, oc. at Agency, N. M.
- capucina* FABRICIUS, Ent. Syst., IV, 259; Mantissa Ins., II, 329 (*Bibio*); Syst. Antl., 123 (*Anthrax*).—N. A.  
 OSTEN SACKEN, West. Dipt., 231 (*dorcadion*); Cat., 85, note.—Cal., Wash., Col., N. H., Me.  
 ? WALKER, Dipt. Saund., 172 (*Anthrax californiæ*).—Cal. [O. S., with a doubt.]
- cerberus* FABRICIUS, see *Hyperalonia*.  
 For Macquart, see *Hyperalonia proserpina*.
- clotho* WIEDEMANN, Auss. Zw., II, 635 (*Anthrax*).—Mex.  
*cubana* LOEW, Cent., VIII, 22.—Cuba. Porto Rico—Roeder.  
*decora* LOEW, Cent., VIII, 19.—Wis. O. S. Cat. gives Ga., Tex., Ill., Ia., Red. R. of the North.  
*divisa* COQUILLETT, Canad. Ent., XIX, 13 (*Exoptata*).—Cal., Ariz.  
*dodrans* OSTEN SACKEN, West. Dipt., 234.—Col. Springs, Col.  
*doris* OSTEN SACKEN, West. Dipt., 235.—Humboldt Station, Nev.; Ore.  
 See *iota*.
- emarginata* MACQUART, Dipt. Exot., II, I, 51.—Philadelphia, Pa.  
 N. J.—Smith Cat.; Lake Worth, Fla.—Johnson.  
*eremita* OSTEN SACKEN, West. Dipt., 236 (from Shasta district, Cal.); Cat., 237, and Biologia, Dipt., I, 82, notes; may be a var. of *pueblensis*.  
 St. Augustine and Lake Worth, Fla.—Johnson.  
*fascipennis* SAY, Long's Exped., App., 373; Compl. Works, I, 254 (*Anthrax*).—Red R. of the North ("of Winnepeek").

- WIEDEMANN, Auss. Zw., I, 284 (id.); II, 635 (*A. noctula*).—Ky. and Red R.; N. A. [O. S.]
- MACQUART, Dipt. Exot., II, 1, 52 (*philadelphica*); Suppl., IV, 108 (*coniceps*).—Philadelphia; Va. [O. S.]
- BIGOT, in Sagra's Cuba, 793 (*coniceps* MACQ.).—Cuba.  
Atlantic and Middle States—O. S. Cat.; N. J.—Smith Cat.; Fla., several places—Johnson.
- fasciata** MACQUART, Dipt. Exot., II, 1, 51, pl. XVIII, f. 6; Suppl., IV, 108 (the latter *longirostris*).—U. S.; Va. [O. S.]
- VAN DER WULP, Tijdschr. v. Ent., X, 141, pl. IV, f. 1-4 (*Mulio americana*).—Wis.
- OSTEN SACKEN, West. Dipt., 231, notes.  
N. J.—Smith Cat.; St. Augustine and Ormond, Fla.—Johnson.
- filia** OSTEN SACKEN, Biologia, Dipt., I, 86.—Durango, Mex.  
WILLISTON, Biologia, Dipt., I, 272, oc. in Jalisco, Mex., and note.
- gazophylax** LOEW, see *Hyperalonia*.
- grata** COQUILLET, Canad. Ent., XXIV, 124.—Cal., Wash.
- ignifer** WALKER, List, II, 243.—Jamaica.  
OSTEN SACKEN, Cat., 237, note; Biologia, Dipt., I, 82, *pueblensis* may be the same.
- iota** OSTEN SACKEN, Biologia, Dipt., I, 82, pl. I, f. 13.—Tehuacan, Mex.  
COQUILLET, Canad. Ent., XXIV, 125, says is same as *doris*.  
WILLISTON, Biologia, Dipt., I, 270, considers distinct; oc. in Guerrero, Mex.
- lacera** WIEDEMANN, Auss. Zw., II, 633 (*Anthrax*).—Mex.
- latreillei** WIEDEMANN, Auss. Zw., II, 633 (*Anthrax*).—Mex.
- limbipennis** MACQUART, Dipt. Exot., Suppl., I, 110, pl. XX, f. 3.—Yucatan.  
OSTEN SACKEN, Biologia, Dipt., I, 84.—Venteñas, Mex.  
WILLISTON, Biologia, Dipt., I, 271.—Guerrero and Yucatan, Mex.; *procne* may be the same.
- melanura** BIGOT, Annales, 1892, 344.—Rocky Mts.
- nubifera** LOEW, Cent., VIII, 25.—Cuba.
- orcus** WALKER, List, II, 237 (*Anthrax*).—Mex.
- pallens** BIGOT, Annales, 1892, 345.—Cal.
- pardus** OSTEN SACKEN, Biologia, Dipt., I, 88, pl. I, f. 15.—N. Sonora, Mex.
- parva** LOEW, Cent., VIII, 26.—Cuba. Jamaica—Johnson.
- pavida** WILLISTON, Biologia, Dipt., I, 273.—Chilpancingo, Mex.
- pilatei** MACQUART, see *Hyperalonia*.
- procne** OSTEN SACKEN, Biologia, Dipt., I, 85.—Guatemala.  
WILLISTON, Biologia, Dipt., I, 271, may not be distinct from *limbipennis*.
- proserpina** WIEDEMANN, see *Hyperalonia*.
- pueblensis** JENNICKE, Neue Exot. Dipt., 34, pl. II, f. 21.—Mex.  
OSTEN SACKEN, Biologia, Dipt., I, 82, notes; oc. in Tehuacan, Mex., and Guatemala.  
WILLISTON, Biologia, Dipt., I, 270, oc. in Guerrero, Jalisco, and Guanajuato, Mex. See *ignifer* and *cremita*.
- rhea** OSTEN SACKEN, Biologia, Dipt., I, 83, pl. I, f. 14.—Mex.
- rostrifera** JENNICKE, Neue Exot. Dipt., 33, pl. II, f. 19.—Mex.  
OSTEN SACKEN, Biologia, Dipt., I, 86, notes.  
WILLISTON, Biologia, Dipt., I, 271, oc. in Guerrero, Mex.
- rubiginosa** MACQUART, Dipt. Exot., II, 1, 51; Suppl., I, 111.—Philadelphia; Colombia, S. A. Unrecognizable—O. S. Cat.



**sackeni** WILLISTON, *Biologia*, Dipt., I, 271.—Guerrero, Mex.

OSTEN SACKEN, *Biologia*, Dipt., I, 86 (*Exoprosopa*, species No. 1).

[**satyrus** FABRICIUS, recognized by Walker, see O. S. Cat., 87; it is almost certainly not North American.]

**sima** OSTEN SACKEN, *West. Dipt.*, 231.—Humboldt Desert, Nev.

**socia** OSTEN SACKEN, *Biologia*, Dipt., I, 87.—Durango, Mex.

Amula, Mex.—Williston.

**sordida** LOEW, *Cent.*, VIII, 21.—Metamoras, Mex.

**subfascia** WALKER, *List*, II, 249 (*Anthrax*).—Jamaica.

**thomæ** FABRICIUS, *Syst. Antl.*, 135 (*Anthrax*).—St. Thomas, W. I.

WIEDEMANN, *Dipt. Exot.*, 129 (id.); *Auss. Zw.*, I, 271 (id.).

**titubans** OSTEN SACKEN, *West. Dipt.*, 233.—Denver, Col.

**trimacula** WALKER, see *Anthrax*.

#### ASTROPHANES.

OSTEN SACKEN, *Biologia*, Dipt., I, 106, 1886.

**adonis** OSTEN SACKEN, *op. cit.*, 107.—N. Sonora, Mex.

#### MANCIA.

COQUILLET, *Canad. Ent.*, XVIII, 159, 1886.

WILLISTON, *Synopsis Fam. and Gen. Dipt.*, 1888, 37, quoted.

**nana** COQUILLET, *Canad. Ent.*, XVIII, 159.—Cal.

#### DIPALTA.

OSTEN SACKEN, *West. Dipt.*, 236, 1877; *Biologia*, Dipt., I, 98, note.

COQUILLET, *Canad. Ent.*, 1886, 157, unites to *Anthrax*; *Trans. Amer. Ent. Soc.*, XIV, 159, retains as a subgenus; XIX, 169, discards.

WILLISTON, *Biologia*, Dipt., I, 275, 1901, considers a distinct genus.

**junctura** COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 163; XIX, 177, notes on variation.—Cal.

**keenii** COQUILLET, see *Anthrax cclia*.

**serpentina** OSTEN SACKEN, *West. Dipt.*, 237.—Ga., Col., Cal., Mex.

COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 164.—Fla.

WILLISTON, *Biologia*, Dipt., I, 275, oc. in Guerrero and Vera Cruz, Mex. St. Augustine, Fla.—Johnson.

#### LEPIDANTHRAX.

OSTEN SACKEN, *Biologia*, Dipt., I, 107, 1886.

COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 169, 1892.

**agrestis** COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 171 (*Anthrax*); XIX, 169, gen. ref.—Cal.

**angulus** OSTEN SACKEN, *Biologia*, Dipt., I, III, pl. II, f. 9.—Cal.; N. Sonora, Mex.

**campestris** COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 171 (*Anthrax*); XIX, 171, gen. ref.—Cal.

**disjuncta** WIEDEMANN, *Auss. Zw.*, II, 639 (*Anthrax*).—Mex.

OSTEN SACKEN, *Biologia*, Dipt., I, 108, pl. II, f. 7.—Orizaba and Tuxpango, Mex.

WILLISTON, *Biologia*, Dipt., I, 276, oc. in Guerrero, Mex.

**inaurata** COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 170 (*Anthrax*); XIX, 169, ref.—Cal.

- lauta** COQUILLET, Trans. Amer. Ent. Soc., XIV, 171 (*Anthrax*); XIX, 169, gen. ref.—Cal.  
**proboscidea** LOEW, Cent., VIII, 27 (*Anthrax*).—Sonora, Mex.  
 COQUILLET, Trans. Amer. Ent. Soc., XIV, 168.—Ariz., Mex.  
 OSTEN SACKEN, Biologia, Dipt., I, 109, pl. II, f. 8.—N. Sonora, Mex.  
 WILLISTON, Biologia, Dipt., I, 276, oc. in Guerrero, Mex.

### ANTHRAX.

- SCOPOLI, Ent. Carniolica, 358, 1763.  
 FABRICIUS, Syst. Antl., 118, 1805.  
 MEIGEN, Syst. Besch., II, 107, 1820.  
 SCHINER, Fauna Austr., I, 48, 1862.  
 COQUILLET, Trans. Amer. Ent. Soc., XIV, 159, 1887, synopsis of the genus in the U. S.; revised, XIX, 170-177, 1892; partial table of species, XXI, 97, 1895.  
 OSTEN SACKEN, Biologia, Dipt., I, 111-140, full treatment of the southern fauna, with subgenera, etc.; also includes the genera *Stonyx*, p. 94, and *Isopenthes*, p. 96, which are not recognized as valid by Coquillett, and the latter not by Williston.  
 ? **abbreviata** WIEDEMANN, Auss. Zw., II, 637.—Mex. Gen. ref. questioned in O. S. Cat.  
**adumbrata** COQUILLET, Trans. Amer. Ent. Soc., XIV, 176.—Cal.  
**adusta** LOEW, Cent., VIII, 41.—Cuba.  
**ænea** COQUILLET, Trans. Amer. Ent. Soc., XIV, 165.—Cal.  
**agrestis** COQUILLET, see *Lepidanthrax*.  
**agrippina** OSTEN SACKEN, Biologia, Dipt., I, 139, pl. III, f. 3.—N. Sonora, Mex.  
 COQUILLET, Trans. Amer. Ent. Soc., XIX, 182, oc. in Cal., Wash., Col., N. M.  
 Suwanee, Fla.—Johnson.  
**albipectus** MACQUART, Dipt. Exot., Suppl., III, 34, pl. III, f. 12.—N. A.  
 Unrecognizable—O. S.  
**alpha** OSTEN SACKEN, West. Dipt., 239.—Cheyenne, Wyo.; Webber L., Cal.  
 COQUILLET, Trans. Amer. Ent. Soc., XIV, 180.—Wyo. *Fuliginosa* is said to be probably an immature form of the same species.  
**alternata** SAY, Jour. Acad. Sci. Phil., III, 45; Compl. Works, II, 61.—Pa., Mo.  
 WIEDEMANN, Auss. Zw., I, 303.  
 MACQUART, Dipt. Exot., II, 1, 69, pl. XXI, f. I (*consanguinea*).—Philadelphia. [O. S.]  
 LOEW, Cent., VIII, 39 and 40 (*scrobiculata* and *stenoazona*).—Ill. [Coq.]  
 ? OSTEN SACKEN, Biologia, Dipt., I, 138 (*stenoazona*); oc. in Sonora, with a doubt.  
 COQUILLET, Trans. Amer. Ent. Soc., XIV, 166.—N. Y., Md., Fla., Mont., Nebr.  
 RILEY and HOWARD, Insect Life, II, 353, reared by Gillette from undet. cut-worm larvæ in Ia. (*scrobiculata*).  
 N. J.—Smith Cat.; Montreal—Chagnon; Fla.—Johnson; Beulah, N. M.—Skinner.  
 var. **perimele** WIEDEMANN, Auss. Zw., I, 583.—Brazil.  
 COQUILLET, Trans. Amer. Ent. Soc., XIV, 166.—Cal.  
**anna** COQUILLET, Trans. Amer. Ent. Soc., XIV, 169; XIX, 180, notes.—Cal.  
**arenosa** COQUILLET, Trans. Amer. Ent. Soc., XIX, 187.—N. M.  
**arethusa** OSTEN SACKEN, Biologia, Dipt., I, 116, pl. II, f. II.—N. Sonora, Mex., to Costa Rica; Col.

- WILLISTON, *Biologia*, Dipt., I, 277, oc. in Col., N. M., and in Guerrero, Mex.
- arizonensis** COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 182.—Ariz.
- astarte** WIEDEMANN, *Auss. Zw.*, II, 637.—Mex.  
OSTEN SACKEN, *Biologia*, Dipt., I, 122, note.  
WILLISTON, *Biologia*, Dipt., I, 279.—Guerrero and Tabasco, Mex.
- atrata** COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 171.—Cal.  
? WALKER, *Dipt. Saund.*, 190 (*cedens*).—U. S. [Coq., with a doubt.]
- bifenestrata** BIGOT, see *nugator*.
- bigradata** LOEW, *Cent.*, VIII, 37.—Cuba.  
? MACQUART, *Dipt. Exot.*, Suppl., IV, 113 (*albovittata*).—N. A.? [Coq., with a doubt; it is probably not North American.]  
COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 174.—Cal.  
Porto Rico—Roeder; Jamaica—Johnson.
- campestris** COQUILLET, see *Lepidanthrax*.
- caprea** COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 170.—Cal.
- castanea** JÆNNICKE, *Neue Exot. Dipt.*, 30, pl. II, f. 15.—Mex.  
OSTEN SACKEN, *Biologia*, Dipt., I, 127.—Guatemala.
- castanipes** BIGOT, *Annales*, 1892, 350.—N. A.
- catulina** COQUILLET, *Trans. Amer. Ent. Soc.*, XXI, 100.—Wash. and N. Cal.  
Hudsonian Zone, N. M.—Cockerell; Beulah, N. M.—Skinner.
- cautor** COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 175.—Cal.
- cedens** WALKER, see *atrata*.
- celer** WIEDEMANN, *Auss. Zw.*, I, 310.—Ky.  
MACQUART, *Dipt. Exot.*, II, I, 69; Suppl., IV, 112, pl. x, f. 14 (the latter *floridana*).—Philadelphia; Fla. [Coq.]  
COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 173.—Venezuela.  
St. Augustine, Fla.—Johnson.
- ceria** WILLISTON, *Biologia*, Dipt., I, 283.—Guerrero, Mex.
- ceyx** LOEW, *Cent.*, VIII, 30.—Va.  
? WALKER, *List*, II, 265 (*demogorgon*).—Fla. [O. S., with a doubt.]  
MACQUART, *Dipt. Exot.*, II, I, 68 (*halcyon* SAY).—Car. [O. S.]  
COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 181.—N. C.  
Ga.—O. S. Cat.; N. J.—Smith Cat.
- chimæra** OSTEN SACKEN, *Biologia*, Dipt., I, 131.—N. Sonora, Mex.
- cinefacta** COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 180.—San Diego Co., Cal.
- clelia** OSTEN SACKEN, *Biologia*, Dipt., I, 95, pl. II, f. 3 (*Stonyr.*).—N. Sonora, Mex.  
COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 164 (*keenii*); XIX, 168, syn.—Ariz.
- clotho** WIEDEMANN, *Auss. Zw.*, II, 635.—Oaxaca, Mex.  
OSTEN SACKEN, *Biologia*, Dipt., I, 95, quotes orig. desc. (*Stonyr.*).  
WILLISTON, *Biologia*, Dipt., I, 274, oc. in Morelos, Mex. (*Stonyr.*).
- connexa** MACQUART, *Dipt. Exot.*, Suppl. v, 76.—Baltimore, Md.  
BIGOT, in Sagra's Cuba, 794.—Cuba.  
Unrecognizable—O. S.
- consessor** COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 165.—Cal.
- consul** OSTEN SACKEN, *Biologia*, Dipt., I, 125.—Guatemala.  
COQUILLET, *Trans. Amer. Ent. Soc.*, XXI, 98, doubtful oc. in S. D.  
WILLISTON, *Biologia*, Dipt., I, 280, oc. in Guerrero, Mex.
- costata** SAY, *Long's Exped.*, App., 373; *Compl. Works*, I, 254.—N. W. Terr.  
WIEDEMANN, *Auss. Zw.*, I, 314. See *inops*.

- crocina* COQUILLET, Trans. Amer. Ent. Soc., XIX, 183.—San Bernardino, Co., Cal.
- cuniculus* OSTEN SACKEN, Biologia, Dipt., I, 125, pl. II, f. 16.—N. Sonora, Mex.
- curta* LOEW, Cent., VIII, 35.—Cal.  
COQUILLET, Trans. Amer. Ent. Soc., XIV, 172, transl. orig. desc.  
WILLISTON, Biologia, Dipt., I, 281, oc. in N. Yucatan, etc.
- cyanoptera* WIEDEMANN, Auss. Zw., II, 638.—Mex.  
OSTEN SACKEN, Biologia, Dipt., I, 115.—Mex.  
WILLISTON, Biologia, Dipt., I, 276, oc. in Guerrero, Mex.
- delicatula* WALKER, List, II, 266.—Jamaica.
- diagonalis* LOEW, Cent., VIII, 33.—Cal.
- diana* WILLISTON, Biologia, Dipt., I, 280.—Guerrero, Mex.
- dispar* COQUILLET, Trans. Amer. Ent. Soc., XIV, 177.—Fla.  
? BIGOT, Annales, 1892, 354 (*fissus*).—N. A. [Coq., with a doubt.]  
St. Augustine, Fla.—Johnson.
- edititia* SAY, Jour. Acad. Sci. Phil., VI, 157; Compl. Works, II, 353.—No locality.  
COQUILLET, Trans. Amer. Ent. Soc., XIV, 177 (*impiger*).—Ariz. [Will.]  
OSTEN SACKEN, Biologia, Dipt., I, 119, pl. II, f. 13.—N. Sonora and Tehuacan, Mex.; Texas. May be same as *A. gorgon*.  
WILLISTON, Biologia, Dipt., I, 278, oc. in Guerrero, Mex.; important notes.
- edwardsii* COQUILLET, Jour. N. Y. Ent. Soc., II, 102.—San Francisco, Cal., and Vancouver Id., Br. Col.
- effrena* COQUILLET, Trans. Amer. Ent. Soc., XIV, 182.—Ariz.
- ephebus* OSTEN SACKEN, Biologia, Dipt., I, 124.—Tehuacan, Mex.
- eudora* COQUILLET, Trans. Amer. Ent. Soc., XIV, 169.—Cal.
- eumenes* OSTEN SACKEN, Biologia, Dipt., I, 131, pl. II, f. 19.—N. Sonora, Mex.  
Cal.—Coquillett.
- eurhinata* BIGOT, Annales, 1892, 355.—Mex.
- extremis* COQUILLET, Jour. N. Y. Ent. Soc., X, 138.—Chihuahua, Mex.
- faunus* FABRICIUS, Syst. Antl., 126.—W. I.  
WIEDEMANN, Dipt. Exot., 139; Auss. Zw., I, 292.—S. A.  
MACQUART, Dipt. Exot., II, I, 75, pl. XXI, f. I.—Cuba.  
COQUILLET, Trans. Amer. Ent. Soc., XIX, 187, oc. in Fla.  
Porto Rico—Roeder; St. Augustine, Fla.—Johnson.
- faustina* OSTEN SACKEN, Biologia, Dipt., I, 136.—N. Sonora, Mex.
- fenestratoides* COQUILLET, Trans. Amer. Ent. Soc., XIX, 185.—San Bernardino Co., Cal.  
Panamint Val., Cal.—Williston, Death Val. Exped.
- fissa* BIGOT, see *dispar*.
- flaviceps* LOEW, Cent., VIII, 29.—Tamaulipas, Mex.
- floridana* MACQUART, see *celer*.
- fuliginosa* LOEW, Cent., VIII, 31.—Cal.  
COQUILLET, Trans. Amer. Ent. Soc., XIV, 181, oc. in Cal. and Texas; *alpha* is probably the same.
- fulviana* SAY, Long's Exped., App., 372; Compl. Works, I, 253.—Pembina, Minn., etc.  
WIEDEMANN, Auss. Zw., I, 290.  
COQUILLET, Trans. Amer. Ent. Soc., XIV, 167.—N. M., Wash.  
Montreal—Chagnon; Beulah, N. M.—Skinner.
- var. *nigricauda* LOEW, Cent., VIII, 38.—Mass.  
COQUILLET, Trans. Amer. Ent. Soc., XIV, 167.—Canada.

- fulvicoma** COQUILLET, Trans. Amer. Ent. Soc., xiv, 176.—Cal., Kans., Mont.  
Described as a var. of *edititia*, but as the latter was incorrectly identified (Will., Biol., I, 278), I let this stand as a species.
- fulvohirta** WIEDEMANN, Dipt. Exot., 149; Auss. Zw., I, 308.—Ga.  
MEIGEN, Syst. Besch., II, 158, pl. XVII, f. 11 (*cypris*).—Europe, a mistake.  
[Wied.]  
MACQUART, Dipt. Exot., II, I, 69; Suppl., IV, 112, pl. X, f. 13 (the latter as *conifacies*).—Carolina; Virginia. [O. S.]  
WALKER, Dipt. Saund., 177 (*separata*).—N. A. [O. S.]  
COQUILLET, Trans. Amer. Ent. Soc., xiv, 174.—N. J., Ga., Kans.  
OSTEN SACKEN, Biologia, Dipt., I, 122, common in Texas.  
WILLISTON, Biologia, Dipt., I, 280, oc. in Guerrero, Mex.  
N. J.—Smith Cat.; Fla.—Johnson.
- fumida** COQUILLET, Trans. Amer. Ent. Soc., xiv, 177.—Cal.
- funebria** MACQUART, Dipt. Exot., II, I, 66, pl. XXI, f. 10.—San Domingo.
- fuscipennis** MACQUART, Hist. Nat. Dipt., I, 410.—N. A. Unrecognizable!
- galathea** OSTEN SACKEN, Biologia, Dipt., I, 123, pl. II, f. 15.—Costa Rica.
- gemella** COQUILLET, Trans. Amer. Ent. Soc., xix, 182.—San Diego Co., Cal.
- gorgon** FABRICIUS, Syst. Antl., 126.—West Indies.  
WIEDEMANN, Auss. Zw., I, 303.—W. I.  
OSTEN SACKEN, Biologia, Dipt., I, 119, *edititia* may be a synonym.  
Porto Rico—Roeder and Coquillett.
- gracilis** MACQUART, Dipt. Exot., II, I, 76, pl. XXI, f. 1.—Philadelphia.  
Unrecognizable—O. S.
- halcyon** SAY, Long's Exped., App., 371; Compl. Works, I, 252 (*alcyon*).—N. W. Terr.  
WIEDEMANN, Auss. Zw., I, 288, pl. III, f. 6.  
WILLISTON, Canad. Ent., 1879, XI, 216, notes.  
VAN DER WULP, Tijdschr. v. Ent., xxv, 1882, 79, pl. IX, f. 1.—(Ariz.) May be *pacilogaster*.—O. S.  
COQUILLET, Trans. Amer. Ent. Soc., xiv, 181.—Kans., Nebr.  
MACQUART, see *ceyx*.
- hircina** COQUILLET, Trans. Amer. Ent. Soc., xix, 182.—San Diego Co., Cal.
- hirsuta** WILLISTON, Biologia, Dipt., I, 279.—Guerrero, Mex.
- hypomelas** MACQUART, Dipt. Exot., II, I, 76, pl. XXI, f. 1.—N. A.  
VAN DER WULP, Tijdschr. v. Ent., xxv, 84, 1882, oc. Ariz.; Notes from the Leyden Mus., IV, 75, notes.  
COQUILLET, Trans. Amer. Ent. Soc., xiv, 166; xix, 169.—Can., Pa., Wis.  
RILEY and HOWARD, Insect Life, II, 353, record rearing from *Agrotis herilis* by Webster, giving figs. of larva, adult, etc.—Ind.  
N. J.—Smith Cat.; Montreal—Chagnon; Beulah, N. M.—Skinner.
- impiger** COQUILLET, see *edititia*.
- inaurata** COQUILLET, see *Lepidanthrax*.
- inculta** COQUILLET, Trans. Amer. Ent. Soc., xix, 181.—San Bernardino Co., Cal.
- inops** COQUILLET, Trans. Amer. Ent. Soc., xiv, 169.—Cal. May be same as *costata*.
- keenii** COQUILLET, see *clelia*.
- lacera** WIEDEMANN, Auss. Zw., II, 633.—Oaxaca, Mex.  
WILLISTON, Biologia, Dipt., I, 274, oc. in Guerrero, Mex. (*Stonyx*).
- lacunaris** COQUILLET, Trans. Amer. Ent. Soc., xix, 185.—San Bernardino Co., Cal.

- latelimbata** BIGOT, Annales, 1892, 351 (*Hemipenthes*).—Carolina.  
St. Augustine, Fla.—Johnson (*Argyramaba*).
- lateralis** SAY, Jour. Acad. Sci. Phil., III, 42; Compl. Works, II, 59.—Pa. and Md.  
WIEDEMANN, Auss. Zw., I, 318.  
MACQUART, Dipt. Exot., II, 1, 60 (*bastardi*).—N. A. [O. S.]  
OSTEN SACKEN, Biologia, Dipt., I, 137.—White Mts., N. H.  
COQUILLET, Trans. Amer. Ent. Soc., XIV, 166; XIX, 169.—N. J., Fla., Canada, Wash.  
WILLISTON, Biologia, Dipt., I, 283. oc. in Guerrero, Mex.  
Jamaica—Johnson.
- var. **fulvipes** COQUILLET, Trans. Amer. Ent. Soc., XIV, 166; XIX, 178. note.—Ariz.
- lauta** COQUILLET, see *Lepidanthrax*.
- lelia** WILLISTON, Biologia, Dipt., I, 274, pl. v, f. 1 (*Stonyx*).—Guerrero, Mex.
- lepidota** OSTEN SACKEN, Biologia, Dipt., I, 130, pl. II, f. 18.—N. Sonora, Mex.  
COQUILLET, Trans. Amer. Ent. Soc., XIX, 185. oc. in Cal.  
WILLISTON, Biologia, Dipt., I, 281, note.
- leucothoa** WIEDEMANN, Auss. Zw., II, 638.—Mex.  
WILLISTON, Biologia, Dipt., I, 279.—Guerrero, Mex.
- levicula** COQUILLET, Trans. Amer. Ent. Soc., XXI, 99.—S. Cal.
- livia** OSTEN SACKEN, Biologia, Dipt., I, 139, pl. III, f. 2.—N. Sonora, Mex.
- lucifer** FABRICIUS, Mantissa Ins., II, 329 (*Bibio*); Syst. Antl., 126.—West Indies.  
WIEDEMANN, Dipt. Exot., 142; Auss. Zw., I, 294.—W. I.  
BIGOT, in Sagra's Cuba, 794.  
WALKER, Dipt. Saund., 184 (*fumiflamma*).—Jamaica.  
OSTEN SACKEN, Biologia, Dipt., I, 116.—Cuantla, Mex.  
COQUILLET, Trans. Amer. Ent. Soc., XIV, 180.—Cal., La.  
WILLISTON, Biologia, Dipt., I, 277, oc. in Atoyac, Mex.  
Porto Rico—Roeder; Jamaica and Fla.—Johnson.
- maria** WILLISTON, Biologia, Dipt., I, 283.—Guerrero, Mex.
- melasoma** VAN DER WULP, Tijdschr. v. Ent., XXV, 80, pl. IX, f. 2.—Ariz.  
OSTEN SACKEN, Biologia, Dipt., I, 140.
- melia** WILLISTON, Biologia, Dipt., I, 274, pl. v, f. 1, 1a (*Stonyx*).—Rio Papagaio and Acapulco, Mex.
- mercedis** COQUILLET, Trans. Amer. Ent. Soc., XIV, 166.—Cal.
- mira** COQUILLET, Trans. Amer. Ent. Soc., XIV, 179; XIX, 180. note.—Cal.  
St. Augustine, Fla.—Johnson.
- miscella** COQUILLET, Trans. Amer. Ent. Soc., XIV, 171.—Wash., Cal.
- mobilis** COQUILLET, Trans. Amer. Ent. Soc., XXI, 100.—S. Cal.
- molitor** LOEW, Cent., VIII, 42.—Cal.  
COQUILLET, Trans. Amer. Ent. Soc., XIV, 168.—Cal., Ariz.  
RILEY and HOWARD, Insect Life, II, 353, reared by Coquillett from noctuid pupæ, perhaps *Taniocampa rufula* Grote.
- moneta** OSTEN SACKEN, Biologia, Dipt., I, 138.—N. Sonora, Mex.
- morio** LINNÉ, Fauna Suecica, 1785 (*Musca*).—Europe.  
MEIGEN, Syst. Besch., II, 157, pl. XVII, f. 14 (*semiatra*).  
SAY, Jour. Acad. Sci. Phil., III, 42; Compl. Works, II, 58 (*morioides*).—Merrimac R., in Mo. [Coq.]  
WIEDEMANN, Auss. Zw., I, 309 (id.).  
SCHINER, Fauna Austr., I, 49.  
? LOEW, Cent., VIII, 44 (*Hemipenthes seminigra*).—Saskatchewan R., Canada. [O. S., probably same as *morioides*.]



COQUILLET, Trans. Amer. Ent. Soc., XXI, 98, oc. in Me., N. II., and Mont.; compared with European specimens.

Suwanee, Fla.—Johnson.

**mucorea** LOEW, Cent., VIII, 43.—Nebr.

OSTEN SACKEN, Biologia, Dipt., I, 139, note.

**muscaria** COQUILLET, Trans. Amer. Ent. Soc., XIX, 178.—S. Cal.; referred to *mucorea* LOEW in Coquillett's earlier paper, XIV, 167.

**nebulo** COQUILLET, Trans. Amer. Ent. Soc., XIV, 165.—Wash.

**nebulosa** COQUILLET, Trans. Amer. Ent. Soc., XXI, 99.—S. Cal.

**nero** FABRICIUS, Syst. Antl., 127.—W. I.

WIEDEMANN, Dipt. Exot., 149; Auss. Zw., I, 316.—W. I.

**nigrofimbriata** WILLISTON, Biologia, Dipt., I, 282.—Guerrero, Mex.

**nudiuscula** THOMSON, Eugenes Resa, 482.—Panama.

**nugator** COQUILLET, Trans. Amer. Ent. Soc., XIV, 178; XIX, 180, note.—Cal.

? BIGOT, Annales, 1892 (*bifenestratus*).—Cal. [Coq., with a doubt.]

var. **pallida** COQUILLET, Trans. Amer. Ent. Soc., XIV, 179.—Cal., Ariz.

**obscura** COQUILLET, Trans. Amer. Ent. Soc., XXI, 99.—S. Cal.

**orbitalis** WILLISTON, Biologia, Dipt., I, 281, pl. v, f. 4.—Guerrero, Tabasco, and Jalisco, Mex.

**otiosa** COQUILLET, see *scelne*.

**palliata** LOEW, Cent., VIII, 32.—Ill.

? WALKER, Dipt. Saund., 187 (*incisa*).—N. A. [O. S., with a doubt.]

COQUILLET, Trans. Amer. Ent. Soc., XIV, 176.—Ill., Nebr.

OSTEN SACKEN, Biologia, Dipt., I, 126, transl. orig. desc., etc.

WILLISTON, Biologia, Dipt., I, 281, oc. in Guerrero, Mex., and notes.

**pallidula** COQUILLET, Trans. Amer. Ent. Soc., XXI, 99.—S. Cal.

**paradoxa** JENNICKE, Neue Exot. Dipt., 31, pl. II, f. 16.—Mex.

VAN DER WULP, Tijdschr. v. Ent., XXI, 189, refers to *Diplocampta* SCHINER.

OSTEN SACKEN, West. Dipt., 237; Biologia, Dipt., I, 120.—Texas, Mex., Porto Rico.

WILLISTON, Biologia, Dipt., I, 278, oc. in Guerrero, Mex., and important notes. Porto Rico—Roeder.

**parvicornis** LOEW, Cent., VIII, 36.—Ill.

OSTEN SACKEN, Biologia, Dipt., I, 128, notes.

COQUILLET, Trans. Amer. Ent. Soc., XIV, 178.—La.

**perplexa** COQUILLET, Trans. Amer. Ent. Soc., XIV, 176.—Cal.

**pertusa** LOEW, Cent., VIII, 28.—N. M.

COQUILLET, Trans. Amer. Ent. Soc., XIV, 179, transl. orig. desc.; XXI, 97, corrects errors in orig. desc.

**plagosa** COQUILLET, see *rex*.

**pleuralis** WILLISTON, Biologia, Dipt., I, 282, pl. v, f. 5.—Guerrero, Mex.

**pluricella** WILLISTON, Biologia, Dipt., I, 277, pl. v, f. 3.—Vera Cruz, Mex.

**pæcilogaster** OSTEN SACKEN, Biologia, Dipt., I, 118, pl. II, f. 12.—N. Sonora and Tehuacan, Mex.; Cal.

VAN DER WULP, see *halcyon*.

**pretiosa** COQUILLET, Trans. Amer. Ent. Soc., XIV, 168; XIX, 169, 179.—Cal.

**proboscidea** LOEW, see *Lepidanthrax*.

**pullata** COQUILLET, Trans. Amer. Ent. Soc., XXI, 98.—S. Cal.

**pusio** MACQUART, Dipt. Exot., II, 1, 76, pl. XXI, f. 1.—Cuba.

BIGOT, in Sagra's Cuba, 794.

**quinquepunctata** THOMSON, Eugenes Resa, 484.—Panama.

**rex** OSTEN SACKEN, Biologia, Dipt., I, pl. II, f. 17.—N. Sonora, Mex.

COQUILLET, Trans. Amer. Ent. Soc., XIV, 178 (*plagosa*).—Ariz. [Coq.]

- sabina OSTEN SACKEN, *Biologia, Dipt.*, I, 137.—N. Sonora, Mex.
- sabulosa COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 186.—San Bernardino Co., Cal.; N. M.
- sackeniana WILLISTON, *Biologia, Dipt.*, I, 276 (*Isopenthes*).—Guerrero, Mex.
- sagata LOEW, *Cent.*, VIII, 34.—Metamoras, Mex.
- scitula COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 172.—Cal.
- scrobiculata LOEW, see *alternata*.
- scylla OSTEN SACKEN, *Biologia, Dipt.*, I, 132, pl. III, f. I.—N. Sonora, Mex.
- selene OSTEN SACKEN, *Biologia, Dipt.*, I, 122, pl. II, f. 14.—N. Sonora, Mex.  
COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 182 (*otiosa*).—Ariz. [Coq.]
- seminigra LOEW, see *morio*.
- sinuosa WIEDEMANN, *Dipt. Exot.*, 147; *Auss. Zw.*, I, 301.—Ga.  
MACQUART, *Dipt. Exot.*, II, I, 67 (*nycthemera* HOFFMANNSEGG); 68 (*con-*  
*cisa*); *Suppl.*, I, 114 (*assimilis*).—Ga.; Car.; Galveston, Texas. [O. S.]  
OSTEN SACKEN, *Biologia, Dipt.*, I, 133.—N. Sonora, Mex.; Texas.  
COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 159 (*Hemipenthes*), ref.  
N. J.—Smith Cat.; St. Augustine, Fla.—Johnson; Beulah, N. M.—Skinner.
- squamigera COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 181.—San Diego Co., Cal.
- stenozona LOEW, see *alternata*.
- supina COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 169.—Cal.
- syrtis COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 173.—Cal.  
COCKERELL, *Jour. N. Y. Ent. Soc.*, VI, 206, oc. at Agency, N. M.
- tantilla COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 184.—San Diego Co., Cal.
- tegminipennis SAY, *Long's Exped.*, App., 371; *Compl. Works.*, I, 253.—N. W. Terr.  
WIEDEMANN, *Auss. Zw.*, I, 289.  
COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 180.—Me., Mont., Ariz., Canada.  
N. J.—Smith Cat.; Montreal—Chagnon; Fla., Johnson.  
var. *sackenii* COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 180.—Ariz., Col.
- telluris COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 182.—Los Angeles Co., Cal.
- terrena COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 181.—Los Angeles and Kern Cos., Cal.
- translata WALKER, *Dipt. Saund.*, 182.—West Indies.
- trifigurata WALKER, *Trans. Ent. Soc.*, V, 285.—Hayti.
- trimacula WALKER, *List*, II, 250.—Jamaica.  
OSTEN SACKEN, *Catalogue*, 237, note (*Exoprosopa*).  
JOHNSON, *Proc. Acad. Nat. Sci. Phil.*, 1894, 274, gen. ref.; recognized from Jamaica.
- turbata COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 168.—Cal.
- vacans COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 168; XIX, 169, 179.—Wash.
- vana COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 173; XIX, 180, notes.—Cal.
- variata COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 184.—Los Angeles and Kern Cos., Cal.
- vasta COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 184.—San Diego Co., Cal.
- vestita WALKER, *List*, II, 258.—Nova Scotia.
- vigilans COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 176; XIX, 18, placed as a syn. of *edititia*.—Kans., Col., Mont.  
WILLISTON, *Biologia, Dipt.*, I, 278, not the same as *edititia*.
- vulpina COQUILLET, *Trans. Amer. Ent. Soc.*, XIX, 183.—San Bernardino Co., Cal.
- willistonii COQUILLET, *Trans. Amer. Ent. Soc.*, XIV, 181.—Cal., N. M., Col.  
WILLISTON, *Canad. Ent.*, XI, 216 (n. sp. near *fuliginosa*).—Col. [Coq.]

## PANTARBES.

- OSTEN SACKEN, West. Dipt., 254, 1877; Biologia, Dipt., I, 151, 1886.  
**capito** OSTEN SACKEN, West. Dipt., 256.—Sonoma Co., Cal.  
 Argus Mts., Cal.—Riley.  
**pusio** OSTEN SACKEN, Biologia, Dipt., I, 153, pl. III, f. 15a-d.—N. Sonora, Mex.  
**willistoni** OSTEN SACKEN, Biologia, Dipt., I, 153.—Ariz.

## TRIPLASIUS.

- LOEW, Neue Beiträge, III, 7, 1855.  
 WILLISTON, Dipt. of Death Val. Exped., 255, 1893.  
**novus** WILLISTON, op. cit., 254.—Panamint Val., Cal.

## ANISOTAMIA.

- MACQUART, Dipt. Exot., Suppl., III, 115, 1850.  
 WILLISTON, Biologia, Dipt., I, 284, 1901.  
**fasciata** WILLISTON, Biologia, Dipt., I, 284, pl. v, f. 6.—Jalisco, Mex.  
**valida** WIEDEMANN, Auss. Zw., II, 636 (*Anthrax*).—Mex.  
 MACQUART, Dipt. Exot., Suppl. IV, 114, pl. XI, f. 2 (*eximia*).—Mex.  
 ROEDER, Wien. Ent. Zeit., v, 264 (*Oncodocera*).  
 OSTEN SACKEN, Biologia, Dipt., I, 141, 142 (*Oncodocera*).—Guatemala.  
 COQUILLET, Canad. Ent., XVIII, 87, transl. orig. desc.  
 WILLISTON, Biologia, Dipt., I, 284, oc. in Guerrero and Yucatan, Mex.

## BOMBYLIUS.

- LINNÉ, Fauna Suecica, 1918, 1761.  
 LETREILLE, Hist. Nat. Crust. et Ins., III, 429, 1802; XIV, 298, 1804.  
 FABRICIUS, Syst. Antl., 128, 1805.  
 MEIGEN, Syst. Besch., II, 141, 1820.  
 MACQUART, Hist. Nat. Dipt., I, 377, 1834.  
 SCHINER, Fauna Austr., I, 58, 1862.  
 OSTEN SACKEN, West. Dipt., 247, 1877, table of species.  
**æqualis** FABRICIUS, Mantissa Ins., II, 365; Syst. Antl., 128.—N. A.  
 OSTEN SACKEN, Cat., 238, note 158; is unrecognizable, etc.  
**albicapillus** LOEW, Cent., x, 42.—Cal.  
 OSTEN SACKEN, West. Dipt., 249, oc. in Marin and Sonoma Cos., and Yosemite Val., Cal. Quebec—Wulp.  
**albopenicillatus** BIGOT, Annales, 1892, 363.—Mex.  
 WILLISTON, Biologia, Dipt., I, 286.—Guerrero, Mex.  
**atriceps** LOEW, Cent., IV, 49.—Fla., Va.  
 MACQUART, Dipt. Exot. Suppl., v, 82 (*fulvibasis*); see O. S. Cat., note 159, p. 238.  
 N. J.—Smith Cat.; Fla., several places—Johnson; N. Y., Conn.—O. S. Cat.  
**aurifer** OSTEN SACKEN, West. Dipt., 249.—Webber L., Cal.  
**bicolor** LOEW, Wien. Ent. Monatsch., v, 34.—Cuba.  
**cachinnans** OSTEN SACKEN, West. Dipt., 250.—Sonoma Co., Cal.  
**cinereus** BIGOT, Annales, 1892, 364.—Cal.  
**clio** WILLISTON, Biologia, Dipt., I, 286.—Guerrero, Mex.  
**coquilletti** WILLISTON, see *atr.* at end of this genus.  
**dolorosus** WILLISTON, Biologia, Dipt., I, 286, pl. v, f. 8.—Guerrero, Mex.  
**hæmorrhœicus** LOEW, Cent., IV, 46.—Cuba.  
**helvus** WIEDEMANN, Dipt. Exot., 164; Auss. Zw., I, 336.—Mex.  
**io** WILLISTON, Biologia, Dipt., I, 285, pl. v, f. 7.—Guerrero, Mex.

- lancifer** OSTEN SACKEN, West. Dipt., 251.—San Francisco and Yosemite Val., Cal. N. J.—Smith Cat.; Fla.—Johnson.
- laticeps** BIGOT, Annales, 1892, 363.—Cal.
- major** LINNÉ, Fauna Suecica, 1918, 1761; Syst. Nat., 12th ed., II, 1009.—Europe. FABRICIUS, Spec. Ins., II, 472; Ent. Syst., IV, 407; Syst. Antl., 128. GMELIN, Syst. Nat., V, 2902. DEGEER, Mém. pour Serv. Hist. Nat. Ins., VI, 107, pl. XV, f. 10 (*variegatus*). MIKAN, Monogr. Bombyl. Bohemiæ, 35, pl. II, f. 4 (*sinuatus*). MEIGEN, Klassifikation, 179 (*sinuatus*); Syst. Besch., II, 144, with extensive bibliography. MACQUART, Hist. Nat. Dipt., I, 377. ZETTERSTEDT, Dipt. Scand., I, 188. SCHLINER, Fauna Austr., I, 60. WIEDEMANN, Auss. Zw., I, 583 (*fratellus*).—Ga. MACQUART, Dipt. Exot., II, I, 98 (*vicinus*); Suppl., V, 82, pl. IV, f. 10 (*albipectus*).—Philadelphia; Baltimore. KIRBY, Fauna Boreali-Amer., Ins., 312 (*major*); reproduced in Canad. Ent., XIII, 166.—Northern N. A. LOEW, Neue Beiträge, III, 14, notes. HARRIS, Ins. Inj. Vegetation, 3d ed., 606, f. 263 (*æqualis*, preoc.). OSTEN SACKEN, West. Dipt., 248, oc. Cal.; relation of *fratellus* and *Bombylius* discussed, but not settled. COQUILLET, Trans. Amer. Ent. Soc., XXI, 110, 1894, syn. of *fratellus*.—U. S. generally.
- metopium** OSTEN SACKEN, West. Dipt., 249.—Marin Co., Cal.
- mexicanus** WIEDEMANN, Dipt. Exot., 166; Auss. Zw., I, 338.—Mexico, and Savannah, Ga. MACQUART, Dipt. Exot., II, I, 99, pl. VI, f. 3 and VII, f. 3 (*philadelphicus*).—Philadelphia. [Loew, in O. S. Cat.] N. J.—Smith Cat. (*philadelphicus*); Fla.—Johnson; Middle and S. States—O. S.
- plumipes** DRURY, Illustr. of Nat. Hist., II, pl. XXXIX, f. 3.—Jamaica. WIEDEMANN, Auss. Zw., I, 351, describes from the plate.
- pulchellus** LOEW, Cent., IV, 47.—Ill. N. J.—Smith Cat.
- pygmæus** FABRICIUS, Mantissa Ins., II, 367; Ent. Syst., IV, 411; Syst. Antl., 135.—N. A. OLIVIER, Encycl. Méth., I, 328. LAMARCK, Anim. sans vert., III, 407. WIEDEMANN, Auss. Zw., I, 351. KIRBY, Fauna Boreali-Amer., Ins., 312; reproduced in Canad. Ent., XIII, 166.—Northern N. A. Atlantic States and Br. Amer.; Va.—O. S. Cat. Montreal—Chagnon; Fla.—Johnson.
- ravus** LOEW, Cent., IV, 50.—Matamoras, Mex.
- recurvus** COQUILLET, Proc. U. S. N. M., XXV, 100.—San Bernardino and San Diego Cos., Cal.
- semirufus** LOEW, Cent., X, 41.—San Domingo.
- syndesmus** COQUILLET, see below.
- validus** LOEW, Cent., IV, 48.—Ill., Va. N. Y., Ga.—O. S. Montreal—Chagnon.
- varius** FABRICIUS, Syst. Antl., 132.—N. A. WIEDEMANN, Dipt. Exot., 163; Auss. Zw., I, 335.—N. A.

LOEW, Neue Beiträge, III, 29, notes.

Middle States—O. S.; N. J.—Smith Cat.; Fla.—Johnson.

**ater** COQUILLET, Trans. Amer. Ent. Soc., XXI, 108 (*Thlipsogaster*).—La.

WILLISTON, Psyche, VIII, 331, refers to *Bombylius*, and changes name to *coquilletti* on account of preoccupation; oc. in Mex.; Biologia, Dipt., I, 286, oc. in Guerrero, Mex.

**syndesmus** COQUILLET, Trans. Amer. Ent. Soc., XXI, 108 (*Thlipsogaster*).—S. Cal.

WILLISTON, Psyche, VIII, 331, oc. in Kans. (*Bombylius*).

*Note*.—As Mr. Coquillett assures me very positively that the two preceding species do not belong to *Bombylius*, while apparently also admitting that they differ from *Thlipsogaster*, I am compelled to place them provisionally as an appendix to *Bombylius*.

#### HETEROSTYLUM.

MACQUART, Dipt. Exot., Suppl. III, 35, 1848.

OSTEN SACKEN, West. Dipt., 256, 1877 (*Comastes*); Biologia, Dipt., I, 151, 1886 (id.).

**ferrugineum** FABRICIUS, Syst. Antl., 132 (*Bombylius*).—West Indies.

WIEDEMANN, Auss. Zw., I, 334 (id.).—West Indies? and Brazil.

OSTEN SACKEN, Cat., 238, oc. at St. Thomas, and gen. ref. (*Comastes*).

**pallipes** BIGOT, Annales, 1892, 361.—Hayti.

**robustum** OSTEN SACKEN, West. Dipt., 256 (*Comastes*).—Texas, Mexico.

**rufum** OLIVIER, Encycl. Méth., I, 327 (*Bombylius*).—West Indies.

WIEDEMANN, Zool. Mag., III, 46; Dipt. Exot., 164; Auss. Zw., I, 335 (all *Bombylius basilaris*).—Brazil.

LOEW, Neue Beitr., III, 29, syn., etc. (*Comastes*).

**sackeni** WILLISTON, Dipt. of Death Val. Exped., 255 (*Comastes*).—Argus Mts., Cal.

#### ANASTÆCHUS.

OSTEN SACKEN, West. Dipt., 251, 1877.

**nitidulus** FABRICIUS, Ent. Syst., IV, 409; Syst. Antl., 132 (*Bombylius*).—Europe.

MEIGEN, Klassifikation, 189; Syst. Besch., II, 154 (id.).

SCHINER, Fauna Austr., I, 63 (*Systæchus*).

OSTEN SACKEN, West. Dipt., 252 (*barbatus*).—Cheyenne, Wyo.; Cal.; Col.; Mass.

COQUILLET, Trans. Amer. Ent. Soc., XXI, 110, syn. of *barbatus*—compared with European specimens.

Beulah, N. M.—Skinner (*barbatus*).

#### SYSTÆCHUS.

LOEW, Neue Beitr., III, 34, 1855.

OSTEN SACKEN, West. Dipt., 250, 1877.

RILEY, 9th Mo. Report, 96, undet. larva in egg-masses of the Rocky Mountain Locust; figured, etc.

**candidulus** LOEW, Cent., IV, 51.—Wis.

OSTEN SACKEN, West. Dipt., 253.—Ill. and Kans.

**oreas** OSTEN SACKEN, West. Dipt., 254.—Webber L., Cal.

RILEY, PACKARD and THOMAS, 2d Rept. of the U. S. Entom. Commission, 266, larvæ in egg-pods of locusts; col. figs., etc.—West. Mississippi Val. vulgaris LOEW, Cent., IV, 52.—Nebr.

OSTEN SACKEN, West. Dipt., 253.—Col., Utah, N. Y.  
N. J.—Smith Cat.; Montreal—Chagnon.

#### AMPHICOSMUS.

COQUILLET, West. Amer. Scientist, 1891, 219.  
cincturus WILLISTON, Biologia, Dipt., I, 296, pl. v, f. 11, 11a.—Guerrero, Mex.  
elegans COQUILLET, West. Amer. Scientist, 1891, 220.—Cal.

#### EXEPACMUS.

COQUILLET, Trans. Amer. Ent. Soc., XXI, 101, 1894.  
johnsoni COQUILLET, Trans. Amer. Ent. Soc., XXI, 101.—Cal.

#### PLOAS.

LATREILLE, Dist. d'Hist. Nat., XXIV, 1804; Hist. Nat. Crust. et Ins., XIV, 299, 1804.  
MEIGEN, Illig. Mag., II, 268, 1803 (*Conophorus*); Syst. Besch., II, 174, 1820.  
SCHINER, Fauna Austr., I, 65, 1862 (states in footnote that *Ploas* was used by Latreille before 1803; I can find no indication of an earlier date than 1804).  
OSTEN SACKEN, West. Dipt., 360, 1877, table of species.  
COQUILLET, Trans. Amer. Ent. Soc., XXI, 101, 1894, table of species.  
amabilis OSTEN SACKEN, West. Dipt., 261.—Yosemite Val., Cal.  
atratala LOEW, Cent., X, 44.—Cal.  
fenestrata OSTEN SACKEN, West. Dipt., 260.—Sonoma Co., Crafton, and San Rafael, Cal. Death Val., Cal.—Riley.  
limbata LOEW, Cent., VIII, 51.—N. M.  
melanocerata BIGOT, Annales, 1892, 361 (*Conophorus*).—Cal.  
nigripennis LOEW, Cent., X, 45.—Cal.  
obesula LOEW, Cent., X, 46.—Cal.  
pictipennis MACQUART, Dipt. Exot., II, I, 107, pl. IX, f. 3.—Carolina.  
rufula OSTEN SACKEN, West. Dipt., 261.—San Geronimo, Cal.  
serrata COQUILLET, Trans. Amer. Ent. Soc., XXI, 102.—S. Cal.

#### GEMINARIA.

COQUILLET, Trans. Amer. Ent. Soc., XXI, 109, 1894.  
pellucida COQUILLET, op. cit., 109.—S. Cal.

#### LORDOTUS.

LOEW, Cent., IV, 53, 1863.  
COQUILLET, Entomologica Amer., III, 115, 1888, table of species; West Amer. Scientist, 1891, 197, table of species; Trans. Amer. Ent. Soc., XXI, 109, table of species, 1894.  
OSTEN SACKEN, Biologia, Dipt., I, 154, 1886.  
apicula COQUILLET, Entomol. Amer., III, 116.—Cal.  
buceros COQUILLET, Trans. Amer. Ent. Soc., XXI, 110.—S. Cal.  
canalis COQUILLET, Entom. Amer., III, 115.—Cal.



- diversus** COQUILLET, West Amer. Scientist, 1891, 198.—Cal.  
 COCKERELL, Jour. N. Y. Ent. Soc., vi, 206, oc. at Agency, N. M.
- gibbus** LOEW, Cent., iv, 53.—Matamoros, Mex.  
 JENNICKE, Neue Exot. Dipt., 39 (*Adelidea flava*).—Mex. [O. S.]  
 OSTEN SACKEN, West. Dipt., 258; Biologia, Dipt., i, 154, notes.—West. States; N. Sonora and Tehuacan, Mex.  
 WILLISTON, Biologia, Dipt., i, 288, notes.
- juncus** COQUILLET, West Amer. Scientist, 1891, 198.—Cal.
- miscellus** COQUILLET, Entom. Amer., iii, 116.—Cal.
- ? **planus** OSTEN SACKEN, West. Dipt., 258.—Marin Co., Cal. Query by O. S.
- puella** WILLISTON, Kans. Univ. Quart., ii, 64.—Cal.
- pulcherrimus** WILLISTON, Kans. Univ. Quart., ii, 64.—Nev.
- sororcula** WILLISTON, Dipt. of Death Valley Exped., 255.—Coso Val. and Kern Co., Cal.
- zona** COQUILLET, Entom. Amer., iii, 116.—Cal.

## ONCODOCERA.

- MACQUART, Dipt. Exot., ii, i, 83, 1840 (*Ogcodocera*).  
 COQUILLET, Canad. Ent., xviii, table of species, 1886.  
 OSTEN SACKEN, Biologia, Dipt., i, 141, 1886.  
 WILLISTON, Biologia, Dipt., i, 284, 1901, amends to exclude *valida*.
- analis** WILLISTON, Biologia, Dipt., i, 283.—Guerrero, Mex.
- leucoprocta** WIEDEMANN, Auss. Zw., i, 330 (*Mulio*); ii, 639 (*Anthrax terminalis*).—No locality; Mex. [O. S.]  
 MACQUART, Dipt. Exot., ii, i, 84, pl. xv, f. i (*Ogcodocera dimidiata*).—N. A. [O. S.]  
 COQUILLET, Canad. Ent., xviii, 87.—N. C., Fla.  
 ROEDER, Wien. Ent. Zeit., v, 263.  
 OSTEN SACKEN, Biologia, Dipt., i, 142, oc. in S. States and Mex.  
 N. J.—Smith Cat.; Suwanee, Fla.—Johnson.
- valida** WIEDEMANN, see *Anisotamia*.

## ACREOTRICHUS.

- MACQUART, Dipt. Exot., Suppl., iv, 121, 1849.  
 COQUILLET, Psyche, Aug., 1895, 272
- americanus** COQUILLET, Psyche, Aug., 1895, 273.—Wash.

## PHTHIRIA.

- MEIGEN, Illig. Mag., ii, 268, 1803; Syst. Besch., ii, 165, 1820.  
 MACQUART, Hist. Nat. Dipt., i, 392, 1834; Dipt. Exot., ii, i, 114, 1840 (*Cyclorhynchus*). [Will.]  
 SCHINER, Fauna Austr., i, 66, 1862.  
 JENNICKE, Neue Exot. Dipt., 43, 1867 (*Pacilogathus*). O. S.  
 COQUILLET, Trans. Amer. Ent. Soc., xxi, 102, table of species.  
 WILLISTON, Biologia, Dipt., i, 288, 1901, table of C. A. species; doubts distinctness of *Acreotrichus*.
- albida** WIEDEMANN, Auss. Zw., i, 356.—Brazil.  
 MACQUART, Dipt. Exot., ii, i, 115.—Brazil.  
 WILLISTON, Biologia, Dipt., i, 290.—Guerrero, Mex.
- aldrichi** JOHNSON, Psyche, 1903, 184.—Caldwell, Ida.
- alterans** WILLISTON, Biologia, Dipt., i, 291.—Guerrero, Mex.
- cingulata** LOEW, Linnæa Ent., i, 383.—Oaxaca, Mex.

- OSTEN SACKEN, *Biologia*, Dipt., I, 156, quotes orig. desc.  
 ? WILLISTON, *Biologia*, Dipt., I, 290, doubtful oc. in Guerrero, Mex.  
**consors** OSTEN SACKEN, *Biologia*, Dipt., I, 155.—Durango, Mex.  
 WILLISTON, *Biologia*, Dipt., I, 289, oc. in Magdalena Mts., N. M., and notes.  
**coquilletti** JOHNSON, *Canad. Ent.*, 1902, 240.—Jamesburg and Riverton, N. J.  
**cyaenoceps** JOHNSON, *Psyche*, 1903, 184.—Cohasset, Mass.  
**diversa** COQUILLET, *Trans. Amer. Ent. Soc.*, XXI, 103.—S. Cal.  
 COCKERELL, *Jour. N. Y. Ent. Soc.*, VI, 206, oc. at Agency, N. M.  
**dolorosa** WILLISTON, *Biologia*, Dipt., I, 290.—Guerrero, Mex.  
**egerminans** LOEW, *Cent.*, X, 47.—Cal.  
**floralis** COQUILLET, *Trans. Amer. Ent. Soc.*, XXI, 103.—S. Cal.  
**humilis** OSTEN SACKEN, *West. Dipt.*, 264.—Sonoma Co., Cal.  
 COQUILLET, *Trans. Amer. Ent. Soc.*, XXI, 104, desc. of female; no locality.  
**notata** LOEW, *Cent.*, III, 19.—Cal.  
**pulchella** WILLISTON, *Biologia*, Dipt., I, 289.—Guerrero, Mex.  
**punctipennis** WALKER, *List*, II, 294.—Ga.  
 St. Augustine, Fla.—Johnson.  
**quinquenotata** JOHNSON, *Psyche*, 1903, 185.—Grand Junction, Utah.  
**similis** COQUILLET, *Trans. Amer. Ent. Soc.*, XXI, 103.—S. Cal.  
 WILLISTON, *Biologia*, Dipt., I, 289, note.  
**scolopax** OSTEN SACKEN, *West. Dipt.*, 263.—Manitou, Col.  
**sororia** WILLISTON, *Biologia*, Dipt., I, 291.—Guerrero, Mex.  
**sulphurea** LOEW, *Cent.*, II, 18.—N. J.  
 OSTEN SACKEN, *West. Dipt.*, 262.—Tex., Col., III.  
 COCKERELL, *Psyche*, Jan., 1895, 188.—N. M.  
 Fla., several places—Johnson.  
**thlipsomyzoides** JENNICKE, *Neue Exot. Dipt.*, 43, pl. I, f. II (*Pacilogathus*).—  
 Mex.  
 WILLISTON, *Biologia*, Dipt., I, 291.—Guerrero, Mex.

## LEPIDOPHORA.

- WESTWOOD, *London and Edinb. Philos. Mag.*, 1835.  
 OSTEN SACKEN, *Biologia*, Dipt., I, 160, table of known species.  
**ægeriiformis** WESTWOOD, *London and Edinb. Philos. Mag.*, 1835, VI, 447.  
 MACQUART, *Dipt. Exot., Suppl.*, I, 115, pl. X, f. 1.—Ga.  
 GRAY, in *Griffith's Animal Kingdom*, XV, Ins. 2, 779, pl. CXXVI, f. 6 (*Ploas*).  
 Ga., Ill., Kans.—O. S. Cat.; N. J.—Smith Cat.; Georgiana, Fla.—Johnson.  
**appendiculata** MACQUART, *Dipt. Exot., Suppl.*, I, 118, pl. XX, f. 4 (*Toxophora*).—  
 Galveston, Tex.; may be the male of Wiedemann's *Toxophora lepidocera* (*Auss. Zw.*, I, 360, pl. V, f. 4; no locality).  
 ? **vetusta** WALKER, *Trans. Ent. Soc. Lond.*, 1857, 145.—Brazil.  
 ? OSTEN SACKEN, *Biologia*, Dipt., I, 160, doubtfully rec. from Mex. and  
 Guat.  
 ? WILLISTON, *Biologia*, Dipt., I, 294, same species in Vera Cruz.

## SPARNOPOLIUS.

- LOEW, *Neue Beitr.*, III, 43, 1855.  
**apertus** MACQUART, *Dipt. Exot., Suppl.*, II, 54 (*Bombylius*).—Guadeloupe.  
 OSTEN SACKEN, *Cat.*, 43, note.

**brevicornis** LOEW, Cent., x, 43.—Texas.

OSTEN SACKEN, West. Dipt., 259.—Waco, Tex.

**coloradensis** GROTE, Proc. Ent. Soc. Phil., vi, 445.—Col.

OSTEN SACKEN, West. Dipt., 259, male.—Colorado Spr., Col.

Beulah, N. M.—Skinner.

**cumatilis** GROTE, Proc. Ent. Soc. Phil., vi, 445.—Col.

**diversus** WILLISTON, Biologia, Dipt., i, 287.—Guerrero, Mex.

**fulvus** WIEDEMANN, Dipt. Exot., 172 (*Bombylius*); Auss. Zw., i, 347 (id.).—N. A.

MACQUART, Dipt. Exot., ii, i, 103 (*Bombylius pherminieri* and *brevirostris*).—Carolina. [O. S.]

LOEW, Neue Beitr., iii, 43.

WILLISTON, Biologia, Dipt., i, 287, notes.

N. J.—Smith Cat.; Agency, N. M.—Cockerell; Atlantic States—O. S. Cat.

### ECLIMUS.

LOEW, Stett. Ent. Zeit., 1884, 154; Deutsche Ent. Zeit., 1876, 209.

BIGOT, Bull. Soc. Ent. France, 1875, p. 196 (*Thevenimyia*); Annales, 1892, 339 (*Thevenetimyia*).

OSTEN SACKEN, West. Dipt., 268, 1877 (*Epibates*).

WILLISTON, Kans. Univ. Quart., ii, 65, 1893, syn.

**auratus** WILLISTON, Kans. Univ. Quart., ii, 66.—Wash.

**auripilus** OSTEN SACKEN, Biologia, Dipt., i, 161, pl. iii, f. 5.—Durango, Mex.

? **auripilus** BIGOT, Annales, 1892, 372 (*Amictus*).—Wash.

COQUILLET, Trans. Amer. Ent. Soc., xxi, 90, gen. ref., with a doubt.

**californicus** BIGOT, Bull. Soc. Ent. France, 1875, 197 (*Thevenimyia*).—Cal.

**fascipennis** WILLISTON, Biologia, Dipt., i, 295, pl. v, f. 9.—Guerrero, Mex.

**funestus** OSTEN SACKEN, West. Dipt., 271 (*Epibates*).—White Mts., N. H.

**harrisii** OSTEN SACKEN, West. Dipt., 272 (*Epibates*).—"Atl. States?"

**lotus** WILLISTON, Kans. Univ. Quart., ii, 66.—Cal.

**lucifer** OSTEN SACKEN, West. Dipt., 271 (*Epibates*).—Vancouver Id., Br. Col.

**magnus** OSTEN SACKEN, West. Dipt., 272 (*Epibates*).—Vancouver Id., Br. Col.

**marginatus** OSTEN SACKEN, West. Dipt., 272 (*Epibates*).—San Francisco, Cal.

**melanopogon** BIGOT, Annales, 1892, 370 (*Thevenetimyia*).—Wash.

**melanosus** WILLISTON, Kans. Univ. Quart., ii, 65.—Cal.

**muricatus** OSTEN SACKEN, West. Dipt., 272 (*Epibates*).—Sierra Nevada Mts., Cal.

WILLISTON, Kans. Univ. Quart., ii, 65, supposed female of this species.—Cal., Wash.

Rocky Mts., Col., 9000 ft.—O. S. Cat.

**niger** MACQUART, Hist. Nat. Dipt., i, 390 (*Apatomyza*); Dipt. Exot., ii, i, III, pl. xi, f. i (id.).—Ga.

WALKER, List, ii, 296 (*Cyllenia agiale*); iv, 1154, syn.—Ga.

OSTEN SACKEN, West. Dipt., 273 (*Epibates*); Cat., 239, correction (id.).

**ostensackenii** BURGESS, Proc. Bost. Soc. Nat. Hist., 1878, 323, pl. ix, f. i (*Epibates*).—S. Col., Kans.

**quadratus** WILLISTON, Biologia, Dipt., i, 295.—Guerrero, Mex.

**sodalis** WILLISTON, Kans. Univ. Quart., ii, 65.—Wash.

### SPHENOIDOPTERA.

WILLISTON, Biologia, Dipt., i, 295, 1901.

**varipennis** WILLISTON, op. cit., 296, pl. v, f. 10.—Guerrero, Mex.

## DESMATONEURA.

- WILLISTON, Kans. Univ. Quart., III, 267, 1895.  
**argentifrons** WILLISTON, op. cit., III, 267.—Albuquerque, N. M.

## EUCESSIA.

- COQUILLET, Canad. Ent., XVIII, 82, 1886.  
 WILLISTON, Synops. Fam. and Gen., 1888, 37, quoted.  
**rattus** OSTEN SACKEN, Biologia, Dipt., I, 147 (*Aphabantus*).—Tex.  
 COQUILLET, Trans. Amer. Ent. Soc., XXI, 105, gen. ref.  
**rubens** COQUILLET, Canad. Ent., XVIII, 82.—Cal.

## EPACMUS.

- OSTEN SACKEN, Biologia, Dipt., I, 142, 1886, change of name.  
 LOEW, Cent., X, 40, 1872 (*Leptochilus*, preoc.).  
 COQUILLET, Canad. Ent., XXIV, 9, 1892, table of species; Trans. Amer. Ent. Soc., XXI, 90 and 104, notes and corrections, 1894.  
 WILLISTON, Biologia, Dipt., I, 285, 1901, considers hardly distinct from *Aphabantus*.  
**modestus** LOEW, Cent., X, 40 (*Leptochilus*).—Texas.  
 OSTEN SACKEN, Biologia, Dipt., I, 142, oc. in Tehuacan and N. Sonora, Mex., and notes.  
 WILLISTON, Biologia, Dipt., I, 284, note.  
**nebritus** COQUILLET, Trans. Amer. Ent. Soc., XXI, 104.—S. Cal.  
 COQUILLET, Canad. Ent., XVIII, 83 (*Leptochilus modestus* Lw.).—Cal., Tex. [Coq.]  
**rufolimbatus** BIGOT, Annales, 1892, 359.—Cal.  
 COQUILLET, Trans. Amer. Ent. Soc., XXI, 104, may be an *Aphabantus*.

## APHÆBANTUS.

- LOEW, Cent., X, 39, 1872.  
 OSTEN SACKEN, West. Dipt., 245, 1877 (*Triodites*). [Coq. and O. S.]  
 OSTEN SACKEN, Biologia, Dipt., I, 143-146, full discussion; table of species, 1886.  
 COQUILLET, Canad. Ent., XVIII, 84, table of species, 1886; West. Amer. Scientist, 1891, 256, table of species; Trans. Amer. Ent. Soc., XXI, 104, definition, table, etc., 1894.  
 WILLISTON, Biologia, Dipt., I, 285, 1901, notes.  
**abnormis** COQUILLET, West. Amer. Scientist, 1891, 262.—Orange Co., Cal.  
**bisulcus** OSTEN SACKEN, Biologia, Dipt., I, 148.—N. Sonora, Mex.  
**brevistylus** COQUILLET, West. Amer. Sci., 1891, 264.—Los Angeles Co., Cal.  
**capax** COQUILLET, West. Amer. Scientist, 1891, 261.—San Diego Co., Cal.  
**carbonarius** OSTEN SACKEN, Biologia, Dipt., I, 149.—Wash.; W. Kans.; N. Sonora, Mex.  
**catulus** COQUILLET, Trans. Amer. Ent. Soc., XXI, 107.—S. Cal.  
**cervinus** LOEW, Cent., X, 39.—Texas.  
 COQUILLET, Canad. Ent., XVIII, 1886, 86.—Cal., Ariz., Col., Tex.  
 OSTEN SACKEN, Biologia, Dipt., I, 144, 148, notes.  
 See *pavidus*.  
**concinus** COQUILLET, Canad. Ent., XXIV, 10 (*Epacmus*).—San Diego Co., Cal.  
**conurus** OSTEN SACKEN, Biologia, Dipt., I, 148.—Cal., Kern Co.  
 WILLISTON, Biologia, Dipt., I, 285, oc. in Guerrero, and notes.

- cyclops** OSTEN SACKEN, *Biologia*, Dipt., 1, 146, pl. III, f. 4 a-c.—N. Sonora, Mex.
- desertus** COQUILLET, *West. Amer. Scientist*, 1891, 261.—San Diego Co., Cal.
- fucatus** COQUILLET, *Trans. Amer. Ent. Soc.*, XXI, 108.—S. Cal.
- fumidus** COQUILLET, *West. Amer. Scientist*, 1891, 263.—San Bernardino Co., Cal.
- fumosus** COQUILLET, *Canad. Ent.*, XXIV, 11 (*Epacmus*).—San Diego Co., Cal.
- hirsutus** COQUILLET, *Canad. Ent.*, XVIII, 85.—Cal.
- interruptus** COQUILLET, *West. Amer. Scientist*, 1891, 259.—Los Angeles Co., Cal.
- leviculus** COQUILLET, *Trans. Amer. Ent. Soc.*, XXI, 107.—S. Cal.
- litus** COQUILLET, *Canad. Ent.*, XVIII, 84.—Cal.
- marcidus** COQUILLET, *West. Amer. Scientist*, 1891, 258.—San Diego and Kern Cos., Cal.  
COQUILLET, *West. Amer. Scientist*, 1891, 262 (*squamosus*); *Trans. Amer. Ent. Soc.*, XXI, 105, syn.—Orange Co., Cal.
- mixtus** COQUILLET, *West. Amer. Scientist*, 1891, 259.—San Bernardino Co., Cal.
- mus** OSTEN SACKEN, *West. Dipt.*, 245 (*Triodites*).—Salt Lake, Utah; Sonoma Co. and Shasta District, Cal.  
RILEY, PACKARD and THOMAS, 2d Rept. U. S. Entomol. Comm., 1880, 262-269, pl. XVI, col. figs.; life history, etc. The larvæ live in egg-pods of locust in the West (*Triodites*).  
OSTEN SACKEN, *Biologia*, Dipt., 1, 147, oc. and notes.—N. Sonora; West. U. S.  
COQUILLET, *Canad. Ent.*, XVIII, 85.—Cal., Ariz.
- pavidus** COQUILLET, *West. Amer. Scientist*, 1891, 257; *Canad. Ent.*, XVIII, 87, as a var. of *cervinus*.—Los Angeles, San Diego and Kern Cos., Cal.
- pellucidus** COQUILLET, *Canad. Ent.*, XXIV, 10 (*Epacmus*).—Los Angeles Co., Cal.
- peodes** OSTEN SACKEN, *Biologia*, Dipt., 1, 149.—N. Sonora, Mex.
- rattus** OSTEN SACKEN, see *Eucessia*.
- scriptus** COQUILLET, *West. Amer. Scientist*, 1891, 260.—S. Cal.
- squamosus** COQUILLET, see *marcidus*.
- tardus** COQUILLET, *West. Amer. Scientist*, 1891, 258.—Los Angeles, San Diego and Kern Cos., Cal.
- transitus** COQUILLET, *Canad. Ent.*, XVIII, 83 (*Epacmus*).—Cal.
- varius** COQUILLET, *West. Amer. Scientist*, 1891, 256.—San Diego Co., Cal.
- vittatus** COQUILLET, *Canad. Ent.*, XVIII, 86.—Cal.  
? WILLISTON, *Dipt. of Death Val. Exped.*, 254, doubtful oc. in Panamint Val., Cal.
- vulpecula** COQUILLET, *Trans. Amer. Ent. Soc.*, XXI, 107.—S. Cal.

**METACOSMUS.**

- COQUILLET, *West. Amer. Scientist*, 1891, 220.
- exilis** COQUILLET, *West. Amer. Sci.*, 1891, 221.—Orange Co., Cal.

**DESMATOMYIA.**

- WILLISTON, *Kans. Univ. Quart.*, III, 268, 1895.
- anomala** WILLISTON, *op. cit.*—Garden of the Gods, Col.

**PARACOSMUS.**

- OSTEN SACKEN, *West. Dipt.*, 262, 1877, name changed.
- LOEW, *Cent.*, x, 48, 1872 (*Allocotus*, *preoc.*).

- edwardsii* LOEW, Cent., x, 48 (*Allocotus*).—San Francisco, Cal.  
*insolens* COQUILLET, West. Amer. Scientist, 1891, 221.—Los Angeles and San Diego Cos., Cal.  
*morrisoni* OSTEN SACKEN, Biologia, Dipt., I, 155.—N. Sonora, Mex.

## SYSTROPUS.

- WIEDEMANN, Dipt. Nov. Gen., 1820; Auss. Zw., I, 359, 1828.  
 LATREILLE, Fam. Naturelles, 1825, 496 (*Cephenus*).  
 MACQUART, Hist. Nat. Dipt., I, 391, 1834.  
 KARSCH, Zeitsch. Berl. Ent. Ges., 1881, 657, attempts to revive *Cephenus*, to include all the American species. The characters do not seem sufficient.  
 OSTEN SACKEN, Biologia, Dipt., I, 157, 1886, notes, and table of American species.  
 WANDOLLECK, Entom. Nachrichten, xxiii, 198, gives characters of *Cephenus*; I have not seen this paper.  
 TOWNSEND, Trans. Amer. Ent. Soc., xxvii, 160, 1901, table of species.  
 WILLISTON, Biologia, Dipt., I, 292, partial table of species, 1901.  
*ammophiloides* TOWNSEND, Trans. Amer. Ent. Soc., xxvii, 1901, 159.—Organ Mts., N. M.  
*angulatus* KARSCH, Zeitsch. Berl. Ent. Ges., 1881, 657 (*Cephenus*).—Dallas, Tex.  
*cerdo* OSTEN SACKEN, Biologia, Dipt., I, 158.—Panama.  
*dolorosus* WILLISTON, Biologia, Dipt., I, 293.—Jalisco and Yucatan, Mex.  
*fœnoides* WESTWOOD, Guérin's Mag. Zool., 1842; Ins., pl. xc, text p. 3 (*fœnoides*); Trans. Ent. Soc. Lond., 1876, 578 (*fœnoides*).—Mex.  
 COSTA, Annuario Mus. Zool. R. Univ. Napoli, 1864, 151 (*funereus*). [O. S. Cat.]  
*imbecillus* KARSCH, Zeitsch. Berl. Ent. Ges., 1881, 658 (*Cephenus*).—Ga.  
*infuscatus* KARSCH, Zeitsch. Berl. Ent. Ges. 1881, 657 (*Cephenus*).—Dallas, Texas.  
*lugubris* OSTEN SACKEN, Biologia, Dipt., I, 159.—Mex.  
*macer* LOEW, Cent., iv, 56.—Wis., Pa.  
 WALSH, Proc. Boston Soc. Nat. Hist., ix, 300, 1864, reared from pupa of *Limacodes* (*Conops*).  
 OSTEN SACKEN, West. Dipt., 265, notes.  
 N. J.—Smith Cat.: Atl. States to Kans.—O. S. Cat.  
*Note*.—Prof. Otto Lugger reared it from *Limacodes* in Minn.; he gave me a bred specimen.  
*pulcher* WILLISTON, Biologia, Dipt., I, 294.—Guerrero, Mex.  
*quadripunctatus* WILLISTON, Biologia, Dipt., I, 293.—N. Yucatan.  
*rogersi* OSTEN SACKEN, Biologia, Dipt., I, 158.—Costa Rica.  
 WILLISTON, Biologia, Dipt., I, 293, note.  
*rufiventris* OSTEN SACKEN, Biologia, Dipt., I, 159.—Mex.  
*sallei* COSTA, Annuario d. Mus. Zool. R. Univ. d. Napoli, 1864, 151.—Mex.  
 OSTEN SACKEN, Cat., 265, quotes diagnosis; Biologia, Dipt., I, 159, oc. in Mex.  
*similis* WILLISTON, Biologia, Dipt., I, 294.—Guerrero, Mex.

## DOLICHOMYIA.

- WIEDEMANN, Auss. Zw., II, 642, 1830.  
 LOEW, Dipterenfauna Südafrika's, 175, note, 1860.



SCHINER, Novara, 134, 1868.

WILLISTON, Kans. Univ. Quart., III, 175, 1894.

*gracilis* WILLISTON, Kans. Univ. Quart., III, 41.—Estes Park, Col.

### GERON.

MEIGEN, Syst. Besch., II, 223, 1820.

SCHINER, Fauna Austr., I, 68, 1862.

COQUILLET, Trans. Amer. Ent. Soc., XXI, III, table of species, 1894.

MIK, Wien. Ent. Zeit., XIV, 106, rearing a European species from a Pyralid larva.

*calvus* LOEW, Cent., IV, 54, female; IX, 76, male (*macropterus*).—N. Y.; Geneseo, N. Y.

COQUILLET, Trans. Amer. Ent. Soc., XXI, 110, syn. N. J.—Smith Cat.

*capax* COQUILLET, Canad. Ent., XXIV, 126.—Cal. N. J.—Smith Cat.

*cinctura* COQUILLET, Trans. Amer. Ent. Soc., XXI, III.—Cal.

*fasciola* COQUILLET, Canad. Ent., XXIV, 125.—Cal., Merced Co.

*holosericeus* WALKER, List, II, 295.—Ga.

*hybos* COQUILLET, Trans. Amer. Ent. Soc., XXI, 112 (*hybus*).—S. Cal.

*insularis* BIGOT, in Sagra's Cuba, 792 (*Bombylius*).—Cuba.

*rufipes* MACQUART, Dipt. Exot., Suppl., I, 119.—Yucatan.

WILLISTON, Biologia, Dipt., I, 292, oc. in Guerrero, Mex.

*senilis* FABRICIUS, Ent. Syst., IV, 411 (*Bombylius*); Syst. Antl., 135 (id.).—West Indies.

WIEDEMANN, Auss. Zw., I, 357.

MACQUART, Dipt. Exot., Suppl., I, 119.

LOEW, Cent., IX, 77 and 78 (*vitripennis* and *albidipennis*).—Mid. States; Cal. [Coq., Tr. Am. Ent. Soc., XXI, 110.]

WILLISTON, Dipt. St. Vincent, 306, pl. XI, f. 81.—St. Vincent, W. I.

N. J.—Smith Cat.; Jamaica—Johnson.

*sigma* COQUILLET, Proc. U. S. N. M., XXV, 101.—Ala., Col.

*subauratus* LOEW, Cent., IV, 55; see also IX, 77, note.—Pa. N. J.—Smith Cat.

*trochilides* WILLISTON, Biologia, Dipt., I, 292.—Guerrero, Mex.

*trochilus* COQUILLET, Trans. Amer. Ent. Soc., XXI, III.—S. Cal.

### TOXOPHORA.

MEIGEN, Illig. Mag., II, 270, 1802; Klassifikation, 1804; Syst. Besch., II, 178, 1820.

SCHINER, Fauna Austr., I, 69, 1862.

COQUILLET, Entomol. Amer., I, 1886, 221, table of species; West. Amer. Sci., 1891, 199, table of species.

GLOVER, Entomol. Rept., 1866, 45, reports rearing *Toxophora* sp. from mud "pot" of *Eumenes* sp.; loc. cit., 1870, 78, same with bad figs.; 1877, 105, refers to European sp. preying upon *Bembex*.

*amphitea* WALKER, List, II, 298.—St. John's Bluff, Fla.

OSTEN SACKEN, West. Dipt., 267.—Middle and Southern States.

COQUILLET, Entomol. Amer., I, 222, note.—Fla.

WILLISTON, Biologia, Dipt., I, 294, oc. in Guerrero, Mex.

N. J.—Smith Cat.; Fla., several places—Johnson.

*fulva* OSTEN SACKEN, West. Dipt., 267.—Ga. Also Cat. 238, note.

Fla.—Johnson.

*leucopyga* WIEDEMANN, Auss. Zw., I, 361.—No locality.

- MACQUART, Dipt. Exot., II, 1, 117.—Carolina.  
 GRAY, Griffith's Anim. Kingd., xv, Ins., II, 779 (*fulva*). [O. S.]  
 WALKER, List, II, 298, note.  
*maxima* COQUILLET, Entomol. Amer., I, 222.—Cal.  
*pellucida* COQUILLET, Entomol. Amer., I, 222.—Cal.  
*varipennis* WILLISTON, Biologia, Dipt., I, 294.—Guerrero, Mex.  
*vasta* COQUILLET, West. Amer. Scientist, 1891, 199.—San Diego Co., Cal.  
*virgata* OSTEN SACKEN, West. Dipt., 266.—Waco, Texas; Ga.  
 TOWNSEND, Psyche, May, 1893, 455, desc. of puparium.  
 Inverness, Fla.—Johnson; Cal.—Coq.

#### RHABDOPSELAPHUS.

- BIGOT, Bull. Soc. Ent. France, 1886, ciii.  
 WILLISTON, Synops. Fam. and Gen., 1888, 37, quoted.  
*mus* BIGOT, loc. cit.—Cal.

#### THEREVIDÆ.

- BIGOT, Annales, 1889, 322, table of genera.  
 COQUILLET, Jour. N. Y. Ent. Soc., II, 97, 1894, table of species.

#### METAPHRAGMA.

- COQUILLET, Jour. N. Y. Ent. Soc., II, 98, 1894.  
*planiceps* LOEW, Cent., x, 38 (*Xestomyza*).—Cal.  
 COQUILLET, Jour. N. Y. Ent. Soc., II, 97, gen. ref.; does not belong to  
*Xestomyza*.

#### NEBRITUS.

- COQUILLET, Jour. N. Y. Ent. Soc., II, 98, 1894.  
*pellucidus* COQUILLET, loc. cit.—Cal.

#### TABUDA.

- WALKER, Dipt. Saund., 197, 1853.  
*fulvipes* WALKER, loc. cit., pl. vi, f. 4.—No locality.  
 EVETT, Proc. Ent. Soc. Phil., I, 217, oc. in N. J.  
 Ga.—O. S.

#### OZODICEROMYIA.

- BIGOT, Annales, 1889, 321.  
*mexicana* BIGOT, loc. cit., 322.—Mex.

#### PSILOCEPHALA.

- ZETTERSTEDT, Ins. Lapp., 525, note, 1840; Dipt. Scand., I, 211, 1842.  
 \* COQUILLET, Canad. Ent., xxv, 223, 1893, table of species; corrected, p.  
 260.  
*acuta* ADAMS, Kans. Univ. Sci. Bull., II, 222.—Englewood, Kans.  
*aldrichii* COQUILLET, Canad. Ent., xxv, 227.—N. J., Mont., Wyo., Cal.  
*argentata* BELLARDI, Saggio, II, 90.—Mexico City and Cordova, Mex.  
 ROEDER, Stett. Ent. Zeit., 1885, 340, oc. in Porto Rico.  
 WILLISTON, Dipt. St. Vincent, 306, pl. XI, f. 82.—St. Vincent, W. I.  
*baccata* COQUILLET, Canad. Ent., xxv, 226.—Los Angeles and San Bernardino  
 Cos., Cal.  
*costalis* LOEW, Cent., VIII, 16.—Cal.  
*crassicornis* WILLISTON, see *Thereva*.  
*erythrura* LOEW, Cent., IX, 75.—Middle States.

- festina* COQUILLET, *Canad. Ent.*, xxv, 225.—Fla.  
Fla., several places.—Johnson.
- grandis* JOHNSON, *Canad. Ent.*, 1902, 241.—Rouville Co., Quebec, Can.
- hæmorrhoidalis* MACQUART, *Dipt. Exot.*, II, 1, 26 (*Thereva*).—Carolina.  
N. J.—Smith Cat.; Montreal—Chagnon; Ormond, Fla.—Johnson.
- johnsoni* COQUILLET, *Canad. Ent.*, xxv, 228.—Fla.  
St. Augustine and Ormond, Fla.—Johnson.
- lævigata* LOEW, *Zeitsch. f. Ges. Naturwiss.*, Dec., 1876, 319.—San Francisco.
- longipes* LOEW, *Cent.*, VIII, 11.—Cuba.
- limata* COQUILLET, *Jour. N. Y. Ent. Soc.*, II, 99.—Col., Wash.
- marcida* COQUILLET, *Canad. Ent.*, xxv, 228.—Los Angeles and San Diego Cos.,  
Cal.
- melampodia* LOEW, *Cent.*, VIII, 12.—Ill.
- melanoprocta* LOEW, *Cent.*, VIII, 15.—Me.; Huds. Bay Terr.  
Axton, N. Y.—M. and H.
- montivaga* COQUILLET, *Canad. Ent.*, xxv, 226.—Los Angeles Co., Cal.
- morata* COQUILLET, *Canad. Ent.*, xxv, 225.—N. J., Fla.  
(*Marmoratus* of Smith Cat.)
- munda* LOEW, *Cent.*, VIII, 13.—Wis.  
Montreal—Chagnon; Axton, N. Y.—M. & H.
- nigra* BELLARDI, *Saggio*, II, 92.—Mex.  
SCHINER, *Novara*, 146, oc. in Chili (*pentoptera*, nom. nov. on account of  
Say's *Thereva nigra*—an unnecessary change).
- notata* WIEDEMANN, *Dipt. Exot.* 114; *Auss Zw.*, I, 236 (*Thereva*).—Ga.  
St. Augustine and Ormond, Fla.—Johnson.
- obscura* COQUILLET, *Canad. Ent.*, xxv, 229.—Jamaica.  
Key West, Fla.—Johnson.
- pavida* COQUILLET, *Canad. Ent.*, xxv, 226.—Los Angeles Co., Cal.
- pictipennis* WIEDEMANN, *Dipt. Exot.*, 113; *Auss. Zw.*, I, 235 (*Thereva*).—Ga.  
CASTLE and LAURENT, *Ent. News.*, VII, 303, oc. at Enterprise, Fla.  
N. J.—Smith Cat.; Fla., several places—Johnson.
- placida* COQUILLET, *Jour. N. Y. Ent. Soc.*, II, 99.—Fla.
- platancala* LOEW, *Zeitsch. f. Ges. Naturwiss.*, Dec., 1876, 321.—Texas.
- platycera* LOEW, *Cent.* vol. II, p. 290, change of name; *Cent.*, VIII, 14 (*laticornis*,  
preoc.).—Cuba.
- rufiventris* LOEW, *Cent.*, VIII, 17.—Nebr. N. J.—Smith Cat.
- scutellaris* LOEW, *Cent.*, IX, 74.—D. C. N. J.—Smith Cat.
- slossoni* COQUILLET, *Canad. Ent.*, xxv, 227.—N. H.
- sumichrasti* BELLARDI, *Saggio*, II, 91.—Tuxpango, Mex.
- tergissa* SAY, *Jour. Acad. Sci. Phil.*, III, 39; *Compl. Works*, II, 57 (*Thereva*).—  
E. Fla.  
WIEDEMANN, *Auss. Zw.*, I, 232 (*Thereva corusca*; no reason for change  
of name).  
COQUILLET, *Canad. Ent.*, xxv, 197 and 222, refers to this genus, from Fla.  
specimens.
- univittata* BELLARDI, *Saggio*, II, 90.—Puebla, Mex.
- variegata* LOEW, *Cent.*, IX, 73.—Canada.

## THEREVA.

- LATRIELLE, *Précis d. Caract. gén. Ins.*, 167, 1796; *Hist. Nat. Crust. et*  
*Ins.*, III, 440, 1802.
- MEIGEN, *Syst. Besch.*, II, 86, 1820.

- RONDANI, Dipt. Ital. Prod., I, 155, 1856 (*Thereva* and *Dialineura*).  
 SCHINER, Fauna Austr., I, 161, 1862.  
 WILLISTON, Manual, 69, 1896 (*Thereva* and *Dialineura*).  
 COQUILLET, Canad. Ent., xxv, 197, table of species, 1893.  
**albiceps** LOEW, Cent., ix, 69.—Red R. of the North; L. Winnipeg.  
 See *albifrons*.  
**albifrons** SAY, Jour. Acad. Sci. Phil., vi, 156; Compl. Works, II, 353.—Ind.  
 COQUILLET, Canad. Ent., xxv, 197, refers *albiceps* to this species, which seems very doubtful, from the descriptions.  
**argentata** BELLARDI, Saggio, II, 89.—Mexico City and Cordova, Mex. Porto Rico—Roeder.  
**bolboceras** OSTEN SACKEN, Biologia, Dipt., I, 162.—Presidio, Mex.  
**candidata** LOEW, Cent., viii, 10.—N. Wis.  
 North U. S. and Canada—O. S. Cat.; also note, p. 239, correcting Loew, "read *clausa* for *aperta*." Montreal—Chagnon.  
**comata** LOEW, Cent., viii, 9.—Cal.  
**conspicua** WALKER, List, I, 223.—Nova Scotia.  
**crassicornis** BELLARDI, Saggio, II, 88, pl. II, f. 16.—Mex.  
**crassicornis** WILLISTON, Trans. Amer. Ent. Soc., XIII, 293.—Cal.  
 COQUILLET, Canad. Ent., xxv, 222, refers to *Psilocephala*, from Cal. specimens.  
**diversa** COQUILLET, Jour. N. Y. Ent. Soc., II, 100.—Col., Mont., Fla.  
**duplicis** COQUILLET, Canad. Ent., xxv, 199.—S. D., Mont.  
**egressa** COQUILLET, Jour. N. Y. Ent. Soc., II, 99.—Col., Cal.  
**flavincta** LOEW, Cent., ix, 70; op. cit., 71 (*gilvipes*).—Wis., N. H.; Mass. [Coq.]  
 N. J.—Smith Cat.; Axton, N. Y.—M. & H.  
**frontalis** SAY, Long's Exped., App., 370; Compl. Works, I, 252.—N. W. Terr.  
 WIEDEMANN, Auss. Zw., I, 230. Montreal—Chagnon.  
**fucata** LOEW, Cent., x, 37.—Cal.  
**germana** WALKER, List, I, 222.—Fla.  
**hirticeps** LOEW, Berl. Ent. Zeitsch., 1874, 382.—San Francisco.  
**johnsoni** COQUILLET, Canad. Ent., xxv, 200.—Wash.  
**melanoneura** LOEW, Cent., x, 36.—Cal.  
 COQUILLET, Proc. Acad. Sci. Wash., II, 407, oc. at Kukak Bay, Alaska.  
**melanophleba** LOEW, Zeitsch. f. ges. Naturwiss., 1876, 317.—San Francisco.  
**nervosa** WALKER, List, I, 223.—Ga. (preoc.—Osten Sacken).  
**nigra** SAY, Jour. Acad. Sci. Phil., III, 40; Compl. Works, II, 57.—Pa.  
 WIEDEMANN, Auss. Zw., I, 235.  
 COQUILLET, Canad. Ent., xxv, 222, doubtfully recognized from Cal.  
**nitoris** COQUILLET, Jour. N. Y. Ent. Soc., II, 101.—Mo.  
**otiosa** COQUILLET, Canad. Ent., xxv, 199.—Los Angeles Co., Cal.  
 N. J.—Smith Cat.  
**ruficornis** MACQUART, Dipt. Exot., II, 1, 25.—Carolina.  
**semitaria** COQUILLET, Canad. Ent., xxv, 198.—S. Cal.  
**senex** WALKER, List, I, 224.—Nova Scotia. Province of Quebec—Fyles.  
**strigipes** LOEW, Cent., ix, 72.—L. Winnipeg, Canada.  
 JOHANNSEN, Ent. News, XIV, 15, notes.—Axton, N. Y.  
 White Mts., N. H.—Slosson.  
**tergissa** SAY, see *Psilocephala*.  
**varia** WALKER, List, I, 221.—Fla.  
**vialis** OSTEN SACKEN, West. Dipt., 274.—Yosemite Valley, Cal.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 293, oc. in Wash., etc.; Dipt. of Death Val. Exped., oc. in Death Val., Cal.

*vicina* WALKER, List, I, 222.—Nova Scotia.

OSTEN SACKEN, Cat., 97, note on types of Walker's *Therevas*.

### SCENOPINIDÆ.

COQUILLET, Ent. News, XI, 500, 1900, table of the three N. A. genera.

#### METATRICHIA.

COQUILLET, Ent. News, XI, 500, 1900.

*bulbosa* OSTEN SACKEN, West. Dipt., 275 (*Scenopinus*).—Mo.

COQUILLET, Ent. News, XI, 500, refers to this genus, as type.

#### PSEUDATRICHIA.

OSTEN SACKEN, West. Dipt., 275, 1877, change of name.

LOEW, Cent., VII, 76, 1866 (*Atrichia*, preoc.).

*flaviceps* COQUILLET, Proc. U. S. N. M., XXV, 102.—Williams, Ariz.

*griseola* COQUILLET, Ent. News, XI, 500.—Mesilla Park, N. M., and Los Angeles Co., Cal.

*longurio* LOEW, Cent., VII, 76 (*Atrichia*).—Mex.

*pilosa* COQUILLET, Proc. U. S. N. M., XXV, 102.—Williams and Hot Springs, Ariz.

*unicolor* COQUILLET, Ent. News, XI, 500.—Las Vegas, N. M.

#### SCENOPINUS.

LATREILLE, Hist. Nat. Crust. et Ins., III, 463, 1802; XIV, 392, 1804.

MEIGEN, Syst. Besch., IV, 111, 1824.

MACQUART, Hist. Nat. Dipt., II, 5, 1835.

SCHINER, Fauna Austr., I, 159, 1862.

BRAUER, Zweifl. d. Kaiserl. Mus., II, 42, 1882, full discussion of related forms.

*albidipennis* LOEW, Cent., VIII, 53.—Cuba.

*bulbosus* OSTEN SACKEN, see *Metatrachia*.

*fenestralis* LINNÉ, Fauna Suecica, 1845 (*Musca*).—Europe.

DEGEER, Mém. pour. Servir Hist. Nat. Ins., II, 77 (*Nemotelus*).

LATREILLE, Gen. Crust., IV, 349; Consid. Génér., 444.

FABRICIUS, Syst. Antl., 335.

MEIGEN, Syst. Besch., IV, 113 (114, *sulcicollis*; 115, *vitripennis*; 116, *domesticus*; VII, 165, *rufitarsis*).

SAY, Jour. Acad. Sci. Phil., III, 100; Compl. Works, II, 86 (*pallipes*).—Pa.

LOEW, Verh. Zool.-Bot. Ver., 1857, oc. in N. A.; Silliman's Jour., syn. of *pallipes*.

SCHINER, Fauna Austr., I, 159.

HAGEN, Canad. Ent., XVIII, 129, larvæ found under carpet, may be carnivorous (*pallipes*).

OSTEN SACKEN, Ent. Mo. Mag., XXIII, 51, larval habits—undoubtedly carnivorous.

LINTNER, in Amsterdam, N. Y., "Daily Democrat," Nov. 1, 1890, larva "feeds only, so far as known, on the larvæ and pupæ of the clothes-moth."

N. J.—Smith Cat.; Montreal—Chagnon.

*glabrifrons* MEIGEN, Syst. Besch., IV, 114 (*glabrifrons* and *orbita*); 113 (*halterata*).—Europe.

SCHINER, Fauna Austr., I, 160.

LOEW, Verh. Zool.-Bot. Ver., 1857; Silliman's Jour., oc. in N. A.

*nubilipes* SAY, Jour. Acad. Sci. Phil., VI, 170; Compl. Works, II, 362.—Ind. Cuba, Fla.—Loew, in O. S. Cat.

### MYDAIDÆ.

GERSTÆCKER, Stett. Ent. Zeit., 1868, 72, table of genera.

### DOLICHOGASTER.

MACQUART, Dipt. Exot., Suppl., II, 2, 178, 1848.

WILLISTON, Kans. Acad. Sci., 1897, 57, correction.

*brevicornis* WIEDEMANN, Dipt. Exot., 117; Auss. Zw., I, 242 (*Midas*).—Brazil.

Also Auss. Zw., I, 241 (*Midas iopterus*).—Brazil. [O. S.]

MACQUART, Dipt. Exot., Suppl., II, 2, 179, pl. II, f. 2.—Brazil.

WALKER, List, I, 228, oc. in Mass. and St. John's Bluff, Fla. (*iopterus*).

### ECTHYPUS.

GERSTÆCKER, Stett. Ent. Zeit., 1868, 92.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 292, oc. in N. A., and note.

*limbatus* WILLISTON, Trans. Amer. Ent. Soc., XIII, 292.—Ariz.

*townsendi* WILLISTON, Proc. Kans. Acad. Sci., 1897, 58.—N. M.

### LEPTOMYDAS.

GERSTÆCKER, Stett. Ent. Zeit., 1868, 81.

WILLISTON, Kans. Acad. Sci., 1897, 53, table of species.

*brachyrhynchus* OSTEN SACKEN, Biologia, Dipt., I, 69.—N. Sonora, Mex.

WILLISTON, Proc. Acad. Sci. Kans., 1897, 54, male.—Mex.; Biologia, Dipt., I, 267, oc. at Teapa, Mex., and notes.

*pantherinus* GERSTÆCKER, Stett. Ent. Zeit., 1868, 85.—Cal.

OSTEN SACKEN, West. Dipt., 280.—San Francisco, Cal.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 291, male.—Wash., Cal.

*sponsor* OSTEN SACKEN, Biologia, Dipt., I, 68.—Guatemala.

*tenuipes* LOEW, Cent., X, 20 (*Midas*).—Cal.

*venosus* LOEW, Cent., VII, 26 (*Midas*).—Pecos R., West. Texas.

HINE, Canad. Ent., XXXV, 245.—Oak Creek Canyon, Ariz.

### MYDAS.

FABRICIUS, Ent. Syst., IV, 252, 1794; Syst. Antl., 60, 1805.

LATREILLE, Hist. Nat. Crust. et Ins., III, 447, 1802; XIV, 338, 1804.

MEIGEN, Syst. Besch., II, 99, 1820.

WIEDEMANN, Mon. Gen. Midarum, Bonn, 1831.

MACQUART, Hist. Nat. Dipt., I, 273, 1834.

SCHINER, Fauna Austr., I, 158, 1862.

GERSTÆCKER, Stett. Ent. Zeit., 1868, 93.

OSTEN SACKEN, Berl. Ent. Zeitsch., 1895, 345, discusses the forms *Midas* and *Mydas*, accepting the latter.

WILLISTON, Kans. Acad. Sci., 1897, 54, table of species.

*annularis* GERSTÆCKER, Stett. Ent. Zeit., 1868, 100.—Mex.

WILLISTON, Biologia, Dipt., I, 268, oc. in Chilpancingo, Mex., and notes.



- annulicornis** WESTWOOD, see *mystaceus*.
- audax** OSTEN SACKEN, Bull. Buff. Soc. Nat. Hist., 1874, 186; Cat., 235, desc. quoted.—Ky.
- basalis** WESTWOOD, Arcana Ent., 1, 53.—Mex.  
 BELLARDI, Saggio, II, 10.—Angang. Mex.  
 WILLISTON, Kans. Acad. Sci., 1897, 55, oc. in N. M.
- bitæniatus** BELLARDI, Saggio, II, 7, pl. 1, f. 1.—Playa Vicente, Mex.
- brevicornis** WIEDEMANN, see *Dolichogaster*.
- carbonifer** OSTEN SACKEN, Bull. Buff. Soc. Nat. Hist., 1874, 186; quoted in Cat., 236.—West. N. Y.
- chrysites** OSTEN SACKEN, Biologia, Dipt., 1, 72.—N. Sonora, Mex.
- chrysostoma** OSTEN SACKEN, Bull. Buff. Soc. Nat. Hist., 1874, 187; quoted in Cat., 236.—Texas. N. J.—Smith Cat.
- clavatus** DRURY, Illustrations of Nat. Hist., 1, 103, pl. XLIV, f. 1; II, Appendix (*Musca*).  
 DEGEER, Mém. pour Serv. Hist. Nat. Ins., pl. XXIX, f. 6 (*Nemotelus asiloides*).  
 FABRICIUS, Syst. Ent., 756 (*Bibio illucens*); Spec. Ins., II, 412 (*Bibio filata*); Mantissa Ins., 328 (id.); Ent. Syst., IV, 252 (*Mydas filatus*); Syst. Antl., 60 (id.).—S. A.  
 OLIVIER, Encycl. Méthodique, VIII, 83 (*filatus*).  
 WIEDEMANN, Dipt. Exot., 116 (*filatus*); Auss. Zw., 1, 240 (id.); Mon. Midarum, pl. LIII, f. 8 (id.).—S. A.  
 Eastern U. S. N. J.—Smith Cat.; Fla.—Johnson; Chicago—J. M. A.
- cleptes** OSTEN SACKEN, Biologia, Dipt., 1, 72.—N. Sonora, Mex., and perhaps Texas.
- crassipes** WESTWOOD, Arcana Ent., 1, 51, pl. XIII, f. 3.—N. A.  
 OSTEN SACKEN, Biologia, Dipt., 1, 71, note.  
 WILLISTON, Biologia, Dipt., 1, 268, oc. in Teapa, Mex.
- decor** OSTEN SACKEN, Biologia, Dipt., 1, 71.—Panama.  
 WILLISTON, Kans. Acad. Sci., 1897, 55, oc. in N. M. and Mex.; Biologia, Dipt., 1, 268, oc. in Guerrero, Mex.
- dives** WESTWOOD, Arcana Ent., 1, 50, pl. XIII, f. 1.—Brazil.  
 OSTEN SACKEN, Biologia, Dipt., 1, 70.—Panama.  
 WILLISTON, Kans. Acad. Sci., 1897, 55, notes.
- fulvifrons** ILLIGER, Illig. Mag., 1, 206.—Ga.  
 WIEDEMANN, Monogr. Midarum, 47, pl. LIII, f. 13.—Ga.  
 WILLISTON, Kans. Acad. Sci., 1897, 55, oc. in Fla. N. J.—Smith Cat.
- fulvipes** WALSH, Proc. Boston Soc. Nat. Hist., IX, 306.—Ill.  
 ROEDER, Wien. Ent. Zeitung, XIII, 169.—Mo.
- gracilis** MACQUART, Hist. Nat. Dipt., 1, 274, pl. VII, f. 1.—S. A.  
 Oc. in Cuba reported by Loew, in O. S. Cat., 84.
- incisus** MACQUART, Dipt. Exot., 1, 2, 11, pl. 1, f. 1.—Carolina.  
 JÆNNICKE, Neue Exot. Dipt., 354, oc. in Mex.  
 See *pachygaster*.
- interruptus** WIEDEMANN, Monogr. Midarum, 46, pl. LIII, f. 12.—Mex.  
 BELLARDI, Saggio, II, 8, pl. 1, f. 2 (*tricinctus*).—Mex. City. [Gerst.]
- luteipennis** LOEW, Cent., VII, 23.—West. Texas. Ariz.—Williston.
- maculiventris** WESTWOOD, Lond. and Edinb. Philos. Mag., 1835; Arcana Ent., 1, 53, pl. XIII, f. 5.—Ga.
- militaris** GERSTÆCKER, Stett. Ent. Zeit., 1868, 10 and 99.—Vera Cruz, Mex.

- MACQUART, Dipt. Exot., Suppl., IV, 60, pl. IV, f. 6 (*vittatus* Wied.).—  
Mex. [Will.]
- BELLARDI, Saggio, II, 7 (id.).—Mex.
- WILLISTON, Biologia, Dipt., I, 268, oc. in Guerrero, Mex.  
See *rufiventris* MACQ.
- mystaceus* WIEDEMANN, Monogr. Midarum, 40, pl. LII, f. 3, male.—Surinam.  
WESTWOOD, Arcana Ent., I, 51, pl. XIII, f. 2, female (*annulicornis*).—Brazil.  
GERSTÆCKER, Syst. Uebersicht Exot. Mydaiden, 94, syn.
- WILLISTON, Kans. Acad. Sci., 1897, 57, oc. in Mexico (*annulicornis*).
- pachygaster* WESTWOOD, Arcana Ent., I, 53, pl. XIII, f. 4.—Ga.  
JÆNNICKE, Neue Exot. Dipt., 354, oc. in Mex.
- JOHNSON, Proc. Acad. Nat. Sci. Phil., 1895, 325, oc. in Fla., and suggests  
that *incisus* MACQ. is the male of the same species.
- parvulus* WESTWOOD, Arcana Ent., I, 53, pl. XIII, f. 6.—Ga.  
Fla.—Walker; Georgiana, Fla.—Johnson.
- quadrilineatus* WILLISTON, Kans. Acad. Sci., 1897, 56.—Mex. Also Biologia,  
Dipt., I, 268, oc. in Guerrero and Jalisco, Mex.
- rubidapex* WIEDEMANN, Monogr. Midarum, 40, pl. LII, f. 2; Auss. Zw., 626.—  
Mex.  
BELLARDI, Saggio, II, 5.—Mex.  
BRAUER, Syst. Zool. Studien, pl. I, f. 2. [Will.]  
OSTEN SACKEN, Biologia, Dipt., I, 70, oc. in Guatemala, and notes.  
WILLISTON, Kans. Acad. Sci., 1897, 55, oc. in Mex.; Biologia, Dipt., I, 267,  
oc. in Guerrero, Mex., and in Yucatan.
- [*rufiventris* MACQUART, Dipt. Exot., Suppl., IV, 60.—Brazil.  
WILLISTON, Kans. Acad. Sci., 1897, 56, and Biologia, Dipt., I, 268, thinks  
this probably the prior name for *militaris* and *ventralis* GERST.]
- scitulus* WILLISTON, Trans. Amer. Ent. Soc., XIII, 291.—Ariz.
- senilis* WESTWOOD, Arcana Ent., I, 52.—Mex.
- simplex* LOEW, Cent., VII, 25.—West. Texas.
- subinterruptus* BELLARDI, Saggio, II, 10, pl. I, f. 3.—Angang and Patzcuaro, Mex.
- tibialis* WIEDEMANN, Monogr. Midarum, 42, pl. LIII, f. 6; Auss. Zw., II, 627.—  
Baltimore, Md.  
BELLARDI, Saggio, II, 6.—Mex.  
WESTWOOD, Arcana Ent., I, 51.  
WALKER, List, VI, 359.  
Mich.—O. S. Cat.
- tricolor* WIEDEMANN, Monogr. Midarum, 42, pl. LIII, f. 5.—Cuba.  
BIGOT, in Sagra's Cuba, 799.—Cuba.
- ventralis* GERSTÆCKER, Stett. Ent. Zeit., 1868, 102, change of name.  
LOEW, Cent., VII, 22 (*rufiventris*, preoc.).—Cal.  
See *rufiventris* MACQ.
- xanthopterus* LOEW, Cent., VII, 24.—West. Texas.  
GERSTÆCKER, Stett. Ent. Zeit., 1868, 96 (*lavatus*).—Mex. [O. S.]

#### PHYLLOMYDAS.

- BIGOT, Bull. Soc. Ent. France, 1880, no. 6, 62 (*Phyllomydas*).  
WILLISTON, Manual N. A. Dipt., 63, quotes desc.  
*phyllocerus* BIGOT, op. cit., 63.—Rocky Mts.

## APIOCERIDÆ.

The relations of the group, and the question of family rank, have been exhaustively discussed in the following papers:

OSTEN SACKEN, Berl. Ent. Zeitsch., xxvii, 1883, 287.

WILLISTON, Psyche, 1888, 100, and Kans. Univ. Quart., 1, 101, 1893, two plates.

## APIOCERA.

WESTWOOD, London and Edinb. Philos. Mag., 1835; Arcana Ent., 1, 50, 1841.

MACQUART, Dipt. Exot., 1, 1, 78, 1838 (*Tapinocera*).

MACQUART, Dipt. Exot. Suppl., 11, 47, 1847 (*Pomacera*).

PHILLIPPI, Verh. Zool.-Bot. Ges., 1865, 702, pl. xxv, f. 26 (*Anyphenus*).

**augur** OSTEN SACKEN, Biologia, Dipt., 1, 2.—Presidio, Mex.

**haruspex** OSTEN SACKEN, West. Dipt., 283.—Yosemite, Cal. There is a correction of the desc. in Berl. Ent. Zeitsch., xxvii, 300.

COQUILLET, Psyche, 1885, 241.

Wash.—J. M. A.

## APOMYDAS.

COQUILLET, Canad. Ent., xxiv, 314, 1892 (*Apomidas*).

**trochilus** COQUILLET, Canad. Ent., xxiv, 315.—Merced Co., Cal.

## RHAPHIOMYDAS.

OSTEN SACKEN, West. Dipt., 281, 1877.

TOWNSEND, Proc. Cal. Acad. Sci., iv, 601, table of species.

**acton** COQUILLET, West. Amer. Scientist, vii, 84.—Los Angeles Co., Cal.

TOWNSEND, Proc. Cal. Acad. Sci., iv, 602.—Sonora, Mex.

**episcopus** OSTEN SACKEN, West. Dipt., 282.—Cal., or perhaps Lower Cal.

TOWNSEND, Proc. Cal. Acad. Sci., iv, 603.—Lower Cal. The comparison with *episcopus* made by Coquillett in describing *acton* refers to *mellifex* instead.

**mellifex** TOWNSEND, Proc. Cal. Acad. Sci., iv, 604.—Lower Cal.

COQUILLET, West American Scientist, vii, 84 (*episcopus*).—Los Angeles Co., Cal. [Townsend.]

**xanthos** TOWNSEND, Proc. Cal. Acad. Sci., iv, 606.—Lower Cal. Also in Trans. Amer. Ent. Soc., xxvii, 161, oc. in Las Cruces, N. M.

## ASILIDÆ.

## LEPTOGASTER.

MEIGEN, Illig. Mag., 11, 269, 1803.

LATREILLE, Hist. Nat. Crust. et Ins., xiv, 309 (*Gonyptes*), 1804.

MEIGEN, Syst. Besch., 11, 258, 1820.

MACQUART, Hist. Nat. Dipt., 1, 315 (*Gonyptes*), 1834.

ZETTERSTEDT, Dipt. Scand., 1, 186, 1842.

SCHINER, Fauna Austr., 1, 117, 1862.

WILLISTON, Biologia, Dipt., 1, 298, partial table of Mexican species, 1901.

**annulatus** SAY, Jour. Acad. Sci. Phil., 111, 75; Compl. Works, 11, 68.—Pa.

WIEDEMANN, Auss. Zw., 1, 535 (*histrion*; no reason for change of name).

SCHINER, Verh. Zool.-Bot. Ges., 1867, 356, notes on Wiedemann specimens.

N. J.—Smith Cat.; Province of Quebec—Fyles (*histrion*).

*badius* LOEW, Cent., II, 6.—III.

N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.  
*brevicornis* LOEW, Cent., x, 23.—Texas.

*carolinensis* SCHINER, Verh. Zool.-Bot. Ges., 1866, 696, change of name.

MACQUART, Dipt. Exot., I, 2, 155 (*Gonypes nitidus*, preoc.)—Carolina.

OSTEN SACKEN, Catalogue, 230, note 98, on priority, etc.

*clavipes* JOHNSON, Ent. News, VIII, 120, change of name; Proc. Acad. Nat. Sci. Phil., 1894, 273 (*longipes*, preoc.)—Jamaica.

*concinatus* WILLISTON, Biologia, Dipt., I, 300.—Guerrero, Mex.

*croceus* WILLISTON, Biologia, Dipt., I, 300.—Guerrero, Mex.

*cubensis* BIGOT, in Sagra's Cuba, 792 (*Gonypes*).—Cuba.

ROEDER, Stett. Ent. Zeit., 1885, 340.—Porto Rico.

*dorsalis* WILLISTON, Biologia, Dipt., I, 301.—Guerrero, Mex.

*eudicranus* LOEW, Berl. Ent. Zeitsch., 1874, 353.—Texas.

*favillaceus* LOEW, Cent., II, 12.—Conn.

*fervens* WIEDEMANN, Auss. Zw., II, 646.—Mex.

*flavicornis* VAN DER WULP, Tijdschr. v. Ent., x, 136.—Wis.

LOEW, Zeitsch. f. Ges. Naturwiss., XXXVI, 120, says probably is a syn. of *flavipes*.

*flavipes* LOEW, Cent., II, 15.—Nebr.; O. S. changes this to Atlantic States in his Catalogue.

VAN DER WULP, Tijdschr. v. Ent., XXVII, (sep.) I, male described. His own *flavicornis* is very likely the same.—Mass.

N. J.—Smith Cat.; Montreal—Chagnon.

*histrio* WIEDEMANN, see *annulatus*.

*incisuralis* LOEW, Cent., II, 11.—III. N. J.—Smith Cat.

*intimus* WILLISTON, Biologia, Dipt., I, 300.—Guerrero, Mex.

*longipes* JOHNSON, see *clavipes*.

*macropygialis* WILLISTON, Biologia, Dipt., I, 301, pl. v, f. 14.—Teapa, Mex.

*micropygialis* WILLISTON, Biologia, Dipt., I, 301.—Guerrero, Mex., several places.

*murinus* LOEW, Cent., II, 9.—Nebr.

*obscuripennis* JOHNSON, Proc. Acad. Nat. Sci., 1895, 304, 306.—Fla.

*obscuripes* LOEW, Cent., II, 13.—Cuba.

JÆNNICKE, Neue Exot. Dipt., 46 (*ramoni*).—Cuba. [Loew, in O. S. Cat.]

*ochraceus* SCHINER, Verh. Zool.-Bot. Ges., 1867, 359.—Pa.

*pictipes* LOEW, Cent., II, 7.—III.

TOWNSEND, Annals and Mag. Nat. Hist., XX, 23, thinks *varipes* is the same; oc. Vera Cruz. N. J.—Smith Cat.

*rœderi* WILLISTON, Trans. Ent. Soc. Lond., 1896, 305, pl. XI, f. 80.—St. Vincent, W. I.

*rubida* WIEDEMANN, of Williston, see *testaceus*.

*scapularis* BIGOT, Annales, 1878, 444.—Cal.

*tenuipes* LOEW, Cent., II, 14.—D. C.

*testaceus* LOEW, Cent., II, 10.—N. Y.

? WILLISTON, Biologia, Dipt., I, 299, doubtfully identified from N. Yucatan; *rubida* Wied. of S. A. may be the same.

Montreal—Chagnon; N. J.—Smith Cat.

*triungulatus* WILLISTON, Biologia, Dipt., I, 299, pl. v, f. 13.—Amula in Guerrero, Mex.

*truquii* BELLARDI, Saggio, II, 87, pl. II, f. 18.—Mex.; "Jantepec."

*varipes* LOEW, Cent., II, 8.—D. C. See also note under *pictipes*.

## DICRANUS.

LOEW, Bemerkungen über Asiliden, 1851, 13.

WILLISTON, Ent. News, VII, 185, oc.

*jaliscoensis* WILLISTON, Biologia, Dipt., I, 302, pl. v, f. 15.—Jalisco, Mex.

## DAMALIS.

FABRICIUS, Syst. Antl., 147, 1805.

WESTWOOD, Annales Soc. Ent. France, IV, 684 (*Chalcidomorpha*), 1835.

*occidentalis* WILLISTON, Biologia, Dipt., I, 309, pl. v, f. 21.—Tepetlapa and Santiago, Mex.

## TOWNSENDIA.

WILLISTON, Kans. Univ. Quart., IV, 107, 1895; Biologia, Dipt., I, 307, 1901.

*minuta* WILLISTON, Kans. Univ. Quart., IV, 107; Biologia, Dipt., I, 307, pl. v, f. 19.—Tabasco, Mex.; N. M.

## ABLAUTUS.

LOEW, Cent., VII, 63, 1866; Berl. Ent. Zeitsch., 1874, 377, name changed to *Ablautatus*.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 846, quotes orig. desc.

OSTEN SACKEN, West. Dipt., 1877, 289 (*Ablautatus*).

WILLISTON, Manual, adopts original form.

*mimus* OSTEN SACKEN, West. Dipt., 289 (*Ablautatus*).—San Bernardino, Cal. Ariz.—Williston.

*trifarius* LOEW, Cent., VII, 63.—Cal.

? OSTEN SACKEN, Biologia, Dipt., I, 168, doubtful oc. in N. Sonora, Mex. (*Ablautatus*).

## OSPRIOCERUS.

LOEW, Cent., VII, 51, 1866.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 846, quotes orig. desc.

COQUILLET, Ent. News, IX, 37, 1898, synopsis of species.

WILLISTON, Biologia, Dipt., I, 303, notes, 1901.

*abdominalis* SAY, Long's Exped., App., 375; Compl. Works, I, 255 (*Asilus*). N. W. Terr.

WIEDEMANN, Auss. Zw., I, 390, changes name to *Dasygogon æacus*.

LOEW, Cent., VII, 51 (*æacides*).—Cal. [Coq.]

OSTEN SACKEN, West. Dipt., 290, oc. in Col., etc. (*æacus*).

COQUILLET, Ent. News, IX, 37, note. Mont.—Will. Ms.

*æacus* WIEDEMANN, see *abdominalis*.

*æacides* LOEW, see *abdominalis*.

*diversus* WILLISTON, Biologia, Dipt., I, 303, pl. v, f. 16.—Guerrero, Mex.

*eutrophus* LOEW, Berl. Ent. Zeitsch., 1874, 355.—Pecos R., Tex.

Kans.—O. S. Cat.

*minos* OSTEN SACKEN, West. Dipt., 291.—Col.

*rhadamanthus* LOEW, Cent., VII, 52.—Pecos R., Texas.

*spathulatus* BELLARDI, Saggio, II, 82, pl. I, f. 9.—Mex.

LOEW, Cent., VII, 51, thinks is probably *æacus*—that is, *abdominalis*.

*ventralis* COQUILLET, Ent. News, IX, 37.—Ariz.

## SCLEROPOGON.

LOEW, Cent., VII, 45, 1866.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 846, quotes orig. desc.

- helvolus LOEW, Berl. Ent. Zeitsch., 1874, 355.—Texas. Nebr.—J. M. A.  
 lugubris WILLISTON, Biologia, Dipt., I, 304.—Guerrero, Mex.  
 ochraceus VAN DER WULP, Tijdschr. v. Ent., XIII, 212, pl. IX, f. 9 (*Stenopogon*);  
 XXV, 96, notes; refers to this genus.—N. A.  
 OSTEN SACKEN, Cat., note 101, gen. ref.  
 picticornis LOEW, Cent., VII, 45.—Cal.  
 truquii BELLARDI, Saggio, II, 76, pl. I, f. 10 (*Stenopogon?*).—Mex.  
 WILLISTON, Biologia, Dipt., I, 303.—Guerrero, Mex.

## STENOPOGON.

- LOEW, Linnæa Ent., II, 453, 1847.  
 SCHINER, Fauna Austr., I, 127, 1862.  
 æacidinus WILLISTON, Trans. Amer. Ent. Soc., XIII, 289.—Kans.  
 albibasis BIGOT, Annales, 1878, 422.—Cal.  
 brevisculus LOEW, Cent., X, 28.—Cal.  
 californiæ WALKER, List, II, 322 (*Dasyopogon*).—Cal.  
 consanguineus LOEW, Cent., VII, 48.—Nebr.  
 fuscolumbatus BIGOT, Annales, 1878, 421.—Mex.  
 gratus LOEW, Cent., X, 31; loc. cit., 29, female (*univittatus*).—Both Cal.  
 [LOEW, Berl. Ent. Zeitsch., 1874, 358.]  
 inquinatus LOEW, Cent., VII, 47.—Nebr.  
 latipennis LOEW, Cent., VII, 49.—Pecos R., Texas.  
 longulus LOEW, Cent., VII, 50.—Pecos R., Texas.  
 modestus LOEW, Cent., VII, 46.—Red R. of the North.  
 morosus LOEW, Berl. Ent. Zeitsch., 1874, 356.—Red R. of the North.  
 obscuriventris LOEW, Cent., X, 30.—Cal.  
 subulatus WIEDEMANN, Auss. Zw., I, 375 (*Dasyopogon*).—Ga.  
 univittatus LOEW, see *gratus*.

## SPHAGEUS.

- LOEW, Cent., VII, 55, 1866.  
 SCHINER, Verh. Zool.-Bot. Ges., 1866, 847, quotes orig. desc.  
 chalcoproctus LOEW, Cent., VII, 55.—Cuba.

## MICROSTYLUM.

- MACQUART, Dipt. Exot., I, 2, 26, 1838.  
 LOEW, Dipterenfauna Südafrika's, 74, 1860.  
 fulvigaster BIGOT, Annales, 1878, 410.—Mex.  
 galactodes LOEW, Cent., VII, 44.—N. M.; Osten Sacken, Cat., corrects to Pecos  
 R., Texas, and adds Kans.  
 morosum LOEW, Cent., X, 27.—Dallas, Texas.  
 pollens OSTEN SACKEN, Cat., 230, note 100.—Dallas, Texas.  
*Note.*—Osten Sacken's reference was not intended as a description, but  
 I think the data and the availability of the types make it valid.

## ARCHILESTRIS.

- LOEW, Berl. Ent. Zeitsch., 1874, 377, change of name.  
 SCHINER, Verh. Zool.-Bot. Ges., 1866, 672 (*Archilestes*, preoc.).  
 OSTEN SACKEN, Biologia, Dipt., I, 169, note, 1887.  
 magnificus WALKER, List, VI, 427 (*Dasyopogon*).—Mex.  
 BELLARDI, Saggio, II, 79, pl. I, f. II (*Microstylum*).—Mexico, near the  
 city, at Yautepec and Huastec.  
 SCHINER, Novara, 168 (id.).—S. A.



OSTEN SACKEN, *Biologia, Dipt.*, 1, 169, oc. in Ventenas, Mex.  
 WILLISTON, *Psyche*, 1889, 259.

## DIZONIAS.

- LOEW, *Cent.*, VII, 53, 1866.  
 SCHINER, *Verh. Zool.-Bot. Ges.*, 1866, 846, quotes orig. desc.  
 WILLISTON, *Biologia, Dipt.*, 1, 305.  
**tristis** WALKER, *Dipt. Saund.*, 93 (*Dasygogon*).—U. S.  
 BELLARDI, *Saggio*, II, 80, pl. I, f. 8 (*Das. quadrimaculatus*).—Mex.  
 LOEW, *Cent.*, VII, 54 (*bicinctus*).—N. M.; corrected by O. S. Cat. to Pecos R., Texas, and Dallas, Texas, and Florida are added.  
 OSTEN SACKEN, *Cat.*, 230, note 103, on types, etc.  
 VAN DER WULP, *Tijdschr. v. Ent.*, XXV, 96, oc. in Argentina.  
 Florida, several places—Johnson.  
**lucasi** BELLARDI, *Saggio*, II, 81, pl. I, f. 7 (*Dasygogon*).—Mex.  
 WILLISTON, *Biologia, Dipt.*, 1, 304.—Jalisco, Mex.  
**phœnicurus** LOEW, *Cent.*, VII, 53.—Tamaulipas, Mex.  
 WILLISTON, *Biologia, Dipt.*, 1, 304.—Jalisco, Mex.  
**pilatei** JOHNSON, *Psyche*, 1903, 112, fig.—Tifton, Ga.

## PSILOCURUS.

- LOEW, *Berl. Ent. Zeitsch.*, 1874, 373.  
 WILLISTON, *Kans. Univ. Quart.*, II, 67, 1893 (*Orthoneuromyia*). [Will.]  
**caudatus** WILLISTON, *Biologia, Dipt.*, 1, 308, pl. V, f. 20.—Guerrero, Mex.  
**modestus** WILLISTON, *Kans. Univ. Quart.*, II, 67 (*Orthoneuromyia*).—Western S. D.  
**nudiusculus** LOEW, *Berl. Ent. Zeitsch.*, 1874, 370.—Texas.

## LAPHYSTIA.

- LOEW, *Linnaea Ent.*, II, 538, 1847.  
 SCHINER, *Fauna Austr.*, I, 136, 1862.  
 BIGOT, *Annales*, 1879, 235.  
 ? **albiceps** MACQUART, *Dipt. Exot., Suppl.*, I, 69 (*Dasygogon*).—Texas.  
 OSTEN SACKEN, *Cat.*, gen. ref. with a doubt.  
**sexfasciata** SAY, *Jour. Acad. Sci. Phil.*, III, 50; *Compl. Works*, II, 64 (*Dasygogon*).—Mo.  
 WIEDEMANN, *Auss. Zw.*, I, 408 (id.).  
 SCHINER, *Verh. Zool.-Bot. Ges.*, 1866, 693 (*Laphystis*).  
 LOEW, *Berl. Ent. Zeitsch.*, 1874, 373.  
 BIGOT, *Annales*, 1878, 433 (*Triclis notata*); *Bull. Soc. Ent. France*, 1879, 87 (*Triclis notata* and *L. sexfasciata*); *Annales*, 1879, 236 (mentioned as *L. subfasciata*).—N. A. [Will.]  
 WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 9; XII, 53.—Mont., S. States.  
 N. J.—Smith Cat.; St. Augustine, Fla., "Common along seashore"—Johnson.

## TRICLIS.

- LOEW, *Bemerkungen Ueber Asiliden*, 17, 1851.  
**argentifacies** WILLISTON, *Biologia, Dipt.*, 1, 310, pl. V, f. 22.—Guerrero, Mex.  
**notata** BIGOT, see *Laphystia sexfasciata*.  
**tagax** WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 9, pl. I, f. 6, 6a; XIII, 289, notes.—Cal.

## CERATURGUS.

- WIEDEMANN, *Analecta Ent.*, 12, 1824; *Auss. Zw.*, 1, 414, 1828.  
 MACQUART, *Hist. Nat. Dipt.*, 1, 288, 1834.
- aurulentus** FABRICIUS, *Syst. Anth.*, 166 (*Dasygogon*).—N. Y.  
 WIEDEMANN, *Dipt. Exot.*, 228 (id.); *Analecta Ent.*, 12; *Auss. Zw.*, 1, 414,  
 pl. VII, f. 5.—N. Y.  
 MACQUART, *Hist. Nat. Dipt.*, 1, 239, pl. VII, f. 4.—N. Y.  
 BRAUER, *Wien. Ent. Zeitung*, II, 56.  
 JOHNSON, *Psyche*, 1903, III, fig. of antenna; oc. in N. J. and Pa.  
 N. J.—Smith Cat.
- cruciatus** SAY, *Jour. Acad. Sci. Phil.*, III, 52; *Compl. Works*, II, 66 (*Dasygogon*).—Ark.  
 WIEDEMANN, *Auss. Zw.*, 1, 381 (id.).—Ark.  
 WALKER, *List*, II, 367 (*fasciatus*).—N. Y. [Lw., in O. S. Cat.]  
 BRAUER, *Wien. Ent. Zeitung*, II, 56.  
 JOHNSON, *Psyche*, 1903, 112, fig. of antenna.  
 N. J.—Smith Cat.; Fla.—Johnson; S. D.—J. M. A.  
 For *Dasygogon cornutus* Wied., see *Ceraturgopsis*.
- dimidiatus** MACQUART, *Dipt. Exot., Suppl.*, II, 35 (*Dasygogon*).—Mex.  
 WALKER, *List*, VI, 428.  
 BELLARDI, *Saggio*, II, 61.  
 BRAUER, *Wien. Ent. Zeitung*, II, 56.
- geniculatus** BIGOT, *Annales*, 1878, 443.—Mex.
- lobicornis** OSTEN SACKEN, see *Myelaphus*.
- nigripes** WILLISTON, *Trans. Amer. Ent. Soc.*, XIII, 287, 288.—Ga.
- rufipennis** MACQUART, *Dipt. Exot., Suppl.*, II, 32.—Mex.  
 BELLARDI, *Saggio*, II, 59.—Mex.  
 BRAUER, *Wien. Ent. Zeitung*, II, 56.
- vitripennis** BELLARDI, see *Taracticus*.

## CERATURGOPSIS.

- JOHNSON, *Psyche*, 1903, III.
- cornutus** WIEDEMANN, *Auss. Zw.*, 1, 382 (*Dasygogon*).—No locality.  
 OSTEN SACKEN, *Cat.*, 66, makes a syn. of *Ceraturgus cruciatus*.  
 JOHNSON, *Psyche*, 1903, III, fig., recognized as distinct.—Ormond, Fla.

## MYELAPHUS.

- BIGOT, *Bull. Soc. ent. France*, 1882, no. 9, p. 112.  
 WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 5, 1883.
- lobicornis** OSTEN SACKEN, *West. Dipt.*, 287 (*Ceraturgus*).—Ida., Cal.  
 BRAUER, *Wien. Ent. Zeit.*, II, 56 (*Ceraturgus*).  
 WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 7; XII, 53, and XIII, 288, additional notes.—Cal.
- melas** BIGOT, *Bull. Soc. ent. France*, 1882, no. 9, p. 112.—Cal.  
 WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 5.—Kern Co., Cal.
- rufus** WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 7; XIII, 288, notes.—Kern Co., Cal.

## DICOLONUS.

- LOEW, *Cent.*, VII, 56, 1866.  
 SCHINER, *Verh. Zool.-Bot. Ges.*, 1866, 847, quotes orig. desc.
- simplex** LOEW, *Cent.*, VII, 56.—Cal.  
 WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 11, pl. 1, f. 4, note and fig.—S. Cal.

## ECHTHODOPA.

LOEW, Cent., VII, 27, 1866; Besch. Europ. Dipt., II, 78, obs.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 848, quotes orig. desc.

*formosa* LOEW, Cent., X, 22.—Pa.

*pubera* LOEW, Cent., VII, 27.—Nebr. Mont.—Will. Ms.

## DIOCTRIA.

MEIGEN, Illig. Mag., II, 270, 1803; Syst. Besch., II, 180, 1820.

MACQUART, Hist. Nat. Dipt., I, 289, 1834.

SCHINER, Fauna Austr., I, 119, 1862.

COQUILLET, Canad. Ent., XXV, 80, synopsis, 1893.

*albus* WALKER, List, II, 301.—N. Y.

OSTEN SACKEN, West. Dipt., 287, notes.

WILLISTON, Trans. Amer. Ent. Soc., XI, 8, oc. in Conn. and Wash.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

*nitida* WILLISTON, Trans. Ent. Soc., XI, 8.—Wash.

*parvula* COQUILLET, Canad. Ent., XXV, 80.—Cal.

*pusio* OSTEN SACKEN, West. Dipt., 288.—Sonoma Co., Cal.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 288.—Col.

*resplendens* LOEW, Cent., X, 21.—Cal.

*rubida* COQUILLET, Canad. Ent., XXV, 80.—Cal.

*sackeni* WILLISTON, Trans. Amer. Ent. Soc., XI, 8.—Wash.

## CYRTOPOGON.

LOEW, Linnæa Ent., II, 516, 1847.

SCHINER, Fauna Austr., I, 133, 1862.

OSTEN SACKEN, West. Dipt., 294, analyt. table of western species; Cat., 231, note 104, table of New England species.

*aurifex* OSTEN SACKEN, West. Dipt., 300.—Sierra Nevada Mts., Cal.

*bimacula* WALKER, Dipt. Saund., 102, pl. IV, f. 1 (*Euarmostus*), male.—N. A.

LOEW, Cent., VII, 61 (*Dasygogon melanoplcurus*), female; Berl. Ent. Zeitsch., 1874, 365, syn.—White Mts., N. H.

*callipedilus* LOEW, Berl. Ent. Zeitsch., 1874, 358.—Cal.

OSTEN SACKEN, West. Dipt., 296.—Sierra Nevada, Cal.

WILLISTON, Trans. Amer. Ent. Soc., XI, 12, oc. in Wyo.

COQUILLET, Psyche, Jan., 1901, 149, oc. in N. M.

*cerussatus* OSTEN SACKEN, West. Dipt., 308.—Sonoma Co., Cal.

*chrysopogon* LOEW, Cent., VII, 59.—Mass.

? WALKER, List, II, 355 (*Dasygogon fallo*).—Nova Scotia. [O. S. Cat., with ?]

Quebec—Wulp; Montreal—Chagnon; N. J.—Smith Cat.; Fla.—Johnson; Axton, N. Y.—M. & H.

*cretaceus* OSTEN SACKEN, West. Dipt., 302.—Sierra Nevada, Cal.

*cymbalista* OSTEN SACKEN, West. Dipt., 297, Sierra Nevada, Cal. (Summit Station and Webber Lake).

*dasyllis* WILLISTON, Kans. Univ. Quart., II, 66.—Col.

*dasyллоides* WILLISTON, Trans. Amer. Ent. Soc., XI, 11.—Wash.

*dubius* WILLISTON, Trans. Amer. Ent. Soc., XI, 13.—Ore.

*evidens* OSTEN SACKEN, West. Dipt., 306.—Webber Lake, Cal.

? *gibber* WILLISTON, Trans. Amer. Ent. Soc., XI, 14, pl. 1, f. 9.—Cal. Gen. ref. with a ?

- leucozona** LOEW, Berl. Ent. Zeitsch., 1874, 364.—Sierra Nevadas, Cal.  
OSTEN SACKEN, West. Dipt., 299.—Webber Lake and Yosemite Valley, Cal.  
Beulah, N. M.—Skinner.
- longimanus** LOEW, Berl. Ent. Zeitsch., 1874, 360.—San Francisco.  
OSTEN SACKEN, West. Dipt., 303.—Marin Co., Cal.
- lutatius** WALKER, List, II, 357 (*Dasyopogon*).—Nova Scotia.  
OSTEN SACKEN, Cat., 231, note 105.—Cayuga L., N. Y.; Mass.
- lyratus** OSTEN SACKEN, Cat., 232.—White Mts., N. H.; Catskills, N. Y.
- marginalis** LOEW, Cent., VII, 60; Berl. Ent. Zeitsch., 1874, 365, note.—Mass.  
Canada—O. S. Cat.; N. J.—Smith Cat.
- montanus** LOEW, Berl. Ent. Zeitsch., 1874, 362.—Sierra Nevadas, Cal.  
OSTEN SACKEN, West. Dipt., 298.—Webber Lake, Cal.  
Beulah, N. M.—Skinner.
- ? **nebuloso** OSTEN SACKEN, West. Dipt., 309.—Webber L., Cal. Gen. ref. doubted.  
WILLISTON, Trans. Amer. Ent. Soc., XI, 14.—Wash.
- nugator** OSTEN SACKEN, West. Dipt., 307.—Webber L., Cal.  
WILLISTON, Trans. Amer. Ent. Soc., XI, 13, oc. in Ore. and note.
- plausor** OSTEN SACKEN, West. Dipt., 297.—Morino Valley and Spanish Peaks, N. M.; Utah; Idaho.  
WILLISTON, Trans. Amer. Ent. Soc., XI, 12, oc. in Col.
- positivus** OSTEN SACKEN, West. Dipt., 307.—Webber L., Cal. Ariz.—Will. Ms.
- præpes** WILLISTON, Trans. Amer. Ent. Soc., XI, 12.—Wash.
- princeps** OSTEN SACKEN, West. Dipt., 302.—Webber L., Cal.
- profusus** OSTEN SACKEN, West. Dipt., 305.—Morino Valley and Sangre de Cristo Mts., N. M. Also reported by Williston from N. M.
- rattus** OSTEN SACKEN, West. Dipt., 308.—Webber L., Cal.
- rejectus** OSTEN SACKEN, West. Dipt., 307.—Webber L., Cal.
- sudator** OSTEN SACKEN, West. Dipt., 307.—Webber L., Cal.

#### LASIOPOGON.

- LOEW, Linnæa Ent., II, 508, 1847; Berl. Ent. Zeitsch., 1874, 377, name changed to *Daulopogon*, on account of prior use of *Lasiopogon* in botany.
- arenicola** OSTEN SACKEN, West. Dipt., 310 (*Daulopogon*).—San Francisco.
- bivittatus** LOEW, Cent., VII, 57; Berl. Ent. Zeitsch., 1874, 370, note.—Cal.
- opaculus** LOEW, Berl. Ent. Zeitsch., 1874, 367 (*Daulopogon*).—Ill.  
N. J.—Smith Cat.
- terricola** JOHNSON, Ent. News, XI, 326 (*Daulopogon*).—Ocean Co., Clementon, Wenonah, and Riverton, all in Southern N. J.
- tetragrammus** LOEW, Berl. Ent. Zeitsch., 1874, 368 (*Daulopogon*).—Can.

#### PLESIOMMA.

- MACQUART, Dipt. Exot., I, 2, 54, 1838.
- funesta** LOEW, Wien. Ent. Monatsch., V, 35; Cent., VII, 31.—Cuba.  
JENNICKE, Neue Exot. Dipt., 48 (*Dioctria lugubris*).—Cuba. [Lw. in O. S. Cat.]
- indecora** LOEW, Cent., VII, 33.—Cuba. Jamaica—Johnson.
- leptogaster** LOEW, Cent., VII, 32.—Cuba.
- lineata** FABRICIUS, Spec. Ins., II, 465 (*Asilus*); Ent. Syst., 386 (id.); Syst. Antl., 167 (*Dasyopogon*).—West Indies.

WIEDEMANN, Dipt. Exot., 1, 221 (*Dasygogon*); Auss. Zw., I, 385 (id.).—  
W. I.

? SCHINER, Verh. Zool.-Bot. Ges., 1867, 374 (query by O. S.). See *macra*.  
San Domingo—Will.

**longiventris** SCHINER, Verh. Zool.-Bot. Ges., 1867, 375.—Cuba.

**macra** LOEW, Wien. Ent. Monatsch., v, 35; Cent., VII, 34.—Cuba.

SCHINER, in Verh. Zool.-Bot., Ges., 1867, 374, says this is the same as  
*lineata*; but Osten Sacken does not accept the synonymy in his Cata-  
logue.

**unicolor** LOEW, Cent., VII, 35.—N. M. West. Texas—O. S.

#### HOLCOCEPHALA.

JENNICKE, Neue Exot. Dipt., 51, 1867, name changed.

MACQUART, Dipt. Exot., 1, 2, 1838 (*Discocephala*, preoc.).

**abdominalis** SAY, Jour. Acad. Sci. Phil., III, 50; Compl. Works, II, 64 (*Dasy-  
gogon*).—Pa.

WIEDEMANN, Auss. Zw., I, 412 (id.).

MACQUART, Dipt. Exot., I, 2, 50, pl. IV, f. 2 (*Discocephala rufiventris*).—  
Carolina, Brazil. [O. S., in Say's Compl. Works, loc. cit.]

WALKER, List, II, 362 (*Dasygogon acta*).—Fla., Mass. [O. S.]

VAN DER WULP, Tijdschr. v. Ent., X, 137, pl. III, f. 10-16 (*Dasygogon  
laticeps*).—Wis. [Loew, in Zeitsch. f. Ges. Naturwiss., XXXVI, 115.]

N. J.—Smith Cat.; White Mts., N. H.—Slosson; Fla.—Johnson.

**affinis** BELLARDI, Saggio, II, 86, pl. I, f. 13 (*Discocephala*).—Mex.

**calva** LOEW, Cent., X, 35 (*Discocephala*).—Texas.

N. J.—Smith Cat.; Juniper Cr., Fla.—Johnson; West. N. Y.—O. S.

**deltoides** BELLARDI, Saggio, II, 85, pl. I, f. 12 (*Discocephala*).—Mex.

**interlineata** WALKER, Trans. Ent. Soc., v, 279 (*Discocephala*).—Mex.

**longipennis** BELLARDI, Saggio, II, 286, pl. I, f. 14 (*Discocephala*).—Jalapa, Mex.

WALKER, Trans. Ent. Soc., v, 279 (*Discocephala divisa*).—Mex. [Will.]

OSTEN SACKEN, Biologia, Dipt., I, 171, oc. in Costa Rica, and note on type.

**nitida** WIEDEMANN, Auss. Zw., II, 603 (*Dasygogon*).—Mex.

WALKER, List, VI, 503.—Mex.

BELLARDI, Saggio, II, 83, 84 (*Discocephala minuta* and *nitida*).—Tuxpango  
and Orizaba; Jalapa. [Will.]

WILLISTON, Biologia, Dipt., I, 308.—Mexico, several places.

#### HOLOPOGON.

LOEW, Linnæa Ent., II, 473, 1847.

SCHINER, Fauna Austr., I, 129, 1862.

? **appendiculatus** BIGOT, Annales, 1878, 438.—Cal. Query by Bigot.

**dejectus** WILLISTON, Biologia, Dipt., I, 306.—Guerrero, Mex.

**guttula** WIEDEMANN, Dipt. Exot., 228 (*Dasygogon*); Auss. Zw., I, 411 (id.).—  
Savannah, Ga.

? WALKER, List, II, 355.—N. Y., Ohio. Query by Walker.

Atlantic States.—O. S.; N. J.—Smith Cat.

**nitidiventris** BIGOT, Annales, 1878, 437.—Cal.

**phæonotus** LOEW, Berl. Ent. Zeitsch., 1874, 366.—Texas.

**philadelphicus** SCHINER, Verh. Zool.-Bot. Ges., 1867, 360.—Philadelphia, Pa.

LOEW, Berl. Ent. Zeitsch., 1874, 367, note.

Ormond, Fla.—Johnson.

**pulcher** WILLISTON, *Biologia, Dipt.*, I, 306, pl. v, f. 18.—Guerrero, Mex.

**seniculus** LOEW, *Cent.*, VII, 62.—Nebr.

**violaceus** WILLISTON, *Biologia, Dipt.*, I, 306, pl. v, f. 17.—Guerrero, Mex.

#### PYCNOPOGON.

LOEW, *Linnæa Ent.*, II, 500, 1847.

SCHINER, *Fauna Austr.*, I, 128, 1862.

**cirrhatus** OSTEN SACKEN, *West. Dipt.*, 293.—Mariposa Co., Cal.

WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 15.—Cal.

**divisus** COQUILLET, *Jour. N. Y. Ent. Soc.*, X, 139.—Chihuahua, Mex.

**senilis** BIGOT, *Annales*, 1878, 423 (*Anisopogon*).—Cal. Referred to this genus by Williston, in litt. Fla.—Johnson.

#### STICHOPOGON.

LOEW, *Linnæa Ent.*, II, 500, 1847.

SCHINER, *Fauna Austr.*, I, 128, 1862.

**argenteus** SAY, *Jour. Acad. Sci. Phil.*, III, 51; *Compl. Works*, II, 65 (*Dasyopogon*). Pa. and Md.

WIEDEMANN, *Auss. Zw.*, I, 409 (id.).

Atlantic States: not rare on seabeaches.—O. S.; N. J.—Smith Cat.

**candidus** MACQUART, see *trifasciatus*.

**catulus** OSTEN SACKEN, *Biologia, Dipt.*, I, 170.—N. Sonora, Mex.

**trifasciatus** SAY, *Jour. Acad. Sci. Phil.*, III, 51; *Compl. Works*, II, 64 (*Dasyopogon*).—Pa. and Md.

MACQUART, *Dipt. Exot.*, *Suppl.*, I, 67 (*Dasyopogon candidus*); *Suppl.*, IV, 69, pl. VI, f. 13 (*D. fasciventris*).—Vera Cruz; Mex.

WALKER, *List.*, I, 223 (*Thereva plagiata* HARRIS,—a manuscript name); *Trans. Ent. Soc.*, V, 277 (*Dasyopogon gelascens*).—Mass.; Mex.

BELLARDI, *Saggio*, II, 78 (*Dasyopogon*).—Mex.

WILLISTON, *Trans. Amer. Ent. Soc.*, XIII, 289, oc. and preceding synonymy.—New England, Kans., and S. Cal.

TOWNSEND, *Proc. Cal. Acad. Sci.*, IV, 598, oc. in Lower Cal.

N. J.—Smith Cat.

#### HABROPOGON.

LOEW, *Linnæa Ent.*, II, 463, 1847.

SCHINER, *Fauna Austr.*, I, 126, 1864.

WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 10, 1883.

? **lineatus** WILLISTON, loc. cit., pl. I, f. 6.—Cal. Query by Will., in litt.

#### CALLINICUS.

LOEW, *Cent.*, X, 32, 1872.

**calcaneus** LOEW, *Cent.*, X.—Cal.

OSTEN SACKEN, *West. Dipt.*, 291, oc. in Marin Co., Cal.; Cat. gives Sonoma Co., Cal.

BIGOT, *Annales*, 1878, 411 (*Dasyopogon bilimbatum*).—Cal.

#### HETEROPOGON.

LOEW, *Linnæa Ent.*, II, 488, 1847; *Berl. Ent. Zeitsch.*, 1874, 377, changes name to *Anisopogon*, on account of prior use of *Heteropogon* in botany.

COQUILLET, *Canad. Ent.*, XXV, 20, 1893, table of species (*Anisopogon*).

**gibbus** LOEW, *Cent.*, VII, 58.—Pa.



WALKER, List, II, 356 (*Dasygogon macerinus*).—Trenton Falls, N. Y.  
[O. S.]

*humilis* BELLARDI, Saggio, II, 77.—Mex.

*lautus* LOEW, Cent., x, 34.—Texas.

WILLISTON, Trans. Amer. Ent. Soc., XI, 16 (*Anisopogon*).—Wash., Cal.

*ludius* COQUILLET, Canad. Ent., XXV, 20 (*Anisopogon*).—Los Angeles and San Bernardino Cos., Cal.; Brit. Col.

*patruelis* COQUILLET, Canad. Ent., XXV, 21 (*Anisopogon*).—Texas.

*phœnicurus* LOEW, Cent., x, 33.—Texas.

*rejectus* WILLISTON, Biol. Centr. Amer., Dipt., I, 307.—Mex.; Venta de Zopilote.

*rubidus* COQUILLET, Canad. Ent., XXV, 21 (*Anisopogon*).—Los Angeles Co., Cal.

*senilis* BIGOT, see *Pycnopogon*.

*vespoides* BIGOT, Annales, 1878, 423 (*Anisopogon*).—Cal.

#### NEOLAPARUS.

WILLISTON, Psyche, 1885, 255, change of name.

LOEW, Bemerkungen über Asiliden, 4, 1851 (*Laparus*, preoc.).

? *pictitarsis* BIGOT, Annales, 1878, 417.—Cal. Query by Bigot.

WILLISTON, Trans. Amer. Ent. Soc., XI, 25, notes; does not belong to this genus.

#### SAROPOGON.

LOEW, Linnæa Ent., 439, 1847; Bemerk. über Asil., 5, 1851.

SCHINER, Fauna Austr., I, 125, 1862; Verh. Zool.-Bot., Ges., 1866, 653.

*abbreviatus* JOHNSON, Psyche, 1903, 113.—San Antonio, Tex.

*adustus* LOEW, Berl. Ent. Zeitsch., 1874, 375.—Texas.

WILLISTON, Trans. Amer. Ent. Soc., x, 23.—Kans.

*bicolor* JOHNSON, Psyche, 1903, 113.—San Antonio, Tex.

*combustus* LOEW, Berl. Ent. Zeitsch., 1874, 373.—Texas.

WILLISTON, Trans. Amer. Ent. Soc., XI, 23.—Kans.

*dispar* COQUILLET, Jour. N. Y. Ent. Soc., x, 139.—Cuero and Columbus, Tex.

*pulcherrimus* WILLISTON, Biologia, Dipt., I, 312, pl. VI, f. 3.—Guerrero, Mex.

*senex* OSTEN SACKEN, Biologia, Dipt., I, 179.—Presidio, Mex.

#### BLEPHAREPIUM.

RONDANI, Studi Ent., I, 89, 1848.

LYNCH, A. (ENRIQUE), Asilides Argentinos, 3, in Anal. Soc. Cient. Argentina, VIII, 145-153, 1879 (*Planetolestes*).

OSTEN SACKEN, Biologia, Dipt., I, 171, 1887, rejects *Blepharepium*.

WILLISTON, Biologia, Dipt., I, 310, 1892.

*coarctatum* PERTY, Delectus Animal., 181, pl. XXXVI, f. 4 (*Laphria*).—Brazil.

MACQUART, Dipt. Exot., I, 2, 194 (*Dasygogon bonariensis*).—Argentina.

WALKER, List, VI, 439 and 504 (*Das. bonariensis* and *coarctatum*).—Buenos Aires and Rio Negro.

WALKER, Dipt. Saund., 455 (*Dasygogon subcontractus*).—Amazon.

WALKER, Trans. Ent. Soc., v, 276 (*Dasygogon secabilis*).—Mex.

BIGOT, in Sagra's Cuba, 789, pl. XX, f. 3 (*Senobasis annulatus*).—Cuba.

BELLARDI, Saggio, II, 63, pl. I, f. 4 (*Das. secabilis*).—Mex.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 701 (*Senobasis secabilis*); 1867, 371 (*Sen. auricinctus*).—Surinam. [Loew.]

LYNCH, A. (ENRIQUE), Anal. Soc. Cient. Argent., VIII, 145, synonymy.—Argentina.

VAN DER WULP, Tijdschr. v. Ent., XXV, 88.—Argentina.

OSTEN SACKEN, *Biologia*, Dipt., 1, 171 (*Planctolestes secabilis*).—Mexico, several places; Guatemala; Panama.

SNOW, *Kans. Univ. Quart.*, iv, 177.

WILLISTON, *Biologia*, Dipt., 1, 310, oc. in several Mexican localities.

*Note*.—Osten Sacken uses the name *secabilis* for the Mexican form, because he has examined the type. The further synonymy is less certain.

#### DEROMYIA.

PHILIPPI, *Verh. Zool.-Bot. Ges.*, xv, 705, 1865.

SCHINER, *Verh. Zool.-Bot. Ges.*, xvi, 653, 1866.

LOEW, *Cent.*, vii, 36, 1866 (*Diogmites*).

VAN DER WULP, *Tijdsch. v. Ent.*, xxv, 92, 1882.

WILLISTON, *Trans. Amer. Ent. Soc.*, xi, 24, 1883; *Psyche*, 1889, 256; *Biologia*, Dipt., 1, 310, 1901.

OSTEN SACKEN, *Biologia*, Dipt., 1, 173, 1887 (*Diogmites*).

*affinis* BELLARDI, *Saggio*, 73 (*Saropogon*).—Mex.

*angustipennis* LOEW, *Cent.*, vii, 41 (*Diogmites*).—"Kansas; Matamoras."

WILLISTON, *Trans. Amer. Ent. Soc.*, xi, 25, note.

*annulata* BIGOT, see *Blepharepium coarctatum*.

*basalis* WALKER, see *unbrina*.

*bicolor* JÆNNICKE, *Neue Exot. Dipt.*, 49 (*Saropogon*).—Panama.

*bigotii* BELLARDI, *Saggio*, ii, 70 (*Saropogon*).—Mex.

St. Augustine and Ormond, Fla.—Johnson.

*bilineata* LOEW, *Cent.*, vii, 40 (*Diogmites*).—Cuba.

VAN DER WULP, *Tijdsch. v. Ent.*, xvii (sep.) 2, says this is a synonym of *basalis* WALKER "without the least doubt"; Osten Sacken, however, in *Cat.*, 233, note 108, says the type of *basalis* is either an *unbrina* or a *discolor*. *Conn.*—Wulp.

*brunnea* FABRICIUS, *Mantissa Ins.*, ii, 359 (*Asilus*); *Ent. Syst.*, iv, 382 (id.); *Syst. Antl.*, 165 (*Dasyopogon*).—Cayenne, S. A.

WIEDEMANN, *Dipt. Exot.*, 1, 219 (id.); *Auss. Zw.*, 1, 382 (id.).—Cayenne.

? MACQUART, *Dipt. Exot.*, 1, 2, 34 (id.).—Cayenne; Philadelphia. Query by O. S.

BELLARDI, *Saggio*, ii, 67 (*Saropogon*).—Mex.

*craverii* BELLARDI, *Saggio*, ii, 68 (*Saropogon*).—Mex.

OSTEN SACKEN, *Biologia*, Dipt., 1, 178, note on types (*Diogmites*).

*cuantlensis* BELLARDI, *Saggio*, ii, 68 (*Saropogon*).—Cuantla, Mex.

OSTEN SACKEN, *Biologia*, Dipt., 1, 175 (*Diogmites*).—Guatemala.

*discolor* LOEW, *Cent.*, vii, 37 (*Diogmites*).—Pa.

? MACQUART, *Hist. Nat. Dipt.*, 1, 295 (*Dasyopogon rufescens*).—Philadelphia.

? WALKER, *List*, vi, 426 (id.).

OSTEN SACKEN, *Cat.* 232, note on types and syn.

WILLISTON, *Trans. Amer. Ent. Soc.*, xi, 25, oc. in Pa.

N. J.—Smith *Cat.* See *bilineata*.

*dubia* BELLARDI, *Saggio*, ii, 74 (*Saropogon*).—Mex.

*duillia* WALKER, *List*, ii, 340 (*Dasyopogon*).—Honduras.

OSTEN SACKEN, *Biologia*, Dipt., 1, 178, note (*Diogmites*).

*goniostigma* BELLARDI, *Saggio*, ii, 65, pl. 1, f. 6 (*Saropogon*).—Mex.

*hypomelas* LOEW, *Cent.*, vi, 42 (*Diogmites*).—Pecos R., Texas.

*jalapensis* BELLARDI, *Saggio*, ii, 65, pl. 1, f. 5 (*Saropogon*).—Jalapa, Mex.

OSTEN SACKEN, *Biologia*, Dipt., 1, 177, note on type (*Diogmites*).

WILLISTON, *Biologia*, Dipt., 1, 311, oc. in several places in Mex.; Yucatan.

- lindigi** SCHINER, Novara, 165 (*Dasyopogon*).—S. A.  
OSTEN SACKEN, Dipt., I, 174 (*Diogmites*), oc. in Panama.
- memnon** OSTEN SACKEN, Biologia, Dipt., I, 174, pl. III, f. 9 (*Diogmites*).—Costa Rica, Panama.
- nigripennis** MACQUART, Dipt. Exot., Suppl., II, 34, pl. I, f. 6 (*Dasyopogon*).—Mex.  
BELLARDI, Saggio, II, 75 (*Saropogon*).—Mex.
- nigripes** BELLARDI, Saggio, II, 75 (*Saropogon*).—Mex., Playa Vicente.
- platyptera** LOEW, Cent., VII, 36 (*Diogmites*).—Ill.
- pseudojalapensis** BELLARDI, Saggio, App., 23 (*Dasyopogon*).—Tuxpango and Orizaba, Mex.
- rubescens** BELLARDI, Saggio, II, 71 (*Saropogon*).—Tuxpango, Mex.  
OSTEN SACKEN, Biologia, Dipt., I, 176 (*Diogmites*).—Orizaba, Mex.
- rufescens** MACQUART, see *discolor*.
- sallæi** BELLARDI, Saggio, II, 70 (*Saropogon*).—Tuxpango, Mex.  
OSTEN SACKEN, Biologia, Dipt., I, 174, pl. III, f. 8 (*Diogmites*).—N. Sonora, Ventenas, and Presidio, Mex.  
WILLISTON, Biologia, Dipt., I, 311, oc. in many Mexican localities.
- symmacha** LOEW, Cent., X, 26.—Texas. (*Diogmites*).
- tau** OSTEN SACKEN, Biologia, Dipt., I, 176, pl. III, f. 11 (*Diogmites*).—Panama.
- ternata** LOEW, Cent., VII, 38 (*Diogmites*).—Cuba.  
St. Augustine, Fla.—Johnson.
- ? **tricolor** BELLARDI, Saggio, II, 72 (*Saropogon*).—Mex. Query by O. S., in Cat.
- umbrina** LOEW, Cent., VII, 43 (*Diogmites*).—N. Y., Ill.  
? WALKER, Dipt. Saund., 95 (*Dasyopogon basalis*).—U. S. Query by O. S.; see note under *bilineata*.  
? WALKER, List, II, 339 (*Dasyopogon hcrennius*).—Cincinnati. Query by J. M. A.  
OSTEN SACKEN, Cat., 233, note on type of *basalis*.  
WILLISTON, Trans. Amer. Ent. Soc., XI, 25, note.  
Mass.—O. S.; N. J.—Smith Cat.
- virescens** BELLARDI, Saggio, II, 72 (*Saropogon*).—Mex.
- winthemi** WIEDEMANN, Dipt. Exot., 223; Auss. Zw., I, 387 (*Dasyopogon*).—S. A.  
? LOEW, Cent., VII, 39 (*Diogmites misellus*).—D. C.  
SCHINER, Verh. Zool.-Bot. Ges., 1866, 678 (*Dasyopogon*).  
VAN DER WULP, Tijdsch. v. Ent., XXV, 93; XXVII (sep.), 2, oc. in Conn., notes.  
WILLISTON, Trans. Amer. Ent. Soc., XI, 24, pl. II, f. 6, synonymy.  
OSTEN SACKEN, Biologia, Dipt., I, 177, doubts identity of *misellus*.  
N. J.—Smith Cat.; Fla.—Johnson.

## LESTOMYIA.

- WILLISTON, Trans. Amer. Ent. Soc., XI, 19, 1883.  
OSTEN SACKEN, West. Dipt., 292, 1878 (*Clavator Phillippi*).
- fraudigera** WILLISTON, Trans. Amer. Ent. Soc., XI, 21.—Cal.
- sabulonum** OSTEN SACKEN, West. Dipt., 292 (*Clavator*).—Cal.  
WILLISTON, Trans. Amer. Ent. Soc., XI, 20, pl. II, f. 4.—Kern Co., Cal., and Northern Cal.

## LASTAURUS.

- LOEW, Bemerkungen über Asiliden, II, 1851.
- anthracinus** LOEW, loc. cit., 12.—Mex.  
OSTEN SACKEN, Biologia, Dipt., I, 179, pl. III, f. 10.—Guatemala.

*mutabilis* LOEW, loc. cit., 12.—Venezuela.

OSTEN SACKEN, *Biologia*, Dipt., I, 180.—Costa Rica and Panama.

#### TARACTICUS.

LOEW, *Cent.*, vol. II, 240, note; 1872.

*brevicornis* WILLISTON, see *Cophura*.

? *niger* MACQUART, *Dipt. Exot.*, I, 2, 25, pl. II, f. I (*Ceraturgus*).—N. A.

WALKER, *List*, VI, 378, pt. desc. (id.).

OSTEN SACKEN, *Catalogue*, gen. ref.

BRAUER, *Wien. Ent. Zeit.*, II, 54, 56 (*Ceraturgus*).

WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 22, doubts the generic position.

*nigrimystaceus* WILLISTON, *Biologia*, Dipt., I, 313, pl. v, f. 23.—Guerrero, Mex.

*nigripes* WILLISTON, *Biologia*, Dipt., I, 313.—Guerrero, Mex. "May not be distinct from *similis*."

*octopunctatus* SAY, *Jour. Acad. Sci. Phil.*, III, 99; *Compl. Works*, II, 63 (*Dioctria*). U. S.

WIEDEMANN, *Auss. Zw.*, I, 365 (id.).—N. A.

WALKER, *List*, VI, 387 (id.).

SCHINER, *Verh. Zool.-Bot. Ges.*, 1866, 675; 1867, 369 (id.).

WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 22, pl. II, f. 2, 2a.

Atlantic States—O. S.; N. J.—*Smith Cat.*; White Mts., N. H.—Slosson; Fla.—Johnson; S. D.—J. M. A.

*similis* WILLISTON, *Biologia*, Dipt., I, 312.—Guerrero, Mex.

*vitripennis* BELLARDI, *Saggio*, II, 60 (*Ceraturgus*).—Cuantla, Mex.

OSTEN SACKEN, *Cat.*, 66, "can hardly be a *Ceraturgus*."

BRAUER, *Wien. Ent. Zeit.*, II, 56.

SNOW, *Kans. Univ. Quart.*, IV, 179, gen. ref.

WILLISTON, *Biologia*, Dipt., I, 313, oc. in Chilpancingo, Mex., and notes.

#### COPHURA.

OSTEN SACKEN, *Biologia*, Dipt., I, 181, 1886.

LOEW, *Cent.*, X, 24, 1872 (*Blax*, preoc.); *Berl. Ent. Zeitsch.*, 1874, 377 (*Blacodes*, preoc.).

WILLISTON, *Manual N. A. Dipt.*, 57, 1896 (*Laxiella*, preoc.); *Biologia*, Dipt., I, 314, 1901, list of species.

*bella* LOEW, *Cent.*, X, 24 (*Blax*).—Texas.

? *brevicornis* WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 22, pl. II, f. 3 (*Taracticus*); XII, 54, refers to *Aphamartania*; *Biologia*, Dipt., I, 314, refers here with a doubt.—Wash.

*clausa* COQUILLET, *Canad. Ent.*, XXV, 34 (*Blacodes*).—Cal.

*cristata* COQUILLET, *Canad. Ent.*, XXV, 33 (*Blacodes*).—Cal.

*fur* WILLISTON, *Trans. Amer. Ent. Soc.*, XII, 53 (*Aphamartania*).—Ariz.

*humilis* WILLISTON, *Biologia*, Dipt., I, 315.—Guerrero, Mex.

*pulchella* WILLISTON, *Biologia*, Dipt., I, 314, pl. v, f. 24.—Guerrero, Mex.

*scitula* WILLISTON, *Trans. Amer. Ent. Soc.*, XI, 19, pl. II, f. I, 1a (? *Nicocles*).—Wash.

*sodalis* OSTEN SACKEN, *Biologia*, Dipt., I, 181, pl. III, f. 13.—Presidio, Mex.

Jalisco, Mex.—Williston.

*trunca* COQUILLET, *Canad. Ent.*, XXV, 34 (*Blacodes*).—Los Angeles Co., Cal.

#### NICOCLES.

JÆNNICKE, *Neue Exot. Dipt.*, 47, 1867.

LOEW, *Cent.*, VII, 28, 1866 (*Pygostolus*, preoc.).

WILLISTON, Trans. Amer. Ent. Soc., XI, 16, 1883.

COQUILLET, Canad. Ent., XXV, 119, table of species, 1893.

**abdominalis** WILLISTON, Trans. Amer. Ent. Soc., XI, 17, pl. 1, f. 14.—Cal.

**æmulator** LOEW, Cent., X, 25 (*Pygostolus*).—Cal.

**analís** JENNICKE, Neue Exot. Dipt., 47, pl. 1, f. 13.—Mex.

**argentatus** COQUILLET, Canad. Ent., XXV, 119.—Los Angeles and San Bernardino Cos., Cal.

**dives** LOEW, Cent., VII, 29 (*Pygostolus*).—Cal. Sonoma Co., Cal.—O. S.

**pictus** LOEW, Cent., VII, 30 (*Pygostolus*).—D. C.

N. J.—Smith Cat.; St. Augustine, Fla.—Johnson.

**politus** SAY, Jour. Acad. Sci. Phil., III, 52; Compl. Works, II, 65 (*Dasyogon*).—Pa. and Md.

WIEDEMANN, Auss. Zw., I, 405 (*id.*).

WALKER, List, VI, 421 (*id.*).

LOEW, Cent., VII, 28 (*Pygostolus argenteifer*), male.—D. C.

Mass.—O. S.; N. J.—Smith Cat.

**rufus** WILLISTON, Trans. Amer. Ent. Soc., XI, 18, pl. 1, f. 15.—Wash.

**scitulus** WILLISTON, see *Cophura*.

### DASYPOGON.

MEIGEN, Illig. Mag., II, 270, 1803.

*Note.*—In the restricted sense, this genus does not occur in N. A. There are a few descriptions coming under this genus in the old sense which have never been elucidated, and perhaps never will be.

**angustus** MACQUART, Dipt. Exot., Suppl., III, 20.—Hayti.

**bilimbatus** BIGOT, see *Callinicus calcaneus*.

**cepphicus** SAY, Jour. Acad. Sci. Phil., VI, 158; Compl. Works, II, 354.—Mex.

**mexicanus** MACQUART, Dipt. Exot., Suppl., I, 68.—Mex.

**nigritarsis** MACQUART, Dipt. Exot., Suppl., I, 68.—Mex.

**parvus** BIGOT, in Sagra's Cuba, 789.—Cuba.

**quadrinotatus** BIGOT, Annales, 1878, 412.—Cal.

**rubiginosus** BIGOT, Annales, 1878, 419 (*Scilopogon*).—N. A. I put the species here, because Rondani makes *Scilopogon* identical with his *Cheilopogon*, which in turn Schiner makes a synonym of *Dasyogon* in the narrow sense.

### PSEUDORUS.

WALKER, Dipt. Saund., 103, pl. IV, f. 5, 1853.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 653.

OSTEN SACKEN, Biologia, Dipt., I, 183, corrects error of Schiner.

**bicolor** BELLARDI, Saggio, II, 11, pl. 1, f. 20.—Playa Vicente, Mex.

OSTEN SACKEN, Biologia, Dipt., I, 183.—Guatemala.

WILLISTON, Biologia, Dipt., I, 315, oc. in Mex. (Amula, Acapulco, Atoyac, etc.).

### DORYCLUS.

JENNICKE, Abh. Senckenb. Ges., VI, 365, 1867.

MACQUART, Hist. Nat. Dipt., I, 288 (*Megapoda*, preoc.), 1834.

WALKER, List, VII, 564, 1855 (*Ampyva*, preoc.).

SCHINER, Novara, 156, synonymy.

LYNCH ARRIB., F., Anal. Soc. cient. Argent., XIII, syn.

OSTEN SACKEN, Biologia, Dipt., I, 182, notes.

ROEDER, Berl. Ent. Zeitsch., XXXI, 76, 1887, important discussion.

**distendens** WIEDEMANN, Auss. Zw., 1, 571 (*Asilus*).—Brazil.

MACQUART, Dipt. Exot., Suppl., 1, 198, pl. VII, f. 11, male (*Megapoda cras-sitaris*); 199, pl. VII, f. 12, female (*M. cyaneiventris*).—Brazil; Mex.

WALKER, List, VII, 564 (*Ampyx varipennis*).—Brazil.

VAN DER WULP, Tijdschr. v. Ent., XLII, 115, pl. IX, f. 7-12 (*Doryclus latipes*).—Surinam.

JÆNNICKE, Neue Exot. Dipt. (Abh. Senckenb. Ges.), 366, pl. XLIV, f. 3.

OSTEN SACKEN, Biologia, Dipt., 1, 182 (*varipennis* and *cyaneiventris*).—Guatemala.

ROEDER, Berl. Ent. Zeitsch., XXXI, 1887, 76, synonymy.

WILLISTON, Psyche, 1889, 256.—Brazil.

#### ATONIA.

WILLISTON, Psyche, 1889, 257.

**brevistylata** WILLISTON, Biologia, Dipt., 1, 316.—Teapa, Mex.

**mikii** WILLISTON, Trans. Amer. Ent. Soc., XIII, 290 (*Atomosia*, *Atractia*).—San Domingo.

#### APHESTIA.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 673.

WILLISTON, Psyche, 1889, 257.

**nigra** BIGOT, Annales, 1878, 235.—Mex.

**mexicana** WILLISTON, Biologia, Dipt., 1, 317, pl. VI, f. 2.—Mexico; Amula, Atoyac.

#### CEROTAINIA.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 673; Novara, 170, 1868.

WILLISTON, Psyche, 1889, 257.

**dubia** BIGOT, Annales, 238, 1878.—Mex.

**macrocera** SAY, Jour. Acad. Sci. Phil., III, 73; Compl. Works, II, 67 (*Laphria*).—Pa.

WIEDEMANN, Auss. Zw., 1, 531 (id.).

N. J.—Smith Cat.; Jamaica—Johnson.

**nigra** BIGOT, Annales, 1878, 238.—Mex.

**nigripennis** BELLARDI, Saggio, II, 191 (*Atomosia*).—Mex.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 706.

#### ATOMOSIA.

MACQUART, Dipt. Exot., I, 2, 73, 1838.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 661, notes.

OSTEN SACKEN, Biologia, Dipt., 1, 183, note, 1887.

WILLISTON, Psyche, 1889, 257, table of genera of the *Atomosia* group.

**anonyma** WILLISTON, Biologia, Dipt., 1, 316.—Mexico, Teapa.

**beckeri** JÆNNICKE, Neue Exot. Dipt., 51.—Mex.

? **bigoti** BELLARDI, Saggio, II, 20.—Mex.; gen. ref. with a query.

**eupoda** BIGOT, Annales, 1878, 234 (*Cormansis*).—Mex. I place here because Bigot intimates that the genus is not distinct.

**glabrata** SAY, Jour. Acad. Sci. Phil., III, 53; Compl. Works, II, 66 (*Laphria*).—U. S.

MACQUART, Dipt. Exot., Suppl., II, 39 (*rufipes*).—Philadelphia. [Johnson.]

Atlantic States—O. S.

**incisuralis** MACQUART, Dipt. Exot., I, 2, 76, pl. VII, f. 1.—Cuba.

BIGOT, in Sagra's Cuba, 788.



**macquartii** BELLARDI, Saggio, II, 20.—Mex.

WILLISTON, Biologia, Dipt., I, 316.—Mex.—Amula, Atoyac, Teapa, Yucatan,

**mucida** OSTEN SACKEN, Biologia, Dipt., I, 184.—Presidio, Mex.

WILLISTON, Biologia, Dipt., I, 315.—Yucatan, Mexico.

**puella** WIEDEMANN, Auss. Zw., I, 531 (*Laphria*).—No locality.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 706, oc. in N. A.

MACQUART, Hist. Nat. Dipt., I, 287 (*Laphria pygmaea*).—Ga. [O. S.]

? WALKER, List, II, 386 (? *Laphria cchemon*).—Ohio.

JOHNSON, Psyche, 1903, 114, notes.—Gulf States and Phil.

N. J.—Smith Cat.; Fla.—Johnson.

**rufipes** MACQUART, see *glabrata*.

**sayii** JOHNSON, Psyche, 1903, 113.—Philadelphia and Delaware Co., Pa.

SAY, Journ. Acad. Sci. Phil., III, 54; Compl. Works, II, 66 (*Laphria glabrata*, var. a).—U. S.

**sericans** WALKER, Trans. Ent. Soc., v, 282.—Mex.

**similis** BIGOT, in Sagra's Cuba, 788, pl. XX, f. 4.—Cuba.

**soror** BIGOT, Annales, 1878, 236.—Mex.

JOHNSON, Psyche, 1903, 114, brief desc.

**tibialis** MACQUART, Dipt. Exot., Suppl., I, 76.—Yucatan.

**xanthopus** WIEDEMANN, Auss. Zw., I, 529 (*Laphria*).—Brazil.

VAN DER WULP, Tijdsch. v. Ent., XXV, 105, oc. in Mex.

SCHINER, Verh. Zool.-Bot. Ges., XVI, 693.

#### POGONOSOMA.

RONDANI, Dipt. Ital. Prod., I, 160, 1856.

**arachnoides** BIGOT, Annales, 1878, 227.—Mex.

**dorsatum** SAY, Amer. Ent., I, pl. I, f. 3; Compl. Works, I, 13 (*Laphria*).—Pa.

WIEDEMANN, Auss. Zw., I, 506 (*Laphria*).

Ida., Wash.—J. M. A.

**melanoptera** WIEDEMANN, Auss. Zw., I, 514 (*Laphria*).—No locality.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 707, oc. in S. C.

WILLISTON, Trans. Amer. Ent. Soc., XII, 56.—Fla. N. J.—Smith Cat.

#### HYPERECHIA.

SCHINER, Verh. Zool.-Bot. Ges., XVI, 673, 1866.

WILLISTON, Trans. Amer. Ent. Soc., XI, 27, 1883.

**atrox** WILLISTON, loc. cit., 28.—Pa.

N. J.—Smith Cat. Lansing, Mich.—J. M. A.

#### NUSA.

WALKER, Dipt. Saund., 105, 1853.

RONDANI, Dipt. Ital. Prod., I, 160, 1856 (*Andrenosoma*).

WILLISTON, Psyche, 1889, 255, note on priority.

**abdominalis** BROWN, Kans. Univ. Quart., VI, 103, 1897.—Bernalillo Co., N. M.

**cincta** BELLARDI, Saggio, II, 18, pl. I, f. 19 (*Laphria*).—Mex.

OSTEN SACKEN, Biologia, Dipt., I, 188 (*Andrenosoma*).—Brit. Honduras.

**cinerea** BELLARDI, Saggio, II, 16, pl. I, f. 16 (*Laphria*).—Mex.

OSTEN SACKEN, Biologia, Dipt., I, 188, notes on type, etc. (*Andrenosoma*).—Panama.

**chalybea** WILLISTON, Trans. Amer. Ent. Soc., XII, 56 (*Andrenosoma*).—San Domingo.

- formidolosa** WALKER, Trans. Ent. Soc., v, 280 (*Laphria*).—Mex.  
 BELLARDI, Saggio, II, 17, pl. I, f. 18 (id.).—Cordova, Mex.  
 OSTEN SACKEN, Biologia, Dipt., I, 188 (*Andrenosoma*).—Guatemala, Nicaragua, Panama.
- fulvicauda** SAY, Jour. Acad. Sci. Phil., III, 53, pl. VI; Compl. Works, I, 12 (*Laphria*).—Cote sans Dessein, on Mo. Riv.  
 WIEDEMANN, Auss. Zw., I, 517 (*Laphria pyrhhacra*; no apparent reason for the change of name).—Brazil, Savannah, and Mo.  
 Me., Cal.—Williston; Fla.—Johnson; Montreal—Chagnon.
- rubida** WILLISTON, Biologia, Dipt., I, 318.—Mexico, Atoyac.
- similis** BROWN, Kans. Univ. Quart., VI, 102, 1897.—Bernalillo Co., N. M.
- xanthocnema** WIEDEMANN, Auss. Zw., I, 509 (*Laphria*).—Brazil.  
 MACQUART, Dipt. Exot., I, 2, 67 (id.).—West Indies.  
 VAN DER WULP, Tijdsch. v. Ent., XXV, 104.
- sexpunctata** WILLISTON, Biologia, Dipt., I, 319, pl. VI, f. 4.—Mexico, Amula.

## LAMPRIA.

- MACQUART, Dipt. Exot., I, 2, 60, 1838.
- aurifex** OSTEN SACKEN, Biologia, Dipt., I, 187.—Costa Rica.  
 BELLARDI, Saggio, II, 13 (*clavipes* Fabr.).—Orizaba, Mex. [O. S.]
- bicolor** WIEDEMANN, Auss. Zw., I, 522 (*Laphria*).—No locality.  
 ? SAY, Jour. Acad. Sci. Phil., VI, 158; Compl. Works, II, 355 (*Laphria saniosa*).—Ind.  
 MACQUART, Hist. Nat. Dipt., I, 284 (*megaccera*).—Philadelphia. [O. S.]  
 WALKER, List, II, 379, and VII, 527 (*antaa*).—Fla., and Brit. N. A.  
 WILLISTON, Trans. Amer. Ent. Soc., XI, 32.—Conn., Pa.  
 N. J.—Smith Cat.; Ormond, Fla.—Johnson; Province of Quebec—Fyles.
- circumdata** BELLARDI, Saggio, II, 15, pl. I, f. 17.—Mex.
- clavipes** FABRICIUS, Syst. Antl., 162 (*Laphria*).—S. A.  
 WIEDEMANN, Dipt. Exot., I, 237; Auss. Zw., I, 513 (*Laphria*).—Brazil.  
 MACQUART, Dipt. Exot., I, 2, 61; Suppl., III, 22.—Brazil.  
 SCHINER, Novara, 174, says Macquart's second description refers to another species, and describes the proper female.—Brazil.  
 OSTEN SACKEN, Biologia, Dipt., I, 186.—Panama.  
 For Bellardi's *clavipes* see *aurifex*.
- corallogaster** BIGOT, Annales, 1878, 227 (*Laphria*).—N. A.
- felis** OSTEN SACKEN, West. Dipt., 286.—Webber L., Cal.  
 WILLISTON, Trans. Amer. Ent. Soc., XI, 32.—Wash.
- mexicana** MACQUART, Dipt. Exot., Suppl., II, 37.—Mex.  
 BELLARDI, Saggio, II, 13.—Mex.  
 OSTEN SACKEN, Biologia, Dipt., I, 188, note on Bellardi's specimen.
- rubriventris** MACQUART, Hist. Nat. Dipt., I, 284 (*Laphria*).—Philadelphia.  
 WILLISTON, Trans. Amer. Ent. Soc., XI, 32.—Ga., Tex.
- spinipes** FABRICIUS, Syst. Antl., 162 (*Laphria*); 163 (*Laphria affinis*).—S. A.  
 WIEDEMANN, Dipt. Exot., I, 240; Auss. Zw., I, 525, desc. and syn.—Brazil.  
 OSTEN SACKEN, Biologia, Dipt., I, 187.—Panama.

## DASYLLIS.

- LOEW, Bemerkungen über Asiliden, 20, 1851.  
 SNODGRASS, Psyche, 1902, 399, 1 pl., structure of hypopygium.
- affinis** MACQUART, Dipt. Exot., Suppl., v, 54 (*Laphria*).—Baltimore.

- OSTEN SACKEN**, Cat., 75 and 233, note on type (placed as a synonym of *D. thoracica*).
- JOHNSON**, Ent. News, XIII, 77, reasons for believing it distinct; oc. at Jackson, Ala.; Tifton, Ga.; and in N. J.
- astur** **OSTEN SACKEN**, West. Dipt., 285.—Cal., several places.  
**WILLISTON**, Trans. Amer. Ent. Soc., XI, 27.—Cal., Wash., Ore.
- columbica** **WALKER**, in Lord's Naturalist, etc.—Vancouver Id.  
**OSTEN SACKEN**, West. Dipt., 285, quotes Walker.  
**WILLISTON**, Trans. Amer. Ent. Soc., XI, 27.—Ore., Wash.
- fascipennis** **MACQUART**, Hist. Nat. Dipt., I, 284 (*Laphria*); Dipt. Exot., Suppl., I, 74 (*L. præpotens*).—Cayenne, S. A.  
**SCHINER**, Novara, 172, oc. in Central America.
- flavicollis** **SAY**, Long's Exped., App., 374; Compl. Works, I, 255 (*Laphria*).—N. W. Terr.  
**WIEDEMANN**, Auss. Zw., I, 519 (*Laphria*).  
**WILLISTON**, Trans. Amer. Ent. Soc., XI, 25.—Conn.  
 Mass.—Harris Cat.; Atlantic St.—O. S.; N. J.—Smith Cat; White Mts.—Slosson; Montreal—Chagnon; Axton, N. Y.—M. & H.; Province of Quebec.—Fyles.
- grossa** **FABRICIUS**, Spec. Ins., II, 460; Syst. Antl., 153 (*Asilus*).—S. A.  
**SAY**, Jour. Acad. Sci. Phil., III, 74; Compl. Works, II, 67 (*Laphria ter-gissa*).—Pa.  
**WIEDEMANN**, Auss. Zw., I, 502 (id.).  
**MACQUART**, Dipt. Exot., I, 2, 68 (*L. analis*).—N. A.  
**HARRIS**, Ins. New Engl., 3d edit., 604 (*L. flavibarbis*).  
**OSTEN SACKEN**, Cat., 233, notes on synonymy.  
**WILLISTON**, Trans. Amer. Ent. Soc., XI, 26.—Conn.  
 Quebec—Wulp; N. J.—Smith Cat.; Montreal—Chagnon; Fla.—Johnson.
- lata** **MACQUART**, Dipt. Exot., Suppl., I, 78 (*Mallophora analis*).—Galveston, Tex.; change of name in Suppl. IV, 75.  
**OSTEN SACKEN**, Cat., 233, note on type.
- posticata** **SAY**, Long's Exped., App., 374; Compl. Works, I, 255 (*Laphria*).—N. W. Terr.  
**WIEDEMANN**, Auss. Zw., I, 518 (*Laphria*).  
**MACQUART**, Dipt. Exot., I, 2, 69 (id.).—Carolina.  
**WILLISTON**, Trans. Amer. Ent. Soc., XI, 26.  
 Mass.—Harris Cat.; Atlantic St.—O. S.; N. J.—Smith Cat.; Montreal—Chagnon; Fla.—Johnson; Beulah, N. M.—Skinner; Axton, N. Y.—M. & H.
- sacrator** **WALKER**, List, II, 382 (*Laphria*).—Nova Scotia.  
**WILLISTON**, Trans. Amer. Ent. Soc., XI, 26.—N. H.  
 Quebec, N. H., N. Y.—O. S.; Montreal—Chagnon.
- saffrana** **FABR.**, see *Laphria*.
- thoracica** **FABRICIUS**, Syst. Antl., 158 (*Laphria*; in erratis the name is changed to *fulvithorax*, which Wiedemann does not accept).—N. A.  
**WIEDEMANN**, Dipt. Exot., 236; Auss. Zw., I, 511.  
**WALKER**, List, II, 383 (*L. alcanor*).—Mass. [O. S., from type.]  
**WILLISTON**, Trans. Amer. Ent. Soc., XI, 26.—Conn., Pa.  
**LEBARON**, in Prairie Farmer, July 13, 1872, notes it killing bees.  
 N. J.—Smith Cat.; Montreal—Chagnon.
- unicolor** **WILLISTON**, Trans. Amer. Ent. Soc., XI, 26.—Wash.

## LAPHRIA.

- MEIGEN, Illig. Mag., II, 270, 1803; Syst. Besch., II, 215, 1820.  
 MACQUART, Hist. Nat. Dipt., I, 280, 1834.  
 SCHINER, Fauna Austr., I, 137, 1862.  
 WILLISTON, Trans. Amer. Ent. Soc., XII, 54, table of species.  
 SNODGRASS, Psyche, 1902, 399, 1 pl., structure of hypopygium.  
*æatus* WALKER, List, II, 381.—Martin Falls, Canada, and Nova Scotia.  
 White Mts., N. H.—O. S.  
*amanda* WALKER, List, II, 373.—Guatemala.  
*anthrax* WILLISTON, see *carbonarius*.  
*bilineata* WALKER, see *gilva*.  
*canis* WILLISTON, Trans. Amer. Ent. Soc., XI, 31.—Conn.  
 TOWNSEND, Insect Life, II, 43 and 162, oc. in Mich.  
 White Mts., N. H.—Slosson; N. J.—Smith Cat.; Montreal—Chagnon.  
*carbonarius* WILLISTON, K. U. Quart., IV, 173, change of name; Trans. Amer. Ent. Soc., XI, 29 (*anthrax*, preoc.).—N. California.  
 Beulah, N. M.—Skinner (*anthrax*).  
*carolinensis* SCHINER, Verh. Zool.-Bot. Ges., 1867, 380.—Carolina.  
*cœrulea* WILLISTON, Biologia, Dipt., I, 317.—Atoyac, Mex.  
*componens* WALKER, Trans. Ent. Soc., V, 281.—Mex.  
*corallogaster* BIGOT, see *Lampria*.  
*ferox* WILLISTON, Trans. Amer. Ent. Soc., XI, 29.—Wash.  
*flavescens* MACQUART, Dipt. Exot., I, 2, 69.—Carolina and the Pyrenees Mts. of Europe (Macquart's statement—very doubtful).  
*flavipila* MACQUART, Hist. Nat. Dipt., I, 282.—U. S. (Osten Sacken, Cat., 75, says this is unrecognizable.)  
*franciscana* BIGOT, Annales, 1878, 225.—Cal.  
 WILLISTON, Trans. Amer. Ent. Soc., XI, 31.—Wash., Cal.  
*georgina* WIEDEMANN, Dipt. Exot., 235; Auss. Zw., I, 506.—Savannah, Ga.  
*gilva* LINNÉ, Fauna Suec., 1912 (*Asilus*).—Europe.  
 DEGEER, Mém. pour. serv. d'Hist. Ins., VI, 241, pl. XIII, f. 15.  
 LOEW, Linnæa Ent., II, 548.  
 SCHINER, Fauna Austr., I, 139.  
 PERRIS, Annales Soc. Ent. France, IV, 212, pl. III, f. 89, 96, parasitic [predatory?] on *Spondylis* and *Criocephalus* larvæ.  
 VAN DER WULP, Tijdschr. v. Ent., XXV, 104, recognized from Quebec.  
 WALKER, List, IV, 1156 (*bilincata*).—Martin Falls, Canada. [Will.]  
 WILLISTON, Trans. Amer. Ent. Soc., XI, 28, 30 (the latter *bilineata*).  
 Col.—O. S.; Montreal—Chagnon.  
*homopoda* BELLARDI, Saggio, App., 20, f. 16.—Mex.  
 ? *ichneumon* OSTEN SACKEN, Biologia, Dipt., I, 185, pl. III, f. 6.—Guatemala.  
 Gen. ref. with a question.  
*lasipus* WIEDEMANN, Auss. Zw., I, 502.—Ky.  
*marginalis* WILLISTON, Biologia, Dipt., I, 318.—Mexico, Atoyac.  
*melanogaster* WIEDEMANN, Dipt. Exot., 236; Auss. Zw., I, 507.—Mex. and Savannah, Ga.  
 MACQUART, Dipt. Exot. Suppl., I, 75.—Texas.  
*numitor* OSTEN SACKEN, Biologia, Dipt., I, 185.—Nicaragua.  
*olbus* WALKER, List, II, 375.—Guatemala.  
 MACQUART, Dipt. Exot., Suppl., V, 53, pl. II, f. 3.—Honduras.  
*pubescens* WILLISTON, Trans. Amer. Ent. Soc., XI, 32.—Wash., Ore., White Mts., N. H.

Montreal—Chagnon; Axton, N. Y.—M. & H.

**rapax** OSTEN SACKEN, West. Dipt., 286.—Webber Lake, Cal.

**ruficauda** WILLISTON, Trans. Amer. Ent. Soc., XII, 55.—San Domingo.

**sadales** WALKER, List, II, 378.—N. Y. White Mts., N. H.—O. S.

**saffrana** FABRICIUS, Syst. Antl., 160.—Carolina.

WIEDEMANN, Dipt. Exot., 234; Auss. Zw., I, 504.—Ga.

WILLISTON, Trans. Amer. Ent. Soc., XII, 56.—Fla., N. C.

Fla., several places—Johnson.

**sericea** SAY, Jour. Acad. Sci. Phil., II, 74; Compl. Works, I, 12.—U. S.

WIEDEMANN, Auss. Zw., I, 508.

N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.

**terræ-novæ** MACQUART, Dipt. Exot., I, 2, 69.—Newfoundland.

**triligata** WALKER, Trans. Ent. Soc., V, 281.—Mex.

**ventralis** WILLISTON, Trans. Amer. Ent. Soc., XII, 55.—Cal.

**vivax** WILLISTON, Trans. Amer. Ent. Soc., XI, 30.—Wash.

**vultur** OSTEN SACKEN, West. Dipt., 286.—Coast Range and Webber L., Cal.; Ore.

WILLISTON, Trans. Amer. Ent. Soc., XI, 29. oc. in Wash., and note.

**xanthippe** WILLISTON, Trans. Amer. Ent. Soc., XI, 31.—Ore.

Beulah, N. M.—Skinner.

#### NEOPHONEUS.

WILLISTON, Psyche, 1889, 255.

MACQUART, Dipt. Exot., I, 2, 79, 1839 (*Phoncus*, preoc.).

**flavitibia** BIGOT, Annales, 1878, 239 (*flavotibius*).—Hayti.

#### EMPHYSOMERA.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 665 and 845; Novara. 195, 1868.

BIGOT, Annales, 1875, 238.

**bicolor** BIGOT, see *Ommatius pilosulus*.

**pilosula** BIGOT, see *Ommatius*.

#### OMMATIUS.

WIEDEMANN, Auss. Zw., I, 418, 1828.

BIGOT, Annales, 1875, 238.

**fuscipennis** BELLARDI, Saggio, App., 23.—Mex.

**marginellus** FABRICIUS, Spec. Ins., II, 464; Ent. Syst., 384 (*Asilus*); Syst. Antl., 170 (*Dasyopogon*).—West Indies.

? SAY, Jour. Acad. Sci. Phil., III, 49; Compl. Works, II, 63 (*tibialis*).—Pa.

WIEDEMANN, Dipt. Exot., 213; Auss. Zw., I, 421, pl. VI, f. 5.—Brazil.

? WIEDEMANN, Auss. Zw., I, 422 (*tibialis*).

WALKER, List, II, 474 (*saccas*).—Jamaica.

BIGOT, Annales, 1875, 246 (*vitreus*).—Hayti.

WILLISTON, Trans. Amer. Ent. Soc., XII, 76 (*tibialis*); Trans. Ent. Soc.

London, 1896, 304, oc. syn., etc.—New England; St. Vincent, W. I.

**parvus** BIGOT, Annales, 1875, 247.—Mex.

BELLARDI, Saggio, II, 59 (*pumilus* MACQ.).—Cuantla, Mex. [Will.]

WILLISTON, Biologia, Dipt., I, 332.—Guerrero and Yucatan, Mex.

**peregrinus** OSTEN SACKEN, Biologia, Dipt., I, 210.—Panama.

WILLISTON, Biologia, Dipt., I, 331, oc. in Guerrero, Mex.

**pilosulus** BIGOT, Annales, 1875, 243 and 244 (*Empysomera pilosulus* and *bicolor*). Mex.

WILLISTON, Biologia, Dipt., I, 332, syn., etc.—Guerrero and Jalisco, Mex.

*pumilus* MACQUART, Dipt. Exot., Suppl., II, 42, pl. I, f. 10.—Mex.

*tibialis* SAY, see *marginellus*.

*vitreus* BIGOT, see *marginellus*.

#### ATRACTIA.

MACQUART, Dipt. Exot., I, 2, 151, 1838.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 290, notes.

*marginata* OSTEN SACKEN, Biologia, Dipt., I, 212.—Nicaragua.

*mikii* WILLISTON, see *Atonia*.

#### PROCTACANTHUS.

MACQUART, Dipt. Exot., I, 2, 120, 1838.

WILLISTON, Trans. Amer. Ent. Soc., XII, 73, table of U. S. species.

*arno* TOWNSEND, Proc. Cal. Acad. Sci., IV, 599.—Lower Cal.

*brevipennis* WIEDEMANN, Auss. Zw., I, 431 (*Asilus*).—Ky.

VAN DER WULP, Tijdschr. v. Ent., XXV, 108.

WILLISTON, Trans. Amer. Ent. Soc., XII, 73.—Ga., Fla.

N. J.—Smith Cat.; Fla.—Johnson.

*craverii* BELLARDI, Saggio, II, 50.—Mex.

WILLISTON, Biologia, Dipt., I, 327.—Guadalajara, Mexico.

*exquisitus* OSTEN SACKEN, Biologia, Dipt., I, 206, pl. III, f. 12.—N. Sonora, Mex.

*fulviventris* MACQUART, Dipt. Exot., Suppl., IV, 88.—Fla.

OSTEN SACKEN, Cat., 235, note.

Georgiana, Fla.—Johnson.

*heros* WIEDEMANN, Auss. Zw., I, 427 (*Asilus*).—Ky.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 682; 1867, 396.—S. C. and Ky.

WILLISTON, Trans. Amer. Ent. Soc., XII, 74.—Fla.

*longus* WIEDEMANN, Dipt. Exot., 183; Auss. Zw., I, 426 (*Asilus*).—Ga.

MACQUART, Hist. Nat. Dipt., I, 307; Dipt. Exot., I, 2, 123.—Rio Janeiro.

SCHINER, Verh. Zool.-Bot. Ges., 1866, 682; 1867, 396.

*micans* SCHINER, Verh. Zool.-Bot. Ges., 1867, 397.—N. A.

*milbertii* MACQUART, Dipt. Exot., I, 2, 124.—N. A.

RILEY, 2d Mo. Report, 122, fig. 89 (*Asilus missuriensis*).—Mo.; adult preys upon the honey bee.

? JENNICKE, Neue Exot. Dipt., 57 (*Asilus agrion*).—Ill. [O. S., Cat., from type, with a doubt.]

RILEY, PACKARD and THOMAS, 1st Rept. U. S. Entomol. Comm., 317; adults prey upon locusts (*missuriensis*).

WILLISTON, Trans. Amer. Ent. Soc., XII, 74.—Mo., Kans.

See also Riley, Gen. Index Mo. Reports, 87, 88.

*nigriventris* MACQUART, Dipt. Exot., I, 2, 124.—Philadelphia, Carolina.

*philadelphicus* MACQUART, Dipt. Exot., I, 2, 123.—Philadelphia.

WILLISTON, Trans. Amer. Ent. Soc., XII, 75.—New Engl.

N. J.—Smith Cat.; Fla.—Johnson.

*rufiventris* MACQUART, Dipt. Exot., I, 2, 123, pl. x, f. 2.—San Domingo, Honduras.

Porto Rico—Roeder and Coquillett.

*rufus* WILLISTON, Trans. Amer. Ent. Soc., XII, 74.—N. C., Mass.

N. J.—Smith Cat.

*virginianus* VAN DER WULP, Tijdschr. v. Ent., XXV, 109.—Va.

*zamon* TOWNSEND, see *Eccritosisia amphinome*.



## ECCRITOSIA.

- SCHINER, Verh. Zool.-Bot. Ges., 1866, 674.  
**amphinome** WALKER, List, II, 387 (*Asilus*).—Honduras.  
 OSTEN SACKEN, Biologia, Dipt., I, 207.—Presidio, Mex., and Guatemala.  
 TOWNSEND, Proc. Calif. Acad. Sci., (2), IV, 600 (*Proctacanthus zamon*).  
 —Lower California.  
 WILLISTON, Biologia, Dipt., I, 327, syn. and oc.—Jalisco, Mexico.  
**plinthopyga** WIEDEMANN, Dipt. Exot., 184; Auss. Zw., I, 432 (*Asilus*).—Cuba.  
 BIGOT, in Sagra's Cuba, 791 (*Asilus*).  
 SCHINER, Verh. Zool.-Bot. Ges., 1867, 399.

## ANARMOSTUS.

- LOEW, Dipterenfauna Südafrika's, 1866. (This reference is given by Osten Sacken, Williston, and others, and apparently confirmed by Scudder, but I cannot find the genus mentioned in the work specified.)  
**iopterus** WIEDEMANN, Auss. Zw., I, 438 (*Asilus*).—Brazil.  
 OSTEN SACKEN, Biologia, Dipt., I, 211.—Brit. Honduras.

## ERAX.

- SCOPOLI, Entom. Carniolica. 359. 1763.  
 MACQUART, Dipt. Exot., I, 2, 107, 1838.  
 WILLISTON, Trans. Amer. Ent. Soc., XII, 64, table of U. S. species; Biologia, Dipt., I, 322, table of Central American species.  
 COQUILLET, Canad. Ent., XXV, 175 (*Efferia*, for a small group). [Williston.]  
 OSTEN SACKEN, Biologia, Dipt., I, 197, table of Mexican and Cent. American species.  
**estuans** LINNÉ, Syst. Nat., 12th ed., 1007, 5; Amœn. Acad., VI, 413 (*Asilus*).—N. A.  
 FABRICIUS, Syst. Ent., IV, 379 (*Asilus*); Syst. Antl., 164 (*Dasyopogon*).—N. A.  
 OLIVIER, Encycl. Méth., I, 264.  
 WIEDEMANN, Dipt. Exot. I, 200; Auss. Zw., I, 467 (*Asilus*).—N. A.  
 MACQUART, Hist. Nat. Dipt., I, 312 (*Asilus*); Dipt. Exot., I, 2, 115 and 116 (the last as *Asilus rubibarbis*; syn. by Will.).—N. A. to Brazil.  
 BIGOT, in Sagra's Cuba, 791.  
 WILLISTON, Trans. Amer. Ent. Soc., XII, 72.—Eastern N. A.: Cuba.  
 Note.—Williston dates the species from Wiedemann, thinking that Linné had a different species, which may be ignored, there being no possibility of determining it.  
 N. J.—Smith Cat.  
**affinis** BELLARDI, Saggio, II, 41.—Mex.  
**albibarbis** MACQUART, see *cinerascens*.  
**ambiguus** MACQUART, see *maculatus*.  
**anomalus** BELLARDI, Saggio, II, 32, pl. II, f. 7.—Mex.  
 WILLISTON, Trans. Amer. Ent. Soc., XII, 68, oc. in Ariz.; Biologia, Dipt., I, 323.—Mexico.  
 COQUILLET, Canad. Ent., XXV, 175, refers to *Efferia*.  
 OSTEN SACKEN, Biologia, Dipt., I, 199.—N. Sonora and Cuantla, Mex.  
**aper** WALKER, List, VII, 621.—Mex.  
**apicalis** WIEDEMANN, Dipt. Exot., 191; Auss. Zw., I, 443 (*Asilus*).—N. A.  
 COMSTOCK, Rept. Dept. of Agric., 1879, 291. note; this species captures many larvæ of *Aletia argillacea* in Ala.

- OSTEN SACKEN, Cat., 234, note 127, on type.
- argyrogaster* MACQUART, Dipt. Exot., Suppl., 1, 84.—Yucatan.
- aridus* WILLISTON, Dipt. of Death Valley Exped., 254.—Death Val., Cal. "Perhaps a var. of *latrunculus*."
- bastardii* MACQUART, Dipt. Exot., 1, 2, 115-118 (*femoratus*, *incisuralis*, *bastardii* and *tibialis*).—Carolina, Pa., San Domingo, Guiana.
- RILEY, 2d Missouri Rept., 124, fig. larval stages.—Mo.
- RILEY, Packard and Thomas, 1st Rept. U. S. Ent. Comm., 303, figs.; larvae devour locust eggs.—Missouri, etc.
- WILLISTON, Trans. Amer. Ent. Soc., XII, 71, oc. and syn.—Atlantic and Central States.
- Porto Rico—Roeder; Fla.—Johnson. See *macrolabis*.
- bicolor* BELLARDI, Saggio, II, 47.—Mex.
- bimaculatus* BELLARDI, Saggio, II, 45, pl. II, f. II.—Mex.
- SCHINER, Novara, 182, oc. in Colombia, S. A.
- WILLISTON, Biologia, Dipt., 1, 325.—Mexico.
- candidus* COQUILLET, Canad. Ent., xxv, 176 (*Efferia*).—Los Angeles Co., Cal.
- carinatus* BELLARDI, Saggio, II, pl. II, f. 9.—Mex.
- ? OSTEN SACKEN, Biologia, Dipt., 1, 205, oc. at Presidio, Mex., with a doubt.
- ? WILLISTON, Biologia, Dipt., 1, 323.—Acaguizotla and Rincon, Mex.
- caudex* WALKER, List, II, 404.—West Indies.
- cinerascens* BELLARDI, Saggio, II, 39, pl. II, f. 10.—Mex.
- MACQUART, Dipt. Exot., 1, 2, 118 (*albibarbis*).—N. A.
- WILLISTON, Trans. Amer. Ent. Soc., XII, 67 (*furax*).—Wash., Cal., Kans., Ariz., and Conn. (Will.)
- OSTEN SACKEN, Biologia, Dipt., 1, 202, oc. and notes.—N. Sonora and Orizaba, Mex.
- HUNTER, S. J. Bull. Ent. Dept. Univ. of Kans., entitled "Alfalfa, Grasshoppers, Bees," p. 37, note on seeing this species "pouncing on young grasshoppers."—Kans.
- TOWNSEND, Proc. Cal. Acad. Sci., IV, 599.—Lower Cal.
- N. J.—Smith Cat.; "On white sands of ocean beach," St. Augustine and Lake Worth, Fla.—Johnson.
- cingulatus* BELLARDI, Saggio, II, 42.—Mex.
- comatus* BELLARDI, Saggio, II, 34.—Mex.
- completus* MACQUART, Dipt. Exot., 1, 2, 117, pl. IX, f. 9.—N. A.
- COQUILLET, Canad. Ent., xxv, 175, refers to *Efferia*.
- concinatus* WILLISTON, Biologia, Dipt., 1, 323.—Acaguizotla and Rincon, Mexico.
- dascyllus* WALKER, List, II, 401.—Mass.
- OSTEN SACKEN, Cat., 80, note on type; it is no longer recognizable.
- disjunctus* WILLISTON, Biologia, Dipt., 1, 326.—Atoyac, Mexico.
- dolichogaster* WILLISTON, Biologia, Dipt., 1, 326.—Atoyac, Teapa, Mexico.
- eximius* BELLARDI, Saggio, II, 38.—Mex.
- femoratus* MACQUART, see *bastardii*.
- flavofasciatus* WIEDEMANN, Auss. Zw., 1, 470 (*Asilus*).—Brazil.
- WALKER, List, II, 400, oc. in Honduras.
- fortis* WALKER, List, VII, 623.—San Domingo.
- fulvibarbis* MACQUART, Dipt. Exot., Suppl., III, pl. II, f. 13.—Hayti.
- furax* WILLISTON, see *cinerascens*.
- haitensis* MACQUART, Dipt. Exot., Suppl., III, 28, pl. II, f. 10.—Hayti.
- halæsus* WALKER, List, II, 405.—Jamaica. Jamaica—Johnson.

- invarius* WALKER, Dipt. Saund., 131.—Jamaica.
- jubatus* WILLISTON, Trans. Amer. Ent. Soc., XII, 66.—N. M.
- ? *lascivus* WIEDEMANN, Auss. Zw., I, 474.—Brazil.  
WALKER, List, II, 400, oc. in Honduras. List, loc. cit. (*Asilus amarynceus*; syn. in VII, 637). Probably not North American.
- lateralis* MACQUART, see *maculatus*.
- latrunculus* WILLISTON, Trans. Amer. Ent. Soc., XII, 67.—Ariz., Mont.
- leucocomus* WILLISTON, Trans. Amer. Ent. Soc., XII, 69.—Kans.
- loewii* BELLARDI, Saggio, App., 21, f. 17.—Mex.
- macrolabis* WIEDEMANN, Auss. Zw., I, 458.—Ky.  
VAN DER WULP, Tijdschr. v. Ent., XXV, 113, oc. in Tenn.  
WILLISTON, Trans. Amer. Ent. Soc., XII, 71, doubtful synonym of *bastardii*.
- ? *macularis* WIEDEMANN, Dipt. Exot., 193; Auss. Zw., I, 447 (*Asilus*).—Brazil.  
MACQUART, Dipt. Exot., I, 2, 147.—Brazil.  
VAN DER WULP, Tijdschr. v. Ent., XXV, 112; doubtful oc. in N. A.
- maculatus* MACQUART, Dipt. Exot., I, 2, 111, pl. IX, f. 6; 116 (*lateralis*); Suppl., I, 84 (*ambiguus*); Hist. Nat. Dipt., I, 310 (*Asilus interruptus*).—Guiana, Colombia, Guadeloupe; Philadelphia; Texas and Yucatan; Ga. [O. S.]  
BELLARDI, Saggio, II, 49 (*Eristicus-villosus*).—Mex. [O. S.]  
SCHINER, Verh. Zool.-Bot. Ges., 1867, 392.  
OSTEN SACKEN, Cat., 234, note; Biologia, Dipt., I, 200.—N. Sonora, Presidio and Yucatan, Mex.  
Fla., several places—Johnson.
- marginatus* BELLARDI, Saggio, II, 46.—Mex.
- niger* WIEDEMANN, Dipt. Exot., 196; Auss. Zw., I, 460 (*Asilus*).—Ga.
- nigrimystaceus* MACQUART, Dipt. Exot., Supl., II, 41.—Guadeloupe.
- parvulus* BELLARDI, Saggio, II, 35, pl. II, f. 8.—Mex.
- pavidus* WILLISTON, Biologia, Dipt., I, 326.—Xucumanatlan, Mex.
- pernicis* COQUILLET, Canad. Ent., XXV, 175 (*Efferia*).—Los Angeles and San Diego Cos., Cal.
- pogonias* WIEDEMANN, Dipt. Exot., 198 (specific name changed); Auss. Zw., I, 460 (*Asilus*).—N. A. Ariz.—Wulp.  
FABRICIUS, Syst. Antl., 169 (*Asilus barbatus*, preoc.).—N. A.
- prolificus* OSTEN SACKEN, Biologia, Dipt., I, 202.—N. Sonora, Mex.  
WILLISTON, Biologia, Dipt., I, 323.—Venta de Zopilote, Mex.
- pumilus* WALKER, List, VII, 640.—Vera Cruz, Mex.
- quadrimaculatus* BELLARDI, II, 44, pl. II, f. 13.—Mex.  
WILLISTON, Biologia, Dipt., I, 325.—Atoyac, Mexico.
- rapax* OSTEN SACKEN, Biologia, Dipt., I, 201.—N. Sonora, Mex.
- ravus* COQUILLET, Canad. Ent., XXV, 176 (*Efferia*).—Tex.
- rufitibia* MACQUART, Dipt. Exot., Suppl. III, 27, pl. II, f. 11.—Hayti, Brazil.  
ROEDER, Stett. Ent. Zeit., 1885, 339, oc. in Porto Rico.  
WILLISTON, Dipt. St. Vincent, 305, pl. X, f. 79.—St. Vincent, W. I.
- sagax* WILLISTON, Biologia, Dipt., I, 324.—Santiago Iscuintla, Mexico.
- similis* WILLISTON, Trans. Amer. Ent. Soc., XII, 68.—Ariz.
- splendens* WILLISTON, Biologia, Dipt., I, 325, pl. VI, f. 5.—San Blas, Mexico.
- stamineus* WILLISTON, Trans. Amer. Ent. Soc., XII, 68.—Mont.
- stylatus* FABRICIUS, Syst. Ent., 795 (*Asilus*); Ent. Syst., IV, 384 (id.); Syst. Antl., 171 (*Dasygogon*).—West Indies.  
WIEDEMANN, Dipt. Exot., 198; Auss. Zw., I, 462 (*Asilus*).—S. A.  
SCHINER, Verh. Zool.-Bot. Ges., 1866, 686.  
VAN DER WULP, Tijdschr. v. Ent., XVI, 686, oc. in Wis.

- tagax* WILLISTON, Trans. Amer. Ent. Soc., XII, 65.—Ariz.  
*tricolor* BELLARDI, Saggio, II, 40, pl. II, f. 12.—Mex.  
*triton* OSTEN SACKEN, Biologia, Dipt., I, 200.—Presidio, Mex.  
*unicolor* BELLARDI, Saggio, II, 37.—Mex.  
 VAN DER WULP, Tijdschr. v. Ent., XXV, 114.—Guanajuato, Mex.  
*varipes* WILLISTON, Trans. Amer. Ent. Soc., XII, 71.—Ariz., Kans.  
 Beulah, N. M.—Skinner.  
*vicinus* MACQUART, Dipt. Exot., Suppl. I, 85.—Galveston, Tex.

## NEOERISTICUS.

- OSTEN SACKEN, Catalogue, 1878, 81, change of name.  
 LOEW, Linnæa Ent., 396, 1848 (*Eristicus*, preoc.).  
*nigripes* BELLARDI, Saggio, II, 48 (*Erax*, subgenus *Eristicus*).—Mex.  
 SCHINER, Novara, 182 (*Erax bellardii*; change of name because of preoc. in genus *Erax*).—S. A.  
*villosus* BELLARDI, Saggio, II, 49 (*Erax*, subg. *Eristicus*).—Mex.

## MALLOPHORA.

- MACQUART, Hist. Nat. Dipt., I, 300, 1834; Dipt. Exot., I, 2, 84, 1838.  
 WILLISTON, Trans. Amer. Ent. Soc., XII, 57, 1885, table of species.  
 OSTEN SACKEN, Biologia, Dipt., I, 189, notes.  
 COQUILLET, Canad. Ent., XXV, 1893, table of species.  
*æaca* WILLISTON, Biologia, Dipt., I, 319.—Atoyac, Mex.  
*amphinome* WALKER, see *Eccritosis*.  
 OSTEN SACKEN, Cat., 78, notes.  
*ardens* MACQUART, Hist. Nat. Dipt., I, 302; Dipt. Exot., I, 2, 89, pl. VIII, f. 2.—N. A.  
*bomboides* WIEDEMANN, Dipt. Exot., 203; Auss. Zw., I, 476 (*Asilus*).—Ga.  
 MACQUART, Hist. Nat. Dipt., I, 302; Dipt. Exot., I, 2, 89.—Fla.  
 WILLISTON, Trans. Amer. Ent. Soc., XII, 57.—Ga., Fla.  
 St. Augustine, Fla.—Johnson.  
 ? *breviventris* MACQUART, Dipt. Exot., Suppl. IV, 77.—Brazil.  
 ? WILLISTON, Biologia, Dipt., I, 321, doubtfully recognized from Guerrero, Mex.  
*clausicella* MACQUART, Dipt. Exot., Suppl. IV, 79, pl. VII, f. 8.—Va.  
 WILLISTON, Trans. Amer. Ent. Soc., XII, 59.—Pa.  
 N. J.—Smith Cat.; Beulah, N. M.—Skinner.  
*craverii* BELLARDI, Saggio, II, 22.—Mex.  
 WILLISTON, Biologia, Dipt., I, 320.—Atoyac and Teapa, Mex.  
*fautrix* OSTEN SACKEN, Biologia, Dipt., I, 191, pl. III, f. 14.—Presidio, Mex.  
 WILLISTON, Biologia, Dipt., I, 320, oc. in Tepic, Atoyac and Yucatan, Mex.  
*fulvianalis* MACQUART, Dipt. Exot., Suppl. IV, 78.—Mex.; "perhaps the female of *fulviventris*."  
*fulviventris* MACQUART, Dipt. Exot., Suppl. IV, 77.—Mex., Texas?  
 OSTEN SACKEN, Biologia, Dipt., I, 191; Macquart's type is a male.  
*guildiana* WILLISTON, Trans. Amer. Ent. Soc., XII, 60.—Kans., Mont., N. C.  
 "Perhaps a variety of *clausicella*."  
*freycineti* MACQUART, Dipt. Exot., I, 2, 85; Suppl. I, 77.—Brazil and Colombia.  
 WIEDEMANN, Auss. Zw., I, 475 (*Asilus infernalis* var.).—Brazil.  
 BELLARDI, Saggio, II, 21 (*infernalis*).—Mex.  
 OSTEN SACKEN, Biologia, Dipt., I, 189 (*infernalis*).—Panama.  
 WILLISTON, Biologia, Dipt., I, 319.—Guerrero, Mex.

- laphroides** WIEDEMANN, Auss. Zw., I, 483 (*Asilus*).—Ky.  
 MACQUART, Hist. Nat. Dipt., I, 302 (*minuta*); Dipt. Exot., I, 2, 90, pl. VIII, f. 13 (*heteroptera*).—Both Philadelphia.  
 SCHINER, Verh. Zool.-Bot. Ges., 1866, 711; 1867, 387 (the latter *heteroptera* MACQ.).—Ky. and Brazil.  
 WILLISTON, Trans. Amer. Ent. Soc., XI, pl. II, f. II; XII, 59, syn., etc.—Ga. St. Augustine, Fla.—Johnson.
- macquartii** OSTEN SACKEN, see *scopipeda*.
- megachile** COQUILLET, Canad. Ent., XXV, 118.—Los Angeles Co., Cal.
- nigra** WILLISTON, Trans. Amer. Ent. Soc., XII, 58.—Minn.  
 S. Augustine, Fla.—Johnson.
- orcina** WIEDEMANN, Auss. Zw., I, 477 (*Asilus*).—Savannah, Ga.  
 SCHINER, Verh. Zool.-Bot. Ges., 1866, 711.  
 WILLISTON, Trans. Amer. Ent. Soc., XII, 58.—D. C., Ariz., Va.  
 RILEY, PACKARD, and THOMAS, 2d Rept. U. S. Ent. Comm., quote report by Hubbard on manner of oviposition.  
 Fla., several places—Johnson.
- perpusilla** WALKER, Dipt. Saund., 123.—U. S.  
 OSTEN SACKEN, Cat., 78, note on type.
- pica** MACQUART, Dipt. Exot., Suppl. IV, 78.—Mex.  
 SNOW, Kans. Univ. Quart., IV, 186, 1896, makes this a synonym of *bergii* LYNCH, *Asilides Argentinos*, 35, which is much more recent.
- pluto** WIEDEMANN, Auss. Zw., I, 477 (*Asilus*).—Brazil.  
 VAN DER WULP, Tijdschr. v. Ent., XXV, 106, notes.—Guatemala and Brazil.  
 OSTEN SACKEN, Biologia, Dipt., I, 190.—Guatemala.
- robusta** WIEDEMANN, Auss. Zw., I, 478 (*Asilus*).—No locality.  
 MACQUART, Dipt. Exot., Suppl. I, 78.—Yucatan.  
 VAN DER WULP, Tijdschr. v. Ent., XXV, 106.—Brazil.
- scopipeda** RONDANI, Archiv. per la Zool., 1863, 46.—S. A.  
 MACQUART, Dipt. Exot., I, 2, 89 (*scopifer* WIED.).—Cuba.  
 BIGOT, in Sagra's Cuba, 790 (id.).—Cuba.  
 OSTEN SACKEN, Cat., 78 and 233, note 120.  
 SNOW, Kans. Univ. Quart., IV, 1896, 186.  
 (Arrangement by Williston, in litt.)
- trichostica** WILLISTON, Biologia, Dipt., I, 320.—Atoyac, Mex.
- trapezoidalis** BELLARDI, Saggio, II, 28, pl. III, f. 4 (*Promachus*).—Mex.  
 WILLISTON, Biologia, Dipt., I, 320.—Atoyac, Mex.

### PROMACHUS.

- LOEW, Linnæa Ent., III, 390, 1848.  
 MACQUART, Dipt. Exot., I, 2, 91 (*Trupanca*, preoc.), 1838.  
 SCHINER, Fauna Austr., I, 141, 1862.  
 WILLISTON, Trans. Amer. Ent. Soc., XII, 60, table of species.  
 OSTEN SACKEN, Biologia, Dipt., I, 192, table of Mexican species.
- albifacies** WILLISTON, Trans. Amer. Ent. Soc., XII, 63.—Ariz.  
 OSTEN SACKEN, Biologia, Dipt., I, 195.—N. Sonora, Mex.
- anceps** OSTEN SACKEN, Biologia, Dipt., I, 194.—Panama.  
 ? BELLARDI, Saggio, II, 24, pl. II, f. II (*fuscipennis* MACQ.).—Mex. [O. S.]  
 WILLISTON, Biologia, Dipt., I, 321.—Atoyac, Mex.
- bastardii** MACQUART, Dipt. Exot., I, 2, 104 (*Trupanca*).—U. S.  
 WALKER, List, II, 392 (*Asilus lævinus*); Dipt. Saund., 123 and 136 (*Tru-*

- panea rubiginis* and *Asilus ultimus*).—Mass.; N. A.; N. A. [Syn. of *ultimus* by Will.; the rest by O. S.]
- SCHINER, Verh. Zool.-Bot. Ges., 1867, 389 (*philadelphicus*).—Pa. [O. S.]
- WILLISTON, Trans. Amer. Ent. Soc., XII, 63.—New England, Middle States. N. J.—Smith Cat.
- cinctus** BELLARDI, Saggio, II, 25, pl. II, f. 2.—Mex.
- OSTEN SACKEN, Biologia, Dipt., I, 193.—Guatemala, Nicaragua.
- WILLISTON, Biologia, Dipt., I, 321.—San Lorenzo, Mex.
- fitchii** OSTEN SACKEN, Cat., note, 121, p. 234, change of name.
- FITCH, Country Gentleman, XXIV, 63; 3d N. Y. Report, 251, pl. IV, f. 7 (*Trupanea apivora*, preoc). Adult devours bees in Nebraska.
- RILEY, 1st Mo. Report, 168, same habit in Mo. (id.).
- WILLISTON, Trans. Amer. Ent. Soc., XII, 61.—Kans., Conn. St. Augustine, Fla.—Johnson.
- forfex** OSTEN SACKEN, Biologia, Dipt., I, 194.—Costa Rica.
- BELLARDI, Saggio, II, 27, pl. II, f. 3 (*quadratus*, preoc).—Mex. [O. S. and Will.]
- WILLISTON, Biologia, Dipt., I, 321.—Atoyac, Mex.
- [**fuscipennis** MACQUART, not North American. See Osten Sacken, Biologia, Dipt., I, 194.]
- magnus** BELLARDI, Saggio, II, 26.—Mex.
- nobilis** OSTEN SACKEN, Biologia, Dipt., I, 196.—Costa Rica.
- princeps** WILLISTON, Trans. Amer. Ent. Soc., XII, 62.—Wash.
- pulchellus** BELLARDI, Saggio, II, 29, pl. II, f. 5.—Mex.
- quadratus** WIEDEMANN, Dipt. Exot., 201; Auss. Zw., I, 485 (*Asilus*).—Ga.
- OSTEN SACKEN, Biologia, Dipt., I, 192, notes.
- rufipes** FABRICIUS, Syst. Ent., 794 (*Asilus*); Syst. Antl., 169 (*Dasygogon*).—America.
- WIEDEMANN, Dipt. Exot., 203; Auss. Zw., I, 487 (*Asilus*).—America.
- SCHINER, Verh. Zool.-Bot. Ges., XVI, 688, gen. ref.
- VAN DER WULP, Tijdschr. v. Ent., XXV, 107, note.
- WILLISTON, Trans. Amer. Ent. Soc., XII, 107.—Ga., Fla.
- trapezoidalis** BELLARDI, see *Mallophora*.
- truquii** BELLARDI, Saggio, II, 30, pl. II, f. 6.—Mex.
- WILLISTON, Biologia, Dipt., I, 322.—Amula and Atoyac, Mex.
- ultimus** WALKER, Dipt. Saund., 136 (*Asilus*).—U. S.
- OSTEN SACKEN, Cat., 79, note; perhaps same as *bastardii*.
- vertebratus** SAY, Jour. Acad. Sci. Phil., III, 47; Compl. Works, II, 62 (*Asilus*).—Mo.
- WIEDEMANN, Auss. Zw., I, 485 (id.).
- MACQUART, Dipt. Exot., I, 2, 103 (*Trupanea*).—No locality.
- SCHINER, Verh. Zool.-Bot. Ges., XVI, 688, gen. ref.
- WILLISTON, Trans. Amer. Ent. Soc., XII, 62.—Wash. Brookings, S. D.—J. M. A.

#### STENOPROSOPUS.

- MACQUART, Dipt. Exot., I, 2, 130, 1838 (*Senoprosopis*).
- arizonensis** WILLISTON, Kans. Univ. Quart., II, 76.—Ariz.

#### EUTOLMUS.

LOEW, Linnæa Ent., IV, 150, 1849.

This genus is mentioned as North American by Williston, Manual, p. 50, but no species have been definitely referred to it.



## MACHIMUS.

LOEW, Linnæa Ent., iv, 1, 1849.

*avidus* VAN DER WULP, Tijdschr. v. Ent., sec. XII, 82.—Wis.

## HELIGMONEURA.

BIGOT, Thoms. Archiv. Entom., II, 1858.

LOEW, Linnæa Ent., iv, 58, 1849 (*Mochtherus*, preoc.); syn. acknowledged in Dipteren-fauna Südafrika's, 1860.

OSTEN SACKEN, Cat., 82, changes Loew's name to *Neomochtherus*, 1878.

WILLISTON, Psyche, 1889, 255. syn.

*dolichomerus* WILLISTON, Biologia, Dipt., I, 329.—Guerrero, Mex.; may be var. of *melanocerus*.

*gracilis* WIEDEMANN, Auss. Zw., I, 445 (*Asilus*).—Savannah, Ga.

OSTEN SACKEN, Cat., 235, note on type, etc. (*Neomochtherus*).

*fuliginosa* BELLARDI, Saggio, II, 52 (*Mochtherus*).—Mex.

*melanocerus* WILLISTON, Biologia, Dipt., I, 329.—Guerrero, Mex.

*plebeia* OSTEN SACKEN, see *truquii*.

*truquii* BELLARDI, Saggio, II, 52 (*Mochtherus*).—Mex.

VAN DER WULP, Tijdschr. v. Ent., XXV, 116 (id.), note.—Guanaxuato, Mex.

BELLARDI, Saggio, II, 55 (*Philonicus taniatus*).—Mex.

OSTEN SACKEN, Biologia, Dipt., I, 209 (*Neomochtherus plebeius*).—N. Sonora, Mex.

WILLISTON, Biologia, Dipt., I, 328.—Mexico, various places; synonymy.

*xanthocerus* WILLISTON, Biologia, Dipt., I, 329.—Guerrero, Mex.

## STILPNOGASTER.

LOEW, Linnæa Ent., iv, 82, 1849.

*anceps* VAN DER WULP, Tijdschr. v. Ent., XII, 84.—Wis.

## NEOITAMUS.

OSTEN SACKEN, Cat., 82, 1878, change of name.

LOEW, Linnæa Ent., iv, 84, 1849 (*Itamus*, preoc.).

*æneobarba* "LOEW, in litt.—Northern and Middle States"—O. S. Cat.

*affinis* WILLISTON, Kans. Univ. Quart., II, 73.—Wash.

*capillatus* WILLISTON, Biologia, Dipt., I, 330.—Guerrero, Mexico.

*distinctus* WILLISTON, Kans. Univ. Quart., II, 73.—N. H., Conn.

N. J.—Smith Cat.; White Mts., N. H.—Slosson; Montreal—Chagnon.

*nigrocaudatus* WILLISTON, Biologia, Dipt., I, 329.—Guerrero, Mexico.

## EPITRIPTUS.

LOEW, Linnæa Ent., iv, 108, 1849.

? *albispinosus* BELLARDI, Saggio, II, 54.—Mex. Query by Bell.

*niveibarba* BELLARDI, Saggio, II, 53.—Mex.

## TOLMERUS.

LOEW, Linnæa Ent., iv, 82, 1849.

*alterus* WILLISTON, Biologia, Dipt., I, 330.—Guerrero, Mexico.

*annulipes* MACQUARD, Dipt. Exot., I, 2, 149 (*Asilus*).—Carolina.

Atl. St. and Canada—O. S.; N. J.—Smith Cat.

*callidus* WILLISTON, Kans. Univ. Quart., II, 75.—Wash., Ore.

Montreal—Chagnon; Beulah, N. M.—Skinner.

**notatus** WIEDEMANN, Auss. Zw., I, 451 (*Asilus*).—Ga.

WILLISTON, Kans. Univ. Quart., II, 74.—N. C., Mich., S. D., New England.

N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.

#### PHILODICUS.

LOEW, Linnæa Ent., IV, 144, 1848; Dipterenfauna Südafrika's, 139, 1860.  
**tæniatus** BELLARDI, see *Heligmoneura truquii*.

**tuxpanganus** BELLARDI, Saggio, App., 22.—Tuxpango, Mex.

#### ASILUS.

LINNÉ, Syst. Naturæ, 605 (11th ed., 1760); Fauna Suecica, 469, 1761.

LATREILLE, Hist. Nat. Crust. et Ins., III, 433, 1802.

FABRICIUS, Sys. Antl., 153, 1805.

MEIGEN, Syst. Besch., II, 230, 1820.

MACQUART, Hist. Nat. Dipt., I, 302, 1834.

SCHINER, Fauna Austr., I, 142, 1862.

*Note.*—Some of the species included here doubtless belong to other genera, perhaps quite remote from *Asilus*.

**alethes** WALKER, List, II, 454.—N. Y.

**angustifrons** WILLISTON, Kans. Univ. Quart., II, 71.—Wash.

**annulatus** WILLISTON, Kans. Univ. Quart., II, 70.—N. H., Mass., Conn., S. D., Kans.

N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Mrs. Slosson.

**anonymus** WILLISTON, Biologia, Dipt., I, 330.—Guerrero, Mex.

**antimachus** WALKER, List, II, 454.—Trenton Falls, N. Y.

**apicalis** BELLARDI, Saggio, II, 57.—Mex. (Preoccupied—O. S.)

**astutus** WILLISTON, Kans. Univ. Quart., II, 70.—Cal.

**atripes** FABRICIUS, Syst. Antl., 170 (*Dasygogon*).—West Indies.

WIEDEMANN, Dipt. Exot., 195; Auss. Zw., I, 155.—West Indies.

**auratus** JOHNSON, Proc. Acad. Nat. Sci., 1895, 305.—Palatka and St. Augustine, Fla.

**chrysauges** OSTEN SACKEN, Biologia, Dipt., I, 208.—Guatemala.

**femoralis** MACQUART, Dipt. Exot., Suppl. II, 45.—Philadelphia.

**flavipes** WILLISTON, Kans. Univ. Quart., II, 72.—Pa.; the one mentioned from Conn. is different. N. J.—Smith Cat.; Montreal—Chagnon.

**inauratus** WALKER, Trans. Ent. Soc., V, 283.—Mex.

**infuscatus** BELLARDI, Saggio, II, 56, pl. II, f. 15.—Mex.

**lecythus** WALKER, List, II, 451.—Nova Scotia.

**lestes** WILLISTON, Biologia, Dipt., I, 331.—Guerrero, Mexico.

? **longicella** MACQUART, Dipt. Exot., Suppl. IV, 95, pl. IX, f. 5.—Locality N. A., with a doubt.

**megacephalus** BELLARDI, Saggio, II, 58, pl. II, f. 14.—Mex.

**mexicanus** MACQUART, Dipt. Exot., Suppl. I, 94.—Mex.

**midas** BRAUER, Sitzungsbericht der Kaiserl. Akad. der Wissenschaften, xci, 1885, 387, pl. II, f. I.—Mex.

WILLISTON, Kans. Univ. Quart., II, 69, brief quotation.—N. M.

OSTEN SACKEN, Biologia, Dipt., I, 209.—Durango and Cuernavaca, Mex.

**novæ scotiæ** MACQUART, Dipt. Exot., Suppl. II, 46.—Nova Scotia.

WILLISTON, Kans. Univ. Quart., II, 68.—Conn.

N. J.—Smith Cat.; White Mts., N. H.—Slosson; Montreal—Chagnon; Fla.—Johnson.

- orphne** WALKER, List, II, 456.—N. Y.  
**paropus** WALKER, List, II, 455.—N. Y.  
**perrumpens** WALKER, Trans. Ent. Soc., v, 283.—Mex.  
**sadyates** WALKER, List, II, 453.—Ohio.  
**sericeus** SAY, Jour. Acad. Sci. Phil., III, 48; Compl. Works, II, 63.—Pa.  
 WIEDEMANN, Auss. Zw., I, 429.  
 WALKER, List, II, 410 (*herminius*).—Mass. [O. S.]  
 WILLISTON, Trans. Amer. Ent. Soc., XI, pl. II, f. 10, no desc.; Kans. Univ. Quart., II, 68.—New England, Ind., Kans.  
 RILEY, 2d Mo. Report, 123, gives figure, and notes that Harris (Insects Injurious to Vegetation, 605) has reared the species from larvæ feeding on rhubarb roots.  
 N. J.—Smith Cat.  
**tenebrosus** WILLISTON, Biologia. Dipt., I, 328.—Omiteme, Mexico.  
**tibialis** MACQUART, Hist. Nat. Dipt., I, 313.—Philadelphia.  
**truquii** BELLARDI, see *Hcligmoncura*.  
**vittatus** OLIVIER, Encycl. Méthodique, I, 263.—San Domingo.

## RHADIURGUS.

- LOEW, Linnæa Ent., IV, 1849.  
**leucopogon** WILLISTON, Kans. Univ. Quart., II, 75.—S. D., Nebr.

## LOPHONOTUS.

- MACQUART, Dipt. Exot., I, 2, 125, 1838.  
 LOEW, Linnæa Ent., III, 423, 1848; Dipterenfauna Südafrika's, 152, 1860.  
**humilis** BELLARDI, Saggio, II, 51.—Mex.

## DOLICHOPODIDÆ.

LOEW, Mon. N. A. Dipt., vol. II, 1864 (in Smithsonian Miscellaneous Collections, No. 171), is a monograph which is still useful, although it must be studied in connection with the later works. The earlier descriptions are quoted and discussed in this monograph.

BIGOT, Annales, 1890, 261, article with table of genera of the world.

*Note*.—The arrangement in subfamilies, much of the synonymy, and some notes, are the result of my own study of the family, which has been a favorite with me for fourteen years.

## AGONOSOMINÆ.

## PSILOPODINUS.

- BIGOT, Annales Soc. Ent. France, 1890, 269.  
 ? BIGOT, Annales Soc. ent. France, 1859, 215 (*Oariostylus*, *Megistostylus*, *Mesoblepharius*, *Condyllostylus*, *Eurostomerus*, *Dasypsilopus*, *Heteropsilopus*, *Aedipsilopus*).  
 LOEW, Mon. N. A. Dipt., II, 229 (*Psilopus*), 1864.  
 ? BIGOT, Annales Soc. ent. France, 1890, 261–269 (*Spathipsilopus*, *Eudasybus*, *Amblypsilopus*, *Tylochatus*, *Oariopherus*).  
 ALDRICH, Kans. Univ. Quart., II, 47, 1895 (*Psilopus* in restricted sense); Biologia Centrali-Americana, Dipt., I, 350, 1901, table of American species (id.); Canad. Ent., 1904, 246, nomenclature.  
*Note*.—As the species up to 1902 have all been referred to under the name *Psilopus*, it will be unnecessary to repeat it in each reference.

- albicoxa* WALKER, List, III, 651.—U. S.
- argentatus* ALDRICH, Biologia, Dipt., I, 361.—Guerrero and Tabasco, Mex.
- atricauda* ALDRICH, Biologia, Dipt., I, 357.—Tabasco and Vera Cruz, Mex.
- atrolamellatus* ALDRICH, Biologia, Dipt., I, 359.—Teapa, Mex.
- barbatus* ALDRICH, Biologia, Dipt., I, 358.—Guerrero, Mex.; Rio Janeiro.
- basilaris* WIEDEMANN, Auss. Zw., II, 215.—Brazil.  
ALDRICH, Biologia, Dipt., I, 362.—Teapa, Mex.
- bellulus* ALDRICH, Dipt. St. Vincent, 343; Biologia, Dipt., I, 355.—St. Vincent, W. I.; Mexico, several places.
- brevisetia* COQUILLET, Jour. N. Y. Ent. Soc., x, 140.—San Rafael, Vera Cruz, Mex.
- calcaratus* LOEW, Neue Beitr., VIII, 93; Mon. N. A. Dipt., II, 272.—Carolina.
- caudatus* WIEDEMANN, Auss. Zw., II, 224.—Ga.  
LOEW, Neue Beitr., VIII, 93; Mon. N. A. Dipt., II, 271 (both *caudatulus*).—Mo., Ill.  
ALDRICH, Biologia, Dipt., I, 360, oc. in Mexico, several places, and syn. St. Vincent and Grenada, W. I.—Aldrich.  
U. S. generally, except Rocky Mts. and west of them.
- chrysoprasius* WALKER, List, III, 646 (*chrysoprasii*).—W. I.  
LOEW, Neue Beitr., VIII, 90; Mon. N. A. Dipt., II, 265.—Mex.  
SCHINER, Novara, 213, oc. in Brazil.  
Porto Rico—Roeder; Jamaica—Johnson; St. Vincent and Grenada—Aldrich; Charlotte Harbor, Fla.—Johnson.
- ciliatus* LOEW, see *mundus*.
- ciliipes* ALDRICH, Biologia, Dipt., I, 355, pl. VI, f. 22.—Acapulco, N. Yucatan, etc., Mex.
- clavipes* ALDRICH, Biologia, Dipt., I, 363.—Guerrero, Mex.
- clunalis* COQUILLET, Jour. N. Y. Ent. Soc., x, 141.—San Rafael, Vera Cruz, Mex.
- comatus* LOEW, Neue Beitr., VIII, 89; Mon. N. A. Dipt., II, 262.—Middle States.  
ALDRICH, Biologia, Dipt., I, 361, oc. in Mexico, several places.  
? SCHINER, Novara, 213.—S. A. Probably not the same.  
Volusia, Fla.—Johnson. See *longicornis*.
- coxalis* ALDRICH, Biologia, Dipt., I, 357.—Misantla, Mex.
- delicatus* WALKER, see *Agonosoma*.
- depressus* ALDRICH, Biologia, Dipt., I, 359.—Tabasco, Mex.
- diffusus* WIEDEMANN, Auss. Zw., II, 221.—Brazil.  
LOEW, Mon. N. A. Dipt., II, 235, the Savannah label has been changed on the type to Brazil; redesc. from Brazil.  
ALDRICH, Biologia, Dipt., I, 355, oc. in Tabasco and Vera Cruz, Mex.  
Porto Rico—Roeder.
- dimidiatus* LOEW, see *Agonosoma*.
- femoratus* SAY, Jour. Acad. Sci. Phil., III, 86, and VI, 168; Compl. Works, II, 76 and 361—the latter reference, however, is a mistake, and refers to another species.—Pa. (Near *caudatus*, but cannot be determined with certainty—J. M. A.)
- flavicoxa* ALDRICH, Biologia, Dipt., I, 363.—Vera Cruz and Tabasco, Mex.
- forcipatus* ALDRICH, Biologia, Dipt., I, 362.—Teapa, Mex.
- genualis* ALDRICH, Biologia, Dipt., I, 358.—Guerrero, Mex.
- hæreticus* WALKER, Trans. Ent. Soc., v, 286.—Mex. (Unrecognizable—J. M. A.)
- hirtipes* ALDRICH, Biologia, Dipt., I, 361.—Guerrero, Mex.
- hirtulus* BIGOT, Bull. Ent. Soc. France, 1888, XXIX; Annales, 1890, 286.—Hayti. (Near *caudatus*; cannot be determined with certainty—J. M. A.)

- incisuralis** MACQUART, Dipt. Exot., Suppl., i, 120, pl. xx, f. 6.—Yucatan, Mex.  
 LOEW, Mon. N. A. Dipt., ii, 241, notes; not recognized. (Near *flavicoxa*, but cannot be identified with certainty—J. M. A.)
- inermis** LOEW, Neue Beitr., viii, 93; Mon. N. A. Dipt., ii, 272.—Pa.  
 N. J.—Smith Cat.
- inornatus** ALDRICH, Biologia, Dipt., i, 356.—Guerrero and Morelos, Mex.
- insularis** ALDRICH, Dipt. St. Vincent, 344.—St. Vincent, W. I. Grenada—Ald.
- interceptus** ALDRICH, Biologia, Dipt., i, 363.—Teapa, Mex.
- jucundus** LOEW, Neue Beitr., viii, 87; Mon. N. A. Dipt., ii, 258.—Cuba.  
 MACQUART, Dipt. Exot., ii, 2, 119, pl. xxi, f. i (*sipho* WIED.).—Pa., Cuba, Guiana and Brazil. [Lw.]  
 Porto Rico—Roeder; Jamaica—Johnson; Grenada—Aldrich.
- lepidus** WALKER, Dipt. Saund., 207.—Mex. (Unrecognizable.)
- longicornis** FABRICIUS, Syst. Ent., 783; Ent. Syst., iv, 341 (both *Musca*); Syst. Antl., 269 (*Dolichopus*).—W. I.  
 WIEDEMANN, Auss. Zw., ii, 220.—W. I.  
 LOEW, Mon. N. A. Dipt., ii, 231, 289, 294, notes and orig. desc.  
 COQUILLET, Proc. U. S. N. M., xxii, 252, oc. in Porto Rico. (Probably refers to *comatus*, which may be the original species.)
- longiseta** COQUILLET, Jour. N. Y. Ent. Soc., x, 141.—San Rafael, Vera Cruz, Mex.
- macula** WIEDEMANN, Auss. Zw., ii, 219.—Caribee Ids.  
 LOEW, Mon. N. A. Dipt., ii, 292, quotes orig. desc.  
 (Near *sipho*, but cannot be recognized with certainty.)
- melampus** LOEW, Berl. Ent. Zeitsch., vi, 215; Mon. N. A. Dipt., ii, 253.—Mexico.  
 SCHINER, Novara, 212.—S. A.  
 ? WALKER, List, iii, 649 (*inficitus*).—Mex. [J. M. A.]  
 ALDRICH, Biologia, Dipt., i, 354, oc. in Mexico, several places.  
 Beulah, N. M.—Skinner (*melanopus*).
- mundus** WIEDEMANN, Auss. Zw., ii, 227.—Savannah, Ga.  
 LOEW, Neue Beitr., viii, 80; Mon. N. A. Dipt., ii, 240, 260 (*ciliatus*, but with probable synonymy).—Fla.  
 CASTLE and LAURENT, Ent. News., vii, 303, oc. at Enterprise, Fla. (*ciliatus*).  
 Fla., several places—Johnson.
- nigrofemoratus** WALKER, List, iii, 650.—Nova Scotia. (Unrecognizable.)
- nobilissimus** ALDRICH, Biologia, Dipt., i, 360, pl. vi, f. 23.—Guerrero, Morelos, etc., Mex.
- patibulatus** SAY, Jour. Acad. Sci. Phil., iii, 87 and vi, 168; Compl. Works, ii, 76 and 361 (*Dolichopus*).—E. Fla.; the second reference mentions the species as occurring in Mexico, but this is probably *melampus*.  
 WALKER, List, iii, 648 (*amatus*).—Trenton Falls, N. Y.  
 LOEW, Neue Beitr., viii, 85; Mon. N. A. Dipt., ii, 251.—“Chicago, Nebr., etc.”  
 N. J.—Smith Cat.; Montreal—Chagnon.
- pennifer** ALDRICH, Biologia, Dipt., i, 363.—Teapa, Mex.
- peractus** WALKER, Trans. Ent. Soc., v, 286.—Mex. (Unrecognizable.)
- permodicus** WALKER, Trans. Ent. Soc., v, 287.—Mex. (Unrecognizable.)
- pilosus** LOEW, Neue Beitr., viii, 86; Mon. N. A. Dipt., ii, 256.—Cuba.  
 ROEDER, Stett. Ent. Zeit., 1885, 340, oc. in Porto Rico, and notes.
- portoricensis** MACQUART, Hist. Nat. Dipt., i, 450; Dipt. Exot., ii, 2, 121; Suppl. i, 120, pl. xi, f. 17.—Porto Rico.
- præstans** ALDRICH, Biologia, Dipt., i, 355.—Teapa, Mex.

- purpuratus* ALDRICH, *Biologia*, Dipt., I, 358.—Morelos and Guerrero, Mex.  
*purpureus* ALDRICH, *Biologia*, Dipt., I, 362.—Vera Cruz, Guerrero and Tabasco, Mex.  
*radians* MACQUART, *Hist. Nat. Dipt.*, I, 450; *Dipt. Exot.*, II, 2, 121.—N. A. (Near *comatus*, but cannot be recognized.)  
 LOEW, *Mon. N. A. Dipt.*, II, 240, 298, not recognized.  
*scaber* LOEW, *Neue Beitr.*, VIII, 85; *Mon. N. A. Dipt.*, II, 250.—Pa.  
 N. J.—Smith Cat.  
*scobinator* LOEW, *Neue Beitr.*, VIII, 91; *Mon. N. A. Dipt.*, II, 268.—N. Y., III.  
 N. J.—Smith Cat.; Axton, N. Y.—M. & H.  
*similis* ALDRICH, *Biologia*, Dipt., I, 359.—Guerrero, Yucatan, etc., Mex.; Brazil.  
*sipho* SAY, *Jour. Acad. Sci. Phil.*, III, 85; *Compl. Works*, II, 75 (*Dolichopus*).  
 U. S.  
 WIEDEMANN, *Auss. Zw.*, II, 218.—Pa.  
 WALKER, *List*, III, 646 (*gemmifer*).—Trenton Falls, N. Y. [Lw.]  
 LOEW, *Neue Beitr.*, VIII, 83; *Mon. N. A. Dipt.*, II, 248.—Pa., Ga., Va., III.  
 Common throughout the eastern and middle part of the United States;  
 Montreal—Chagnon.  
*Note*.—There is a reference to *sipho* by Macquart, in *Dipt. Exot.*, II, 2, 179, with fig. 1, pl. XXI; Loew, *Mon.*, 241, says it refers to *jucundus*, while Schiner, *Novara*, 210, says it means *dux* WIED.  
*solidus* WALKER, *Trans. Ent. Soc.*, v, 286.—Mex. (Unrecognizable.)  
*suavium* WALKER, *List*, III, 648.—Jamaica. Porto Rico—Roeder.  
*tibialis* WIEDEMANN, *Auss. Zw.*, II, 222.—Antigua.  
*tonsus* ALDRICH, *Biologia*, Dipt., I, 364.—Frontera, Mex.  
*triseriatus* ALDRICH, *Biologia*, Dipt., I, 356.—Cuernavaca and Teapa, Mex.  
*ungulivena* WALKER, *Trans. Ent. Soc.*, IV, 249.—U. S. (Unrecognizable.)  
*virgo* WIEDEMANN, *Auss. Zw.*, II, 224.—N. Y.  
 SCHINER, *Novara*, 215, oc. in S. A.  
 LOEW, *Mon. N. A. Dipt.*, II, 240, 295.

#### AGONOSOMA.

- GUÉRIN-MÉNEVILLE, *Voyage . . . sur la Corvette. Zoologie*, Tome II, partie 2me, p. 293. Paris, 1838 (title-page gives date 1830). On the plates the genus is called *Chrysosoma*.  
 FALLÉN, *Dolichopodes*, 23, 1823 (*Leptopus*, preoc.).  
 MEIGEN, *Syst. Besch.*, IV, 35, 1824 (*Psilopus*, preoc.).  
 ZELLER, *Isis* 1842, 831, changes *Psilopus* to *Sciapus*.  
 ? BIGOT, *Annales Soc. ent. France*, 1859, 215 (*Margaritostylus*, in part).  
 RONDANI, *Dipt. Ital. Prodromus*, IV, 11, 1861, changes *Psilopus* to *Psilopodius*.  
 SCHINER, *Fauna Austr.*, I, 180, 1862 (*Psilopus* MEIG.).  
 LOEW, *Mon. N. A. Dipt.*, II, 229 (id.), 1864.  
 ALDRICH, *Kans. Univ. Quart.*, II, 47, 1893 (*Gnamptopsilopus*); *Biologia*, Dipt., I, 364, 1901, table of species (id.); *Canad. Ent.*, 1904, 246, nomenclature.  
 COQUILLET, *Jour. N. Y. Ent. Soc.*, X, 140, 1902, syn. of *Gnamptopsilopus*.  
 BEZZI, *Zeitsch. f. Syst. Hym. u. Dipterologie*, 1902, 191, adopts *Sciapus*.  
*bicolor* LOEW, see *unifasciatus*.  
*castum* LOEW, *Cent.*, VI, 84 (*Psilopus*).—Cuba.  
*cillipennis* ALDRICH, *Biologia*, Dipt., I, 366, pl. VI, f. 24 (*Gnamptopsilopus*).—Omitlne, Mex.



- delicatum** WALKER, List, III, 645 (*Psilopus*).—N. Y. (Unrecognizable.)
- dimidiatum** LOEW, Berl. Ent. Zeitsch., VI, 216; Mon. N. A. Dipt., II, 246 (both *Psilopus*).—Mex.  
ALDRICH, Biologia, Dipt., I, 365 (*Gnamptopsilopus*).—Morelos, Mex. Porto Rico, Roeder; South Amer.—Schiner, Novara, 212.
- dorsale** LOEW, Cent., VI, 85 (*Psilopus*).—Cuba.
- filipes** LOEW, Neue Beitr., VIII, 99; Mon. N. A. Dipt., II, 286, pl. VII, f. 44 (*Psilopus*).—Middle States.
- flavicornis** ALDRICH, Dipt. St. Vincent, 342 (*Gnamptopsilopus*).—St. Vincent, W. I.; also from Grenada.
- flavidum** ALDRICH, Dipt. St. Vincent, 341, pl. XII, f. 109 (*Gnamptopsilopus*).—St. Vincent, W. I.; also from Grenada.
- infumatum** ALDRICH, Biologia, Dipt., I, 365 (*Gnamptopsilopus*).—Guerrero, Mex.
- mexicanum** ALDRICH, Biologia, Dipt., I, 365 (*Gnamptopsilopus*).—Vera Cruz and Tabasco, Mex.
- pallens** WIEDEMANN, Auss. Zw., II, 219 (*Psilopus*).—N. Y.  
LOEW, Neue Beitr., V, 4 (*Psilopus albonotatus*, from Isle to Rhodes); VIII, 97 (*Psilopus pallens*); Mon. N. A. Dipt., II, 275 (id.).—N. Y.  
OSTEN SACKEN, Cat., 243, oc. and syn.—Spain, N. Y., R. I.  
N. J.—Smith Cat.
- psittacinum** LOEW, Neue Beitr., VIII, 96; Mon. N. A. Dipt., II, 281 (*Psilopus*).—Fla.  
N. J.—Smith Cat.; Porto Rico—Roeder; St. Augustine and L. Worth, Fla.—Johnson.
- scintillans** LOEW, Neue Beitr., VIII, 94; Mon. N. A. Dipt., II, 273 (both *Psilopus*).—Middle States. N. J.—Smith Cat.
- tener** LOEW, Cent., II, 71; Mon. N. A. Dipt., II, 284 (both *Psilopus*).—Pa.  
N. J.—Smith Cat.
- unifasciatum** SAY, Jour. Acad. Sci. Phil., III, 85; Compl. Works, II, 75 (*Dolichopus*).—Pa.  
WIEDEMANN, Auss. Zw., II, 219 (*Psilopus sayi*).  
LOEW, Neue Beitr., VIII, 96; Mon. N. A. Dipt., II, 280 (both *Psilopus bicolor*).—Middle States. Loew also quotes the earlier descriptions, pp. 332, 289, 293.  
GIGLIO-TOS, Annales Soc. Ent. France, 1895, 359, suspects that *Psilopus leptogaster* THOMPSON, Eugen. Resa, 510, is the same as *bicolor*.
- variegatum** LOEW, Neue Beitr., VIII, 95; Mon. N. A. Dipt., II, 278 (both *Psilopus*).—Fla. Cuba. N. J.—Smith Cat.; Fla., several places—Johnson.

## MESORHAGA.

SCHINER, Novara, 217, 1868.

ALDRICH, Kans. Univ. Quart., II, 48, 1893 (*Aptorthus*); Ent. News, XI, 531, syn.

**albiciata** ALDRICH, Kans. Univ. Quart., II, 48 (*Aptorthus*).—Westville, N. J.; Mich. N. J.—Smith Cat.

**borealis** ALDRICH, Kans. Univ. Quart., II, 49 (*Aptorthus*).—St. Paul, Minn.

**nigripis** ALDRICH, Kans. Univ. Quart., II, 49 (*Aptorthus*).—Cal.

**townsendii** ALDRICH, Kans. Univ. Quart., II, 50 (*Aptorthus*).—Aztec., Ariz.; Atlantic City, N. J.

## LEPTORHETHUM.

ALDRICH, Kans. Univ. Quart., II, 50, 1893.

**angustatum** ALDRICH, Kans. Univ. Quart., II, 50; Dipt. St. Vincent, 345, pl. XII, f. 108.—St. Vincent, W. I.

## DIAPHORINÆ.

## DIAPHORUS.

- MEIGEN, Syst. Besch., IV, 32, 1824.  
 SCHINER, Fauna Austr., I, 186, 1864.  
 LOEW, Wien. Ent. Monatsch., I, 37, 1857 (*Lyroneurus*, in part); Mon. N. A. Dipt., II, 156 and 169, 1864 (*Diaphorus* and *Lyroneurus*).  
 ALDRICH, Dipt. St. Vincent, 321, note, 1896; Kans. Univ. Sci. Bull., I, 1902, 85, table of species.
- amœnus* ALDRICH, Kans. Univ. Sci. Bull., I, 86.—Grenada, W. I.  
*approximatus* ALDRICH, see *spectabilis*.  
*cærulescens* LOEW, Wien. Ent. Monatsch., I, 39; Neue Beitr., VIII, 60; Mon. N. A. Dipt., II, 170 (all *Lyroneurus*).—Mex.  
*contiguus* ALDRICH, Dipt. St. Vincent, 323.—St. Vincent, W. I.; also in Grenada.  
*deceptivus* ALDRICH, Biologia, Dipt., I, 346.—Guerrero and Vera Cruz, Mex.  
*dimidiatus* ALDRICH, Dipt. St. Vincent, 322.—St. Vincent, W. I. Also in Grenada.  
*dubius* ALDRICH, Dipt. St. Vincent, 324.—St. Vincent, W. I.; also in Grenada.  
*flavipes* ALDRICH, Dipt. St. Vincent, 323.—St. Vincent, W. I. Also occurs in Grenada.
- interruptus* LOEW, see *Asyndetus*.  
*lamellatus* LOEW, Mon. N. A. Dipt., II, 165.—Middle States.  
*leucostoma* LOEW, Neue Beitr., VIII, 58; Mon. N. A. Dipt., II, 166.—D. C., Md.  
 HOWARD, Proc. Wash. Acad. Sci., II, 561, reared a specimen from human excrement. N. J.—Smith Cat.; Charlotte Harbor, Fla.—Johnson.  
*mundus* LOEW, Neue Beitr., VIII, 57; Mon. N. A. Dipt., II, 161.—Pa.  
 N. J.—Smith Cat.; Drayton Id. and Charlotte Harbor, Fla.—Johnson.  
*nigrescens* ALDRICH, Biologia, Dipt., I, 346.—Guerrero, Mex.  
*opacus* LOEW, Neue Beitr., VIII, 56; Mon. N. A. Dipt., II, 160.—N. Y.  
 ALDRICH, Dipt. St. Vincent, 320; Kans. Univ. Sci. Bull., I, 86.—St. Vincent and Grenada, W. I., and notes. N. J.—Smith Cat.  
*palpiger* WHEELER, Psyche, June, 1890, 360.—Milwaukee Co., Wis.  
*parvulus* ALDRICH, Dipt. St. Vincent, 321.—St. Vincent, W. I.  
*rauterbergi* WHEELER, Psyche, June, 1890, 360.—Saline Co., Nebr.  
*satrapa* WHEELER, Psyche, June, 1890, 359.—Saline Co., Nebr.  
*simplex* ALDRICH, Dipt. St. Vincent, 333, pl. XII, f. 117 (*Lyroneurus*): Biologia, Dipt. I, 345; Kans. Univ. Sci. Bull., I, 85, 87.—St. Vincent, W. I. (type); Mexico, several places; Grenada, W. I.  
*sodalis* LOEW, Neue Beitr., VIII, 58; Mon. N. A. Dipt., II, 163.—N. Y.  
 HOWARD, Proc. Wash. Acad. Sci., II, 561, reared from human excrement in Md.  
 N. J.—Smith Cat.  
*spectabilis* LOEW, Neue Beitr., VIII, 57; Mon. N. A. Dipt., II, 162.—D. C.  
 ALDRICH, Dipt. St. Vincent, 321 (*approximatus*); Ent. News, XI, 533, syn.; Biologia, Dipt., I, 345; Kans. Univ. Sci. Bull., I, 87.—St. Vincent, W. I.; Mexico, several places; Grenada, W. I.  
*subsejunctus* LOEW, Cent., VI, 83.—Cuba.

## ASYNDETUS.

- LOEW, Cent., VIII, 58, 1869; Besch. Europ. Dipt., II, 296, 1871.  
 WHEELER, Proc. Cal. Acad. Sci., II, 32, table of species, etc.  
 ALDRICH, Kans. Univ. Sci. Bull., I, 87, table of species, etc.  
*ammophilus* LOEW, Cent., VIII, 58.—Newport, R. I. N. J.—Smith Cat.

- appendiculatus** LOEW, Cent., VIII, 59.—Newport, R. I.  
**fratellus** ALDRICH, Dipt. St. Vincent, 332. pl. XII, f. 114.—St. Vincent, W. I. Also occurs in Grenada.  
**interruptus** LOEW, Wien. Ent. Monatsch., v, 37; Neue Beitr., VIII, 59; Mon. N. A. Dipt., II, 168 (all *Diaphorus*).—Cuba.  
 ALDRICH, Kans. Univ. Sci. Bull., I, 87, gen. ref.  
**syntormoides** WHEELER, Proc. Cal. Acad. Sci., II, 32, pl. II, f. 50-52.—New Bedford and Boston, Mass.; Avalon, N. J.  
 ALDRICH, Kans. Univ. Sci. Bull., I, 88, oc. in Grenada, W. I., and Kans.

### CHRYSOTUS.

- MEIGEN, Syst. Besch., IV, 40, 1824.  
 SCHINER, Fauna Austr., I, 185, 1862.  
 LOEW, Mon. N. A. Dipt., II, 171, 1864.  
 KOWARZ, Verh. Zool.-Bot. Ges., XXIV, 453-478, 1874, 1 pl., revision of the European species.  
 ALDRICH, Kans. Univ. Sci. Bull., I, 85, 88, table of species, 1902.  
**abdominalis** SAY, see *Thrypticus*.  
**acutus** ALDRICH, Dipt. St. Vincent, 329.—St. Vincent, W. I.  
**affinis** LOEW, Neue Beitr., VIII, 64; Mon. N. A. Dipt., II, 178.—Middle States.  
**albipalpus** ALDRICH, Dipt. St. Vincent, 327.—St. Vincent, W. I. Also occurs in Grenada.  
**apicalis** ALDRICH, see *barbatus*.  
**auratus** LOEW, Neue Beitr., VIII, 65; Mon. N. A. Dipt., II, 183.—N. Y.  
**barbatus** LOEW, Neue Beitr., VIII, 48; Mon. N. A. Dipt., II, 138 (both male only, as *Synarthrus barbatus*); Neue Beitr., VIII, 63; Mon. N. A. Dipt., II, 175 (both female only, as *Chrysotus validus*).—Middle States.  
 WHEELER, Ent. News, VII, 154 (*Xiphandrium americanum*).—Wis., Ill., Ind.  
 ALDRICH, Dipt. St. Vincent, 330 (*apicalis*); Ent. News., XI, 533, syn.; Kans. Univ. Sci. Bull., I, 90.—St. Vincent and Grenada, W. I.  
 Porto Rico—Coq.  
**choricus** WHEELER, Psyche, June, 1890, 357.—Milwaukee Co., Wis.  
**concinarius** SAY, Jour. Acad. Sci., Phil., VI, 168; Compl. Works, II, 361.—Mex. (Unrecognizable.)  
**cornutus** LOEW, Mon. N. A. Dipt., II, 174.—D. C.  
**costalis** LOEW, Neue Beitr., VIII, 64; Mon. N. A. Dipt., II, 179.—Fla., Md.  
**discolor** LOEW, Neue Beitr., VIII, 65; Mon. N. A. Dipt., II, 182.—Middle States.  
 ALDRICH, Biologia, Dipt., I, 347.—Guerrero and Tabasco, Mex.  
**excisus** ALDRICH, Dipt. St. Vincent, 325; Biologia, Dipt., I, 348.—St. Vincent, W. I.; Teapa, Mex. Also occurs in Grenada, W. I.  
**flavus** ALDRICH, Dipt. St. Vincent, 326.—St. Vincent, W. I.  
**hirsutus** ALDRICH, Dipt. St. Vincent, 328.—St. Vincent, W. I. Also in Grenada.  
**incertus** WALKER, List, III, 651.—U. S. (Unrecognizable.)  
**inermis** ALDRICH, Dipt. St. Vincent, 330.—St. Vincent, W. I.  
**longimanus** LOEW, Neue Beitr., VIII, 62; Mon. N. A. Dipt., II, 175.—Middle States.  
**longipalpus** ALDRICH, Dipt. St. Vincent, 329.—St. Vincent, W. I. Also in Grenada.  
**niger** ALDRICH, Dipt. St. Vincent, 327.—St. Vincent, W. I. Also in Grenada.  
**nubilus** SAY, Jour. Acad. Sci. Phil., VI, 168; Compl. Works, II, 361.—Ind. (Unrecognizable.)  
**obliquus** LOEW, Neue Beitr., VIII, 633; Mon. N. A. Dipt., II, 176.—N. Y.  
 ?SCHINER, Novara, 221, oc. in S. A. (doubtful—J. M. A.).  
 N. J.—Smith Cat.  
**pallipes** LOEW, Neue Beitr., VIII, 66; Mon. N. A. Dipt., II, 183.—Middle States.

- SCHINER, Novara, 221, oc. in S. A.  
 Porto Rico—Roeder and Coquillett.
- paradoxus** ALDRICH, Kans. Univ. Sci. Bull., 1, 90.—Grenada, W. I.
- philtrum** MELANDER, Ent. News, XIV, 72.—Tex., La. and Pa.
- picticornis** LOEW, Mon. N. A. Dipt., II, 184.—Ill. [Osten Sacken, Cat., gives the locality as D. C. and Texas.]
- WHEELER, Psyche, June, 1890, 358.—Milwaukee Co., Wis.  
 St. Vincent and Grenada, W. I.; Mex., several places—Aldrich.
- pratincola** WHEELER, Psyche, June, 1890, 357.—Saline Co., Nebr.
- proximus** ALDRICH, Dipt. St. Vincent, 326; Kans. Univ. Sci. Bull., 1, 90.—St. Vincent, W. I.; Grenada, W. I.
- subcostatus** LOEW, Mon. N. A. Dipt., II, 181.—Ill.
- teapanus** ALDRICH, Biologia, Dipt., 1, 347.—Teapa, Mex.
- validus** LOEW, see *barbatus*.
- viridifemora** MACQUART, Dipt. Exot., Suppl., IV, 124.—N. A. (Unrecognizable.)
- vividus** LOEW, Mon. N. A. Dipt., II, 178.—D. C.
- ALDRICH, Biologia, Dipt., 1, 348, oc. in Mexico, several places.
- wisconsinensis** WHEELER, Psyche, June, 1890, 356.—Milwaukee Co., Wis.

#### EUTARSUS.

- LOEW, Neue Beitr., v, 45, 1857; VIII, 54, 1861; Mon. N. A. Dipt., II, 153, 1864.
- loewi** ALDRICH, Biologia, Dipt., 1, 349.—Teapa, Mex.
- sinuatus** ALDRICH, Dipt. St. Vincent, 334, pl. XI, f. 104, pl. XII, f. 110, 115.—St. Vincent, W. I. Occurs also in Grenada.

#### TEUCHOPHORUS.

- LOEW, Neue Beitr., v, 44, 1857; VIII, 66, 1861; Mon. N. A. Dipt., II, 185, 1864.
- SCHINER, Fauna Austr., 1, 236, 1862.
- KOWARZ, Wien. Ent. Zeitung, 1884, 110, table European species.
- WHEELER, Proc. Cal. Acad. Sci., II, 57, 1899, oc. in N. A., etc.
- clavigerellus** WHEELER, Proc. Cal. Acad. Sci., II, 57, pl. IV, f. 103, 104.—S. D. (Type locality is Brookings, S. D.—J. M. A.)

#### CAMPSICNEMUS.

- HALIDAY, in Walker's Ins. Brit., Dipt., 1, 187, 1851.
- LOEW, Neue Beitr., v, 26, 1857; VIII, 68, 1861; Mon. N. A. Dipt., II, 193, 1864.
- SCHINER, Fauna Austr., 1, 232, 1862.
- KOWARZ, Wien. Ent. Zeitung, 1884, 110, table of European species.
- WHEELER, Proc. Cal. Acad. Sci., II, 58, table of species.
- claudicans** LOEW, Mon. N. A. Dipt., II, 194.—Sitka.
- WHEELER, Proc. Cal. Acad. Sci., II, 62, pl. IV, f. 113.—Craig's Mt., Ida.
- degener** WHEELER, Proc. Cal. Acad. Sci., II, 58, pl. IV, f. 110-112.—Pacific Grove, Cal.; Vollmer, Ida.
- hirtipes** LOEW, Neue Beitr., VIII, 68; Mon. N. A. Dipt., II, 193.—Pa.
- WHEELER, Proc. Cal. Acad. Sci., II, 59, oc. in Middle States.  
 St. Augustine, Fla.—Johnson.
- œdipus** WHEELER, Proc. Cal. Acad. Sci., II, 60, pl. IV, f. 114.—Two-gwo-te-ee Pass, Wyo.
- philoctetes** WHEELER, Proc. Cal. Acad. Sci., II, 59, pl. IV, f. 115-117.—Lusk, Little Wind R. Canons, Hunter's Cr., and Jackson's L., all in Wyo.; S. D. (the type locality in S. D. is Brookings.—J. M. A.)

**sequax** WALKER, List, III, 666 (*Dolichopus*).—Martin Falls, Canada.

LOEW, Mon. N. A. Dipt., II, 317, quotes orig. desc.; p. 24, comments.

**thersites** WHEELER, Proc. Cal. Acad. Sci., II, 61, pl. IV, f. 118.—Natrona Co., Wind R. Mts., Two-gwo-te-ee Pass, all in Wyo.

## RHAPHIINÆ.

## ARGYRA.

MACQUART, Hist. Nat. Dipt., I, 456, 1834.

SCHINER, Fauna Austr., I, 188, 1862.

LOEW, Neue Beitr., v, 38, 1857; VIII, 45, 1861; Mon. N. A. Dipt., II, 123, 1864.

MIK, Dipterol. Untersuchungen, 1878 (*Lasiargyra*, in part).

KOWARZ, Verh. Zool.-Bot. Ges., XXVIII, 1878, 437-462, 1 pl., revision of the European species.

**albicans** LOEW, Neue Beitr., VIII, 45; Mon. N. A. Dipt., II, 125.—D. C.

MIK, Dipterol. Unters., refers to *Lasiargyra*.

N. J.—Smith Cat.; Quebec—Wulp.

**albiventris** LOEW, Mon. N. A. Dipt., II, 128.—Sitka.

**calceata** LOEW, Neue Beitr., VIII, 47; Mon. N. A. Dipt., II, 131.—Middle States.

**calcitrans** LOEW, Neue Beitr., VIII, 46; Mon. N. A. Dipt., II, 130.—N. Y.

N. J.—Smith Cat.

**cylindrica** LOEW, Mon. N. A. Dipt., II, 132.—Sitka.

**minuta** LOEW, Neue Beitr., VIII, 46; Mon. N. A. Dipt., II, 129.—D. C.

N. J.—Smith Cat.

**nigripes** LOEW, Mon. N. A. Dipt., II, 127.—Sitka.

## LEUCOSTOLA.

LOEW, Neue Beitr., v, 39; VIII, 53, 1861; Mon. N. A. Dipt., II, 157, 1864

KOWARZ, Verh. Zool.-Bot. Ges., 1878, 458.

**cingulata** LOEW, Neue Beitr., VIII, 53; Mon. N. A. Dipt., II, 152.—D. C.

N. J.—Smith Cat.

## PORPHYROPS.

MEIGEN, Syst. Besch., IV, 45, 1824.

SCHINER, Fauna Austr., I, 196, 1862.

LOEW, Neue Beitr., VIII, 50, 1861; Mon. N. A. Dipt., II, 142, 1864.

WHEELER, Proc. Cal. Acad. Sci., II, 33, table of species.

**consobrinus** ZETTERSTEDT, Dipt. Scand., II, 471 and VIII, 3061.—N. Europe.

COQUILLET, Proc. Wash. Acad. Sci., II, 426, oc. in Yakutat and Kukak Bay, Alaska. Note.—The recognition of this European species is somewhat premature, in view of the condition of our present knowledge of the N. A. species.

**effilatus** WHEELER, Proc. Cal. Acad. Sci., II, 34, pl. II, f. 54, 55; Psyche, June, 1890, 361 (the latter as *P. longipes*).—Buck Creek and Little Wind R., Wyo.; Milwaukee Co., Wis.

**fumipennis** LOEW, Neue Beitr., VIII, 51; Mon. N. A. Dipt., II, 146.—Middle States.

**longipes** LOEW, Cent., v, 92; Mon. N. A. Dipt., II, 340.—White Mts., N. H.

Canada—O. S. Cat. See *effilatus* for Wheeler's reference.

**melampus** LOEW, Neue Beitr., VIII, 50; Mon. N. A. Dipt., II, 141.—Atl. States.

N. J.—Smith Cat.

**nigricoxa** LOEW, Neue Beitr., VIII, 51; Mon. N. A. Dipt., II, 145.—Md.

N. J.—Smith Cat.

**pilosicornis** WALKER, see *Pelastoncurus*.

*rotundiceps* LOEW, Neue Beitr., VIII, 51; Mon. N. A. Dipt., II, 146.—D. C.  
*signifer* OSTEN SACKEN, Cat., 242.—Tarrytown and Manlius, N. Y.  
*xiphères* WHEELER, Proc. Cal. Acad. Sci., II, 34, pl. II, f. 53.—Delaware Co., Pa.

## RHAPHIUM.

MIEGEN, Illig. Mag., II, 272, 1803; Syst. Besch., IV, 28, 1824.  
 LOEW, Neue Beitr., V, 30, 1857; VIII, 49, 1861; Mon. N. A. Dipt., II, 140, 1864.  
*lugubre* LOEW, Neue Beitr., VIII, 49; Mon. N. A. Dipt., II, 141.—Carolina.  
 Delaware Co., Pa.—J. M. A.

## NEMATOPROCTUS.

LOEW, Neue Beitr., V, 40, 1857; VIII, 53, 1861; Mon. N. A. Dipt., II, 150, 1864.  
*venustus* MELANDER, Canad. Ent., XXXII, 142, f. 12.—Westville, N. J.

## SYNTORMON.

LOEW, Neue Beitr., V, 35, 1857 (*Syntormon* and *Synarthrus*); Mon. N. A. Dipt., II, 133 and 134 (id.), 1864.  
 SCHINER, Fauna Austr., I, 192, 1862.  
 WHEELER, Proc. Cal. Acad. Sci., II, 36, 1899, reinstates *Synarthrus*.  
 MIK, Wien. Ent. Zeitung, XIX, 20, 1899.  
*affine* WHEELER, Proc. Cal. Acad. Sci., II, 38, pl. III, f. 56-59 (*Synarthrus*).—Monterey, Cal.  
*barbatum* LOEW, see *Chrysotus*.  
*cinereiventris* LOEW, Neue Beitr., VIII, 48; Mon. N. A. Dipt., II, 137 (both *Synarthrus*).—Middle States. Texas—O. S. Cat.  
 LOEW, Zeitsch. f. Ges. Naturwiss., XLIV, 1874, 77, male (id.).  
 WHEELER, Psyche, June, 1890, 362 (id.).—Wis  
*palmare* LOEW, Mon. N. A. Dipt., II, 135 (*Synarthrus*).—Sitka. Wash.—J. M. A.  
*quadratum* ALDRICH, Biologia, Dipt., I, 342, pl. VI, f. 18.—Mexico City.  
*stratægum* WHEELER, Proc. Cal. Acad. Sci., II, 39, pl. III, f. 60, 61 (*Synarthrus*).—Lusk, Wyo.; Monterey, Cal.

## SYMPYCININÆ.

## PARASYNTORMON.

WHEELER, Proc. Cal. Acad. Sci., II, 41, 1899, def. and table of species.  
*asellus* WHEELER, Proc. Cal. Acad. Sci., II, 42.—Coronado, Cal.  
*emarginatum* WHEELER, Proc. Cal. Acad. Sci., II, 45, pl. III, f. 75.—Monterey and San Diego, Cal.  
*hinnulus* WHEELER, Proc. Cal. Acad. Sci., II, 44, pl. III, f. 72, 73.—Lusk, Wyo.  
*lagotis* WHEELER, Proc. Cal. Acad. Sci., II, 43, pl. III, f. 70, 71.—Monterey, Cal.  
*montivagum* WHEELER, Proc. Cal. Acad. Sci., II, 46, pl. III, f. 74.—Wind R. Mts., Wyo.  
*occidentale* ALDRICH, Kans. Univ. Quart., II, 1894, 153 (*Sympycnus*).—Wyo.  
 WHEELER, Proc. Cal. Acad. Sci., II, 43, oc. in Wind R. Mts., Wyo., and gen. ref.  
*wheeleri* ALDRICH, Biologia, Dipt., I, 343, pl. VI, f. 19.—Mexico City.

## SYMPYCINUS.

LOEW, Neue Beitr., V, 42, 1857; VIII, 66, 1861; Mon. N. A. Dipt., II, 185, 1864.  
 SCHINER, Fauna Austr., I, 231, 1862.



- KOWARZ, Wien. Ent. Zeitung, 1889, 175, synopsis of the European spp.  
 WHEELER, Proc. Cal. Acad. Sci., II, 47, table of species, and def.
- angustipennis** ALDRICH, Biologia, Dipt., I, 344, pl. VI, f. 20.—Orizaba, Mex.
- coxalis** ALDRICH, Biologia, Dipt., I, 344, pl. VI, f. 21.—Teapa, Mex.
- cuprinus** WHEELER, Proc. Cal. Acad. Sci., II, 50, pl. IV, f. 99, 100.—Monterey, Cal.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 426, oc. in Juneau and Popof Id.,  
 Alaska.
- falco** ALDRICH, Dipt. St. Vincent, 336.—St. Vincent, W. I. Also occurs in  
 Grenada.
- frater** ALDRICH, Kans. Univ. Sci. Bull., I, 83.—Grenada, W. I.
- frontalis** LOEW, see *Nothosympycnus*.
- lineatus** LOEW, Neue Beitr., VIII, 67; Mon. N. A. Dipt., II, 189.—Va., N. Y.  
 WHEELER, Proc. Cal. Acad. Sci., II, 49, pl. IV, f. 96-98.—Wis., several places.  
 N. J.—Smith Cat.
- marcidus** WHEELER, Proc. Cal. Acad. Sci., II, 48, pl. IV, f. 92-95.—Little Wind R.  
 Canon, Dinwiddie Cr., Buck Cr., Dubois,—all in W. Wyo.
- nodatus** LOEW, see *Nothosympycnus*.
- occidentalis** ALDRICH, see *Parasyntormon*.
- pugil** WHEELER, Proc. Cal. Acad. Sci., II, 51, pl. IV, f. 101, 102.—Seattle, Wash.
- similis** ALDRICH, Dipt. St. Vincent, 336; Kans. Univ. Sci. Bull., I, 84.—St. Vincent  
 (type) and Grenada, W. I.
- tertianus** LOEW, Mon. N. A. Dipt., II, 187.—Sitka.
- variipes** ALDRICH, Biologia, Dipt., I, 344.—Guerrero, Mex.

#### NOTHOSYMPYCNUM.

- WHEELER, Proc. Cal. Acad. Sci., II, 51, 1899, def. and table of species.
- fortunatus** WHEELER, Proc. Cal. Acad. Sci., II, 52, pl. III, f. 83-85.—Natrona, Pa.  
 N. J.—Smith Cat.
- frontalis** LOEW, Neue Beitr., VIII, 67; Mon. N. A. Dipt., II, 188 (*Sympycnus*).  
 —Pa.  
 WHEELER, Proc. Cal. Acad. Sci., II, 47, gen. ref.
- nodatus** LOEW, Cent., II, 68; Mon. N. A. Dipt., II, 185 (*Sympycnus*).—Ill.  
 WHEELER, Proc. Cal. Acad. Sci., II, 56, notes and gen. ref.—Wis.
- oreas** WHEELER, Proc. Cal. Acad. Sci., II, 55, pl. III, f. 86, 87.—Buck Cr., Wyo.
- sobrinus** WHEELER, Proc. Cal. Acad. Sci., II, 54, pl. III, f. 88-91.—Lewiston, Idaho.
- vegetus** WHEELER, Proc. Cal. Acad. Sci., II, 53, pl. III, f. 76-79.—Monterey, Cal.

#### ANEPSIOMYIA.

- BEZZI, Zeitsch. f. Hym. und Dipterologie, 1902, 192, change of name.
- LOEW, Neue Beitr., V, 45, 1857; VIII, 45, 1861; Mon. N. A. Dipt., II, 123,  
 1864 (all *Anepsius*, preoc.).
- linearis** ALDRICH, Dipt. St. Vincent, 317.—St. Vincent, W. I. Also occurs in  
 Grenada.

#### NEURIGONINÆ.

##### NEURIGONA.

- RONDANI, Dipt., Ital. Prodrum, I, 142, 1856.
- LOEW, Neue Beitr., V, 41, 1857; VIII, 75, 1861; Mon. N. A. Dipt., II, 224,  
 1864 (all as *Saucropus*).
- ALDRICH, Kans. Univ. Quarterly, II, 151, 1894 (*Dactylomyia*, in part);  
 Ent. News., XI, 531, syn.

- WHEELER, Proc. Cal. Acad. Sci., II, 72, table of species, 1899.
- carbonifer** LOEW, Cent., IX, 84 (*Saucropus*).—N. Y.
- WHEELER, Proc. Cal. Acad. Sci., II, 72, female (*floridula*).—Md., N. Y., III.
- White Mts., N. H.—Slosson (*floridula*).
- decora** ALDRICH, Kans. Univ. Sci. Bull., I, 83.—Grenada and St. Vincent, W. I.
- dimidiata** LOEW, Neue Beitr., VIII, 75; Mon. N. A. Dipt., II, 225 (*Saucropus*).  
—Fla., D. C.
- floridula** WHEELER, see *carbonifer*.
- lateralis** SAY, Proc. Acad. Sci., Phil., VI, 169; Compl. Works, II, 362 (*Medcterus*).  
—Indiana.
- LOEW, Neue Beitr., VIII, 76; Mon. N. A. Dipt., II, 227 (both *Saucropus superbiens*).—Fla., D. C., N. Y.
- ALDRICH, Kans. Univ. Quart., II, 151 (*Dactylomyia gracilipes*); Ent. News, XI, 531, syn.—S. D.
- WHEELER, Proc. Cal. Acad. Sci., II, 73, syn. of *gracilipes*.—Mass., III.
- lienosa** WHEELER, Proc. Cal. Acad. Sci., II, 73.—Monterey, Cal.
- rubella** LOEW, Neue Beitr., VIII, 76; Mon. N. A. Dipt., II, 226 (*Saucropus*).—  
Berkeley Spr., Va. N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- signifer** ALDRICH, Dipt. St. Vincent, 337.—St. Vincent, W. I. Occurs also in Grenada.
- superbiens** LOEW, see *lateralis*.
- tenuis** LOEW, Mon. N. A. Dipt., II, 228 (*Saucropus*).—Middle States.

## XANTHOCHLORINÆ.

## ACHALCUS.

- LOEW, Neue Beitr., V, 30, 1857; VIII, 72, 1861; Mon. N. A. Dipt., II, 217, 1864.
- caudatus** ALDRICH, Kans. Univ. Sci. Bull., I, 93.—Grenada, W. I.
- sordidus** ALDRICH, Dipt. St. Vincent, 339, pl. XI, f. 107, 107a.—St. Vincent, W. I.  
Occurs also in Grenada.

## CHRYSOTIMUS.

- LOEW, Neue Beitr., V, 48, 1857; VIII, 73, 1861; Mon. N. A. Dipt., II, 220, 1864.
- barbatus** ALDRICH, Kans. Univ. Sci. Bull., I, 91.—Grenada, W. I.
- delicatus** LOEW, Neue Beitr., VIII, 74; Mon. N. A. Dipt., II, 222.—N. Y.
- pusio** LOEW, Neue Beitr., VIII, 74; Mon. N. A. Dipt., II, 221.—N. Y.
- WHEELER, Psyche, July, 1890, 374.—Wis.

## XANTHOCHLORUS.

- LOEW, Neue Beitr., V, 42, 1857; VIII, 74, 1861; Mon. N. A. Dipt., II, 223, 1864.
- SCHINER, Fauna Austr., I, 184, 1862.
- helvinus** LOEW, Neue Beitr., VIII, 75; Mon. N. A. Dipt., II, 224.—Chicago.
- WHEELER, Psyche, July, 1890, 377.—Milwaukee, Wis.
- White Mts., N. H.—Slosson.

## XANTHINA.

- ALDRICH, Kans. Univ. Sci. Bull., I, 92, 1902.
- plumicauda** ALDRICH, op. cit., pl. IV.—Grenada, W. I.

## THINOPHILINÆ.

## THINOPHILUS.

WAHLBERG, Oefv. of k. Vetensk. Akad. Förhandl., 1844, 37.

SCHINER, Fauna Austr., I, 227, 1862.

LOEW, Mon. N. A. Dipt., II, 148, 1864.

MIK, Dipt. Untersuch., 1878 (*Schwinophilus*).

WHEELER, Ent. News, VII, 153; Proc. Cal. Acad. Sci., II, 69, 1899.

*neglectus* WHEELER, Proc. Cal. Acad. Sci., II, 70.—Cape May, N. J.

*pectinifer* WHEELER, Ent. News, VII, 155.—Lusk, Wyo.

## DIOSTRACUS.

LOEW, Neue Beitr., VIII, 43, 1861; Mon. N. A. Dipt., II, 120, 1864.

*prasinus* LOEW, Neue Beitr., VIII, 44; Mon. N. A. Dipt., II, 121.—N. Y.

## HYPOCHARASSUS.

MIK, Verh. Zool.-Bot. Ges., 1878, 627.

WILLISTON, Synops. Fam. and Gen., 1886, 82, quotes desc.

WHEELER, Zoolog. Bulletin, I, 217, 1898 (*Drepanomyia*).

*gladiator* MIK, Verh. Zool.-Bot. Ges., 1878, 628.—Ga.

WHEELER, Zool. Bull., I, 219, fig. (*Drepanomyia johnsoni*).—Fla.

MIK, Wien. Ent. Zeitung, XIX, 21, syn.

*pruinus* WHEELER, Zool. Bull., I, 218, figs. (*Drepanomyia*).—Fla.

Wood's Hole, Mass.—Wheeler in litt.

## PHYLARCHUS.

ALDRICH, Biologia, Dipt., I, 342, 1902.

*tripartitus* ALDRICH, op. cit., pl. VI, f. 16.—Vera Cruz, Mex.

## MEDETERINÆ.

## MEDETERUS.

FISCHER VON WALDHEIM, notice sur une Mouche carnivore, Moscow, 1819.

SCHINER, Fauna Austr., I, 236, 1862.

LOEW, Mon. N. A. Dipt., II, 218, 1864.

MEIGEN, Syst. Besch., IV, 59, 1824.

KOWARZ, Verh. Zool.-Bot. Ges., XXVII, 1877, 39-76, revision of the European species.

WHEELER, Proc. Cal. Acad. Sci., II, 20, table of species, 1899.

*Note*.—Prof. A. D. Hopkins informed me that he has reared specimens of this genus from larvæ taken in burrows of Scolytidæ, and thinks they are predaceous on the latter insect.

*aberrans* WHEELER, Proc. Cal. Acad. Sci., II, 22, pl. II, f. 40.—Avalon, N. J.

*aldrichii* WHEELER, Proc. Cal. Acad. Sci., II, 24.—Moscow, Idaho.

*appendiculatus* WHEELER, Proc. Cal. Acad. Sci., II, pl. II, f. 41-43.—Lance Cr., Wyo.

*aurivittatus* WHEELER, Proc. Cal. Acad. Sci., II, 29, pl. II, f. 47.—Moscow, Idaho.

*californiensis* WHEELER, Proc. Cal. Acad. Sci., II, 27, pl. II, f. 44, 45.—Palo Alto, Cal.

*cyanogaster* WHEELER, Proc. Cal. Acad. Sci., II, 27.—Colfax, Wash.

*exiguus* ALDRICH, Kans. Univ. Sci. Bull., I, 91.—Grenada, W. I.

*lateralis* SAY, see *Neurigona*.

- maurus** WHEELER, Proc. Cal. Acad. Sci., II, 23, pl. II, 46.—Mt. Wash., N. H.  
**nigripes** LOEW, Neue Beitr., VIII, 73; Mon. N. A. Dipt., II, 218.—Middle States.  
 N. J.—Smith Cat.; Fla.—Johnson.  
**petulcus** WHEELER, Proc. Cal. Acad. Sci., II, 21.—Colfax, Wash.  
**princeps** WHEELER, Proc. Cal. Acad. Sci., II, 25, pl. II, f. 29-32.—Farmingdale,  
 N. J.  
**veles** LOEW, Neue Beitr., VIII, 73; Mon. N. A. Dipt., II, 219.—Fla.  
 WHEELER, Proc. Cal. Acad. Sci., II, 26, pl. II, f. 36-38.—Middle States,  
 Chicago.  
**viduus** WHEELER, Proc. Cal. Acad. Sci., II, 24, pl. II, f. 39.—Olympia, Wash.  
**xerophilus** WHEELER, Proc. Cal. Acad. Sci., II, 28, pl. II, f. 33-35.—Pacific Grove,  
 Cal.

#### PELOROPEODES.

- WHEELER, Psyche, July, 1890, 373.  
 MIK, Wien. Ent. Zeitung, 1892, 3, notes on position, etc.  
**salax** WHEELER, Psyche loc. cit.—Milwaukee Co., Wis.

#### THRYPTICUS.

- GERSTÆCKER, Stett. Ent. Zeit., 1866, 43.  
 WHEELER, Psyche, July, 1890, 375 (*Aphantotimus*).  
 MIK, Wien. Ent. Zeitung, 1891, 4, syn. of *Aphantotimus*.  
 ALDRICH, Trans. Ent. Soc. Lond., 1896, 339 (*Xanthotricha*); Ent. News,  
 XI, 532, syn.  
 WHEELER, Proc. Cal. Acad. Sci., II, 30, table of species, 1899.  
 ? **abdominalis** SAY, Jour. Acad. Sci. Phil., VI, 169; Compl. Works, II, 362  
 (*Chrysotus*).  
 LOEW, Mon. N. A. Dipt., II, 172, notes, and 291, orig. desc.  
 (On account of the bright green color, "white" feet, and purple face, I  
 feel safe in referring to this genus, although I cannot identify it).  
**cupuliferus** ALDRICH, Trans. Ent. Soc. Lond., 1896, 339, pl. X, f. 106 (*Xantho-*  
*tricha*).—St. Vincent, W. I.  
 Grenada, W. I., and Mexico City—Aldrich.  
**fraterculus** WHEELER, Psyche, July, 1890, 376 (*Aphantotimus*); Proc. Cal. Acad.  
 Sci., II, 31, pl. II, f. 48, notes.—Milwaukee Co., Wis.  
 ALDRICH, Biologia, Dipt., I, 349, oc. in Mexico City.  
**minor** ALDRICH, Trans. Ent. Soc. Lond., 1896, 340 (*Xanthotricha*).—St. Vincent,  
 W. I. Also occurs in Grenada.  
**pusillus** ALDRICH, Biologia, Dipt., I, 349.—Teapa, Mex.  
**singularis** ALDRICH, Trans. Ent. Soc. Lond., 1896, 340 (*Xanthotricha*).—St. Vin-  
 cent, W. I.  
**willistoni** WHEELER, Psyche, July, 1890, 376 (*Aphantotimus*); Proc. Cal. Acad.  
 Sci., II, 31, pl. II, f. 49.—Milwaukee Co., Wis. (type); Ill., Wyo.

#### CÆLOGLUTUS.

- ALDRICH, Trans. Ent. Soc. London, 1896, 338.  
**concaucus** ALDRICH, op. cit., pl. XI, f. 105.—St. Vincent, W. I.

#### HYDROPHORINÆ.

##### HYDROPHORUS.

- FALLÉN, Dolichopodes, 1823, 4.  
 WAHLBERG, Oefv. of K. Vetensk. Akad. Förhandl., 1844.

LOEW, Neue Beitr., v, 22, 1857; VIII, 71, 1861; Mon. N. A. Dipt., II, 211, 1864.

SCHINER, Fauna Austr., I, 229, 1862 (inclusive of *Scellus*).

KOWARZ, Wien. Ent. Zeit., 1884, 109, table of European species.

WHEELER, Ent. News, 1896, 185 (*Parhydrophorus*, in part); Proc. Cal. Acad. Sci., II, 62, table of species.

*aestuum* LOEW, Cent., VIII, 60.—Newport, R. I.

*agalma* WHEELER, Proc. Cal. Acad. Sci., II, 33, 66, pl. IV, f. 120, 121.—Battle Creek, Mich.

? *albiflorens* WALKER, List, III, 656 (*Medeterus*).—Nova Scotia.

WHEELER, Proc. Cal. Acad. Sci., II, 63, genus doubtful.

*algens* WHEELER, Proc. Cal. Acad. Sci., II, 63, pl. IV, f. 123.—Two-gwo-te-ee Pass, W. Wyo.

*breviseta* THOMSON, Eugen. Resa, 510 (*Medeterus*).—Cal.

*canescens* WHEELER, Ent. News, VII, 187, fig. (*Parhydrophorus*).—40 miles n. of Lusk, Wyo. Lawrence, Kans.—J. M. A.

*cerutias* LOEW, Cent., X, 65.—Texas. Lawrence, Kans.—J. M. A.

*chrysologus* WALKER, List, III, 655 (*Medeterus*).—Martin Falls, Canada.

LOEW, Mon. N. A. Dipt., 215, 309, quotes desc., with comments.

WHEELER, Proc. Cal. Acad. Sci., II, 63, notes.

(Scarcely identifiable.)

*eldoradensis* WHEELER, Proc. Cal. Acad. Sci., II, 65, pl. IV, f. 125.—Wyo., Cal., N. M., Texas, Kansas.

*glaber* WALKER, List, III, 665 (*Medeterus*).—Martin Falls, Canada.

LOEW, Mon. N. A. Dipt., II, 215, 309, quotes desc.

COQUILLET, Proc. Wash. Acad. Sci., II, 426, oc. at Metlakatla, Alaska.

White Mts., N. H.—Slosson.

*innotatus* LOEW, Mon. N. A. Dipt., II, 212.—Sitka.

*lateralis* SAY, see *Argyra*.

*magdalena* WHEELER, Proc. Cal. Acad. Sci., II, 67, pl. IV, f. 124.—Magdalena, N. M.

*parvus* LOEW, Cent., II, 67; Mon. N. A. Dipt., II, 216.—Pa.

WHEELER, Proc. Cal. Acad. Sci., II, 64, pl. IV, f. 119.—Worcester, Mass.

*philombrius* WHEELER, Psyche, July, 1890, 378; Proc. Cal. Acad. Sci., II, 65, pl. IV, f. 126, 127.—Milwaukee Co., Wis. (type); Texas.

*pirata* LOEW, Neue Beitr., VIII, 71; Mon. N. A. Dipt., II, 214.—Pa.

N. J.—Smith Cat.

*punctipennis* SAY, see *Pelastoneurus*.

*signiferus* COQUILLET, Dipt. of Commander Ids., 344.—Bering Id.

*sodalis* WHEELER, Proc. Cal. Acad. Sci., II, 68, pl. IV, f. 122.—Lusk, etc., Wyo.

*viridiflos* WALKER, Dipt. Saund., 212.—N. A. Mass.—O. S.

### SCELLUS.

LOEW, Neue Beitr., v, 22, 1857; VIII, 70, 1861; Mon. N. A. Dipt., II, 200, 1864.

*avidus* LOEW, Mon. N. A. Dipt., II, 207.—Ft. Resolution, Huds. Bay Terr.

Professor Wheeler collected the species in Wyoming.

*exustus* WALKER, Dipt., Saund., 211 (*Medeterus*).—N. A.

LOEW, Neue Beitr., VIII, 71; Mon. N. A. Dipt., II, 203.—Middle States, Ill.

S. D., Ida., Wash., in grass—J. M. A.

*filifer* LOEW, Mon. N. A. Dipt., II, 209.—Ft. Resolution, Huds. Bay Terr.

Custer, S. D., on pine trunks—J. M. A.

- monstruosus** OSTEN SACKEN, West. Dipt., 319.—British Columbia.  
**spinimanus** ZETTERSTEDT, Ins. Lapp., 701 (*Hydrophorus notatus*); Dipt. Scand., II, 445 (*Hydrophorus*).—N. Europe.  
 LOEW, Mon. N. A. Dipt., II, 205.—Ft. Resolution, Huds. Bay Terr.  
**vigil** OSTEN SACKEN, West. Dipt., 318.—Webber L., Cal., on stones.

#### LIANCALUS.

- LOEW, Neue Beitr., v, 22, 1857; VIII, 70, 1861; Mon. N. A. Dipt., II, 198, 1864.  
 RONDANI, Dipt. Ital. Prod., I, 141, 1856 (*Anoplomerus*, preoc.).  
 SCHINER, Fauna Austr., I, 228, 1864.  
 MIK, Dipterol. Untersuch., 1878 (*Allaoneurus*, in part, as to which see  
 Osten Sacken, Berl. Ent. Zeitsch., XLI, 1896, 326, postscript).  
**genualis** LOEW, Neue Beitr., VIII, 70; Mon. N. A. Dipt., II, 199.—Middle States.  
 N. J.—Smith Cat.; about the cascades at Ithaca, N. Y.—J. M. A.  
**hydrophilus** ALDRICH, Psyche, Dec., 1893, 569.—Custer, in West. S. D.  
**querulus** OSTEN SACKEN, West. Dipt., 318.—The Geysers, Sonoma Co., Cal.  
 Thousand Springs, on Snake R., in S. Idaho—J. M. A.  
**similis** ALDRICH, Psyche, Dec., 1893, 571.—Wash. Occurs also at Kendrick, Idaho.

#### PLAGIONEURINÆ.

##### PLAGIONEURUS.

- LOEW, Wien. Ent. Monatschr., I, 43, 1857; Mon. N. A. Dipt., II, 196, 1864.  
 WHEELER, Proc. Cal. Acad. Sci., II, 71, 1899.  
**univittatus** LOEW, Wien. Ent. Monatschr., I, 43; Neue Beitr., VIII, 69, 1861; Mon.  
 N. A. Dipt., 196, pl. VI, f. 36.—Cuba; also in Brazil.  
 WILLISTON, Trans. Amer. Ent. Soc., XIII, 295, male.—San Domingo.  
 WHEELER, Proc. Cal. Acad. Sci., II, 71, pl. VI, f. 36.—Wis., Ill.  
 ALDRICH, Kans. Univ. Sci. Bull., I, 83, oc. in Grenada, W. I., and note on  
 dist.—S. D., Nebr., Mass. Mrs. Slosson collected several in Fla.

#### APHROSYLINÆ.

##### APHROSYLUS.

- WALKER, Ins. Britannica, I, 220, 1851.  
 LOEW, Neue Beitr., v, 55, 1857; VIII, 52, 1861; Mon. N. A. Dipt., II, 148,  
 1864.  
 SCHINER, Fauna Austr., I, 202, 1862.  
 WHEELER, Proc. Cal. Acad. Sci., I, 145, def. and table of species, 1897;  
 larva on p. 150, pl. IV, fig. 14, found in tufts of algæ on rocks along  
 seashore.  
**direptor** WHEELER, op. cit., 148, pl. IV, f. 7-10.—Pacific Grove, Cal.  
**grassator** WHEELER, op. cit., 149, pl. IV, f. 12, 13.—Pacific Grove, Cal.  
**prædator** WHEELER, op. cit., 146, pl. IV, f. 1-6.—Pacific Grove and San Diego Co.,  
 Cal.

#### DOLICHOPINÆ.

##### DOLICHOPUS.

- LATREILLE, Précis des caract. générique des Insectes, 1797; Hist. Nat. Crust.  
 et Ins., III, 439, 1802 and XIV, 333, 1804.  
 MEIGEN, Syst. Besch., IV, 74, 1824.  
 MACQUART, Hist. Nat. Dipt., I, 459, 1834.  
 ZETTERSTEDT, Dipt. Scand., II, 493, 1843.



- RONDANI, Dipt. Ital. Prod., I, 144, 1856 (*Rhagencura* and *Achantipodus*).  
 LOEW, Neue Beitr., v, 10, 1857; VIII, 5, 1861; Mon. N. A. Dipt., II, 18, 1864  
 (*Hygrocleuthus* and *Dolichopus*).  
 SCHINER, Fauna Austr., I, 212 (id.), 1864.  
 KOWARZ, Wien. Ent. Zeit., 1884, 53, table of European species.  
 BIGOT, Annales, 1890, 292 (*Spatichira*, in part).  
 ALDRICH, Kans. Univ. Quart., II, 1 and 23, tables of species of *Dolichopus*  
 and *Hygrocleuthus* in N. A.  
 MELANDER and BRUES, Biolog. Bull., I, 123, *Hygrocleuthus* as a subgenus,  
 table of species.
- abdominalis** SAY, Jour. Acad. Sci. Phil., VI, 170; Compl. Works, II, 362.—Ind.  
 (Unrecognizable; probably an *Argyra*.)
- acuminatus** LOEW, Neue Beitr., VIII, 12; Mon. N. A. Dipt., II, 34.—Ill.  
 N. J.—Smith Cat.; Wis.—Mel. and Brues; Mich.—J. M. A.
- adjacens** WALKER, List, III, 661.—Martin Falls, Canada. (Unrecognizable.)
- æneus** DEGEER, Mém. Hist. Nat. Ins., VI, 78, pl. IX, f. 14—22.—N. Europe.  
 FABRICIUS, Syst. Antl., 266, etc. (*ungulatus* Linn.).  
 STANNIUS, Isis, 1831, 130 (id.).  
 GUÉRIN, Iconographie, 96 (id.).  
 MACQUART, Annales, II, ser. 2, 186 (id.).  
 SCHINER, Fauna Austr., I, 222.  
 VAN DER WULP, Tijdschr. v. Ent., XII, 1869, 80, oc. in Wis.  
 BRAUER, Zweifl. d. Kaiserl. Mus., III, 44, pl. IV, f. 72—75, desc. of larva, which  
 lives in damp vegetable mold.
- affinis** WALKER, List, III, 659.—Nova Scotia. (Unrecognizable.)
- afflictus** OSTEN SACKEN, West. Dipt., 313 (*Hygrocleuthus*).—Marin Co., Cal.  
 WHEELER, Proc. Cal. Acad. Sci., II, 3, oc. in Cal. and Ariz. (id.).  
 MELANDER and BRUES, Biolog. Bull., I, 132, figs.—Wyo.
- agronomus** MELANDER and BRUES, Biolog. Bull., I, 140, figs.—New Bedford, Mass.
- albiciiliatus** LOEW, Cent., II, 59; Mon. N. A. Dipt., II, 31.—Ill. West. N. Y.—O. S.  
 WHEELER, Psyche, May, 1890, 338, male.—Wis.  
 ALDRICH, Kans. Univ. Quart., II, 9, notes.—N. J.  
 Montreal—Chagnon; White Mts., N. H.—Slosson; Mass.—M. and B.
- albicoxa** ALDRICH, Kans. Univ. Quart., II, 10, pl. I, f. 13.—Mass., Conn.  
 N. J.—Smith Cat.; Ill.—M. and B.; Mich.—J. M. A.
- aldrichii** WHEELER, Proc. Cal. Acad. Sci., II, 3, pl. I, f. 1—3 (*Hygrocleuthus*).—  
 Moscow, Idaho, and West. Wyo.  
 MELANDER and BRUES, Biolog. Bull., I, 129, figs.—Col.
- amnicola** MELANDER and BRUES, Biolog. Bull., I, 130, figs. (*Hygrocleuthus*).—  
 North Park, Col. Cache Co., Utah, and Oneida Co., Ida.—J. M. A.
- amphericus** MELANDER and BRUES, Biolog. Bull., I, 146, figs.—Price Co., Wis.
- angustatus** ALDRICH, Kans. Univ. Quart., II, 15, pl. I, f. 4.—Mass.
- apheles** MELANDER and BRUES, Biolog. Bull., I, 144, figs.—Milwaukee, Wis.
- aurifacies** ALDRICH, Kans. Univ. Quart., II, 20.—Tenn., Kans.
- aurifer** THOMSON, see *Hercostomus*.
- barycnemus** COQUILLET, Proc. Wash. Acad. Sci., II, 424.—Popof Id., Alaska.
- batillifer** LOEW, Neue Beitr., VIII, 5; Mon. N. A. Dipt., II, 31.—Ill. West Point,  
 N. Y. Mass.—M. and B.; N. J.—Smith Cat.; White Mts., N. H.—  
 Slosson.
- bifRACTUS** LOEW, Neue Beitr., VIII, 19; Mon. N. A. Dipt., II, 53.—Chicago, Nebr.  
 ALDRICH, Kans. Univ. Quart., II, 12, pl. I, f. 14.—N. H. to N. D. and Kans.  
 Montreal—Chagnon; Cernavaca, Mex.—Aldrich.

*bifrons* WALKER, see *Pelastoneurus*.

*brevimanus* LOEW, Neue Beitr., VIII, 14; Mon. N. A. Dipt., II, 39.—D. C. Mass., N. H., N. J., Wis.—M. and B.

LOEW, Berl. Ent. Zeitsch., VI, 211 (*socius*); Mon. N. A. Dipt., II, 40 (id.).—III.

ALDRICH, Kans. Univ. Quart., II, 10, Mass.; notes (*socius*).

*brevipennis* MEIGEN, Syst. Besch., IV, 89.—Europe.

FALLÉN, Dolichopodes, 10 (var. of *planitarsis*).

STANNIUS, Isis, 1831, 60.

SCHINER, Fauna Austr., I, 221.

LOEW, Mon. N. A. Dipt., II, 37.—Ft. Resolution, Huds. Bay Terr.

ALDRICH, Kans. Univ. Quart., II, 10, pl. I, f. 6.

*brunneus* ALDRICH, Kans. Univ. Quart., II, 14.—S. D.

*calainus* MELANDER and BRUES, Biolog. Bull., I, 138, fig.—Chicago.

*calcaratus* ALDRICH, Kans. Univ. Quart., II, 8.—N. J.

Mass.—M. and B.; White Mts., N. H.—Slosson.

*canaliculatus* THOMSON, Eugen. Resa, 512.—Cal.

OSTEN SACKEN, West. Dipt., 315.—Marin Co., Cal.

*chrysostoma* LOEW, Neue Beitr., VIII, 23; Mon. N. A. Dipt., II, 67.—D. C.

? WALKER, List, 665 (*terminatus*).—N. A. [Loew, Mon., 24 and 316, with a doubt.]

*ciliatus* WALKER, List, III, 661.—Martin Falls, Canada. (Unrecognizable.)

*ciliatus* ALDRICH, Kans. Univ. Quart., II, 25, pl. I, f. 28 (*Hygroceleuthus*).—S. D., Wyo.

WHEELER, Proc. Cal. Acad. Sci., II, 3, oc. in Wyo. (id.).

MELANDER and BRUES, Biolog. Bull., I, 133, figs. (id.).

*coercens* WALKER, List, III, 661.—N. Y. (Unrecognizable.)

*coloradensis* ALDRICH, Kans. Univ. Quart., II, 16, pl. I, f. 19 (*agilis*, preoc.; see note. loc. cit., 26, where name is changed).—Col.

Beulah, N. M.—Skinner.

*comatus* LOEW, Neue Beitr., VIII, 23; Mon. N. A. Dipt., II, 69.—Pa., Md., D. C.

ALDRICH, Kans. Univ. Quart., II, 14, pl. I, f. 25.—N. J., Pa.

Mass., Ill., Wis.—M. and B.

*confinis* WALKER, List, III, 664.—Martin Falls, Canada. (Unrecognizable.)

*consanguineus* WHEELER, Proc. Cal. Acad. Sci., II, 5, pl. I, f. 5-7 (*Hygroceleuthus*).—Monterey, Cal.

MELANDER and BRUES, Biolog. Bull., I, 131, figs. (id.).

var. *propinquus* MELANDER and BRUES, loc. cit. (id.).—Vancouver Id.

*consors* WALKER, Dipt. Saund., 213.—U. S. (Unrecognizable.)

*conterminus* WALKER, List, III, 664.—N. Y. (Unrecognizable.)

*contiguus* WALKER, List, III, 663.—N. Y. (Unrecognizable.)

*contingens* WALKER, Dipt. Saund., 213.—U. S. (Unrecognizable.)

*convergens* ALDRICH, Kans. Univ. Quart., II, 9.—Ore., Wash.

*coquiletti* ALDRICH, Kans. Univ. Quart., II, 19, pl. I, f. 17.—Cal.

Common at Moscow, Idaho—J. M. A.; Vancouver Id.—M. and B.

*corax* OSTEN SACKEN, West. Dipt., 314.—Webber L., Cal.

ALDRICH, Kans. Univ. Quart., II, 7.—Cal.

*crenatus* OSTEN SACKEN, West. Dipt., 312 (*Hygroceleuthus*).—Sonoma Co., Cal.

ALDRICH, Kans. Univ. Quart., II, 24, pl. I, f. 27, 27a (id.).—Cal., Wash.

WHEELER, Proc. Cal. Acad. Sci., II, 3, pl. I, f. 4 (id.).—Ida., Wyo., Wash.

MELANDER and BRUES, Biolog. Bull., I, 131, figs. (id.).—Wyo. and Vancouver Id.

ALDRICH, Amer. Naturalist, 1894, 35, courtship (id.).

- cuprinus** WIEDEMANN, *Auss. Zw.*, II, 230.—Md., Va.  
 SAY, *Jour. Acad. Sci. Phil.*, III, 86; *Compl. Works*, II, 76 (*cupreus*,  
 prec.).—Md. and Va.  
 LOEW, *Neue Beitr.*, VIII, 20; *Mon. N. A. Dipt.*, II, 55.—Middle States; Nebr.  
 ALDRICH, *Kans. Univ. Quart.*, II, 12, pl. I, f. 7; notes.—Mass. to Kans.  
 Ill., Wis., Wyo.—M. and B.; Montreal—Chagnon; White Mts., N. H.—  
 Slosson.
- dakotensis** ALDRICH, *Kans. Univ. Quart.*, II, 11, pl. I, f. 1.—Brookings, S. D.
- detersus** LOEW, *Cent.*, VII, 79.—Saratoga, N. Y. (O. S. gives Western N. Y.)  
 ALDRICH, *Kans. Univ. Quart.*, II, 8.—Minn., S. D. III.—M. and B.
- discessus** WALKER, *List*, III, 662.—Mass. (Unrecognizable.)
- discifer** STANNIUS, *Isis*, 1831, 57.—Europe.  
 MEIGEN, *Syst. Besch.*, IV, 86 (*patellatus* FLL.).  
 SCHINER, *Fauna Austr.*, I, 216.  
 LOEW, *Neue Beitr.*, VIII, 24 (*tanypus*); *Mon. N. A. Dipt.*, II, 71.—English  
 R., Canada; Red R.; Sitka; White Mts., N. H.  
 COQUILLET, *Proc. Wash. Acad. Sci.*, II, 423, oc. in Alaska, several places.
- distractus** WALKER, *List*, III, 662.—N. Y. (Unrecognizable.)
- dorycerus** LOEW, *Cent.*, V, 85; *Mon. N. A. Dipt.*, II, 326.—White Mts., N. H.
- duplicatus** ALDRICH, *Kans. Univ. Quart.*, II, 18, pl. I, f. 21; II, 157, note on  
 hypopygium.—Wash. Also common in N. Idaho.
- enigma** MELANDER and BRUES, *Biolog. Bull.*, I, 139, figs.—North Park, Col.,  
 9,000 ft.
- eudactylus** LOEW, *Neue Beitr.*, VIII, 16; *Mon. N. A. Dipt.*, II, 46.—N. Y., Mass.  
 ALDRICH, *Kans. Univ. Quart.*, II, 11, pl. I, f. 2 (but the fig. is incorrect).  
 —Kans. N. J.—Smith Cat.  
 var. **tonsus** LOEW, *Neue Beitr.*, VIII, 16; *Mon. N. A. Dipt.*, II, 47.—D. C. (De-  
 scribed as a distinct species; I place it here from examination of type).  
 N. J.—Smith Cat.; Mass.—M. and B.
- exclusus** WALKER, *List*, III, 663.—Martin Falls, Canada. (Unrecognizable.)
- festinans** ZETTERSTEDT, see *rupestris*.
- finitus** WALKER, *List*, III, 662.—N. Y. (Unrecognizable.)
- flagellitenens** WHEELER, *Psyche*, May, 1890, 339.—Milwaukee Co., Wis.  
 ALDRICH, *Kans. Univ. Quart.*, II, 13, pl. I, f. 11.—S. D., Col. III.—M. and B.
- fulvipes** LOEW, *Cent.*, II, 61; *Mon. N. A. Dipt.*, II, 61.—Ill.; White Mts., N. H.  
 N. Y.—O. S.
- funditor** LOEW, *Neue Beitr.*, VIII, 22; *Mon. N. A. Dipt.*, II, 66.—Middle States.  
 ALDRICH, *Kans. Univ. Quart.*, II, 20, pl. I, f. 10.—N. J., Pa.
- germanus** WHEELER, *Psyche*, May, 1890, 341.—Milwaukee Co., Wis.  
 ALDRICH, *Kans. Univ. Quart.*, II, 21, oc. in S. D.; notes. Wyo.—M. and B.
- gracilis** ALDRICH, *Kans. Univ. Quart.*, II, 15.—Pa. Wis.—M. and B.
- grandis** ALDRICH, *Kans. Univ. Quart.*, II, 21, pl. I, f. 22.—Cal.
- gratus** LOEW, *Neue Beitr.*, VIII, 11; *Mon. N. A. Dipt.*, II, 29.—Trenton Falls, West  
 Point, Palisades, etc., in N. Y.  
 ALDRICH, *Kans. Univ. Quart.*, II, 7, oc. in White Mts., N. H., and notes.  
 Ill., Wis.—M. and B.; N. J.—Smith Cat.
- grønlandicus** ZETTERSTEDT, *Dipt. Scand.*, II, 528.—Greenland.  
 STAEGER, *Græn. Antliater*, 358.  
 HOLMGREN, *Ins. Nordgrøn.*, 100.
- [**guttula** WIEDEMANN is South American; see LOEW, *Mon. N. A. Dipt.*, II, 237.]
- hastatus** LOEW, *Mon. N. A. Dipt.*, II, 59.—Sitka.  
 ALDRICH, *Kans. Univ. Quart.*, II, 13, oc. on Mt. Hood, Ore., and notes.

- hebes** WALKER, List, III, 213.—U. S. (Unrecognizable.)  
**heteroneurus** MACQUART, see *Pelastoneurus*.  
**henshawi** WHEELER, see *pugil*.  
**idahoensis** ALDRICH, Kans. Univ. Quart., II, 154 (*Hygroclcutus*).—Moscow, Idaho.  
 MELANDER and BRUES, Biolog. Bull., I, 133, figs. (id.)  
**incisuralis** LOEW, Neue Beitr., VIII, 25; Mon. N. A. Dipt., II, 74.—Trenton Falls, N. Y. N. J.—Smith Cat.; Montreal—Chagnon.  
 LOEW, Cent., VII, 80 (*platyprosopus*).—Huds. B. Terr. [From type.]  
**incongruus** WHEELER, Psyche, May, 1890, 338.—Milwaukee Co., Wis.  
**ineptus** WALKER, Dipt. Saund., 214.—U. S. (Unrecognizable.)  
**intentus** MELANDER and BRUES, Biolog. Bull., I, 137, figs.—Chicago.  
**irrasus** WALKER, see *Pelastoneurus latus*.  
**johnsoni** ALDRICH, Kans. Univ. Quart., II, 7.—N. J.  
**kansensis** ALDRICH, Kans. Univ. Quart., II, 8.—Kans.  
**lamellicornis** THOMSON, Eugenes Resa, 511.—Cal.  
 OSTEN SACKEN, West. Dipt., 313, notes (*Hygroclcutus*).  
 ALDRICH, Kans. Univ. Quart., II, 25, note (id.).  
**lamellipes** WALKER, List, III, 660.—Martin Falls, Canada. (Unrecognizable.)  
**laticornis** LOEW, Neue Beitr., VIII, 12; Mon. N. A. Dipt., II, 29.—Conn.  
 ALDRICH, Kans. Univ. Quart., II, 7.  
 Fla.—Johnson; Montreal—Chagnon; Wis., Wyo.—M. and B.  
**latipes** LOEW, Neue Beitr., VIII, 5 (*Hygroclcutus*); Mon. N. A. Dipt., II, 17 (id.).—Red R. of the North.  
 ALDRICH, Kans. Univ. Quart., II, 24, pl. I, f. 26 (id.); op. cit., p. 155, note.—S. D., Wyo., Conn.; Wis.  
 WHEELER, Proc. Cal. Acad. Sci., II, 2 (id.).—Wis., Ill.  
 MELANDER, and BRUES, Biolog. Bull., I, 128, figs. (id.).  
**lobatus** LOEW, Neue Beitr., VIII, 24; Mon. N. A. Dipt., II, 72.—English R., Canada.  
 ALDRICH, Kans. Univ. Quart., II, 16, pl. I, f. 20.—S. D., Mich.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 425, oc. at Kukak Bay, Alaska.  
 N. J.—Smith Cat.; Wis.—M. and B.  
**longimanus** LOEW, Neue Beitr., VIII, 14; Mon. N. A. Dipt., II, 38.—English R., Canada; West Point, N. Y.  
 ALDRICH, Kans. Univ. Quart., II, 10, oc. in N. H., S. D.; note.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 425, oc. in Alaska, several places.  
 White Mts., N. H.—Slosson; Wis., Mass.—M. and B.  
**longipennis** LOEW, Neue Beitr., VIII, 21; Mon. N. A. Dipt., II, 57.—D. C., Chicago.  
 ALDRICH, Kans. Univ. Quart., II, 13, pl. I, f. 8.—N. J. to Ga. and Kans.  
 Fla.—Johnson; Vancouver Id.—M. and B.  
**luteipennis** LOEW, Neue Beitr., VIII, 18; Mon. N. A. Dipt., II, 51.—D. C.  
 Ill.—O. S. Cat.; Vancouver Id.—M. and B.  
**maculipes** WALKER, see *Pelastoneurus*.  
**marginatus** ALDRICH, Kans. Univ. Quart., II, 17.—Conn.  
 MELANDER and BRUES, Biol. Bull., I, 135, notes.—Mass., N. J.  
**melanocerus** LOEW, Cent., V, 86; Mon. N. A. Dipt., II, 330.—Canada.  
 Mass.—M. and B.  
**metatarsalis** THOMSON, see *Hercostomus*.  
**misellus** MELANDER, Canad. Ent., XXXII, 136, fig. II.—Natrona Co. and Little Wind R., Wyo.

- myosota** OSTEN SACKEN, *Biologia*, Dipt., 1, 213.—N. Sonora, Mex.  
Cal.—M. and B.; North Idaho—Aldrich.
- nudus** LOEW, *Mon. N. A. Dipt.*, 11, 41.—Ft. Resolution, Huds. B. Terr.
- obcordatus** ALDRICH, *Kans. Univ. Quart.*, 11, 14, pl. 1, f. 24.—Wyo., Col. Common in Idaho.
- obscurus** SAY, see *Gymnopternus*.
- occidentalis** ALDRICH, *Kans. Univ. Quart.*, 11, 19, pl. 1, f. 18.—Wash. Id., Vancouver Id.—M. and B.
- ovatus** LOEW, *Neue Beitr.*, VIII, 13; *Mon. N. A. Dipt.*, 11, 35.—Middle States. Ill.—O. S. Cat.
- pachynemus** LOEW, *Neue Beitr.*, VIII, 13; *Mon. N. A. Dipt.*, 11, 35.—Middle States; Ill.  
ALDRICH, *Kans. Univ. Quart.*, 11, 9, pl. 1, f. 12.—S. D. Mass.—M. and B.
- palæstricus** LOEW, *Cent.*, v, 84; *Mon. N. A. Dipt.*, 11, 328.—White Mts., N. H.  
ALDRICH, *Kans. Univ. Quart.*, 11, 10, pl. 1, f. 3.—N. J.  
Ill.—M. and B.; Axton, N. Y.—M. and H.
- paluster** MELANDER and BRUES, *Biolog. Bull.*, 1, 136, figs.—Monterey Bay, Cal.
- pantomimus** MELANDER and BRUES, *Biolog. Bull.*, 1, 142, figs.—New Bedford, Mass.
- partitus** MELANDER and BRUES, *Biolog. Bull.*, 1, 135, fig.—North Park, Col.
- pernix** MELANDER and BRUES, *Biolog. Bull.*, 1, 141, fig.—Corfield, on Vancouver Id.
- platyprosopus**, see *incisuralis*.
- plumipes** SCOPOLI, *Entomol. Carniolica*, 334, 1763 (*Musca*).—Europe.  
FALLÉN, *Dolichopodes*, 11 (*pennitarsis*).  
STANNIUS, *Isis*, 63, 1831 (id.).  
ZETTERSTEDT, *Dipt. Scand.*, 11, 546 (*wahlbergi*).  
SCHINER, *Fauna Austr.*, 1, 217.  
LOEW, *Mon. N. A. Dipt.*, 11, 60.—Europe; Sitka and Quebec.  
ALDRICH, *Kans. Univ. Quart.*, 11, 13, oc. in S. D. and Col.  
MELANDER and BRUES, *Biolog. Bull.*, 1, 127, f. 3 (*Hygroceleuthus*).—Col., Vancouver Id.  
COQUILLET, *Proc. Wash. Acad. Sci.*, 11, 423, oc. in Alaska, several places.  
For the courtship of this species, see Dahl, *Zoolog. Anzeiger*, Apr., 1889, quoted by Wheeler, *Proc. Wis. Nat. Hist. Soc.*, Apr., 1889, and by Aldrich, *Amer. Nat.*, 1894, 36.  
Beulah, N. M.—Skinner; Province of Quebec—Fyles.
- plumitarsis** FALLÉN, *Dolichopodes*, 10, 1823.—Europe.  
ZETTERSTEDT, *Dipt. Scand.*, 11, 556.  
SCHINER, *Fauna Austr.*, 1, 216.  
COQUILLET, *Proc. Wash. Acad. Sci.*, 11, 425, oc. at Kukak Bay and Popof Id., Alaska.
- plumosus** ALDRICH, *Kans. Univ. Quart.*, 11, 18, pl. 1, f. 16.—Wash.
- pollex** OSTEN SACKEN, *West. Dipt.*, 314.—Webber L., Cal.
- præustus** LOEW, *Cent.*, 11, 62; *Mon. N. A. Dipt.*, 11, 68.—Ill.
- pugil** LOEW, *Cent.*, VII, 77.—Canada. Mass.—O. S. Cat.  
WHEELER, *Psyche*, May, 1890, 340 (*henshawii*).—Mass.  
MELANDER and BRUES, *Biolog. Bull.*, 1, 134, notes (id.).
- pulcher** WALKER, *Dipt. Saund.*, 215.—U. S.  
LOEW, *Mon. N. A. Dipt.*, 11, 21 and 309, quotes desc., etc.



- pulchrimanus* BIGOT, Bull. Soc. Ent. France, 1888, p. xxx (*Spathichira pulchri-  
mana*); Annales, 1890, 292 (*Spathichira pulchrimanus*).—Rocky Mts.,  
N. A.  
ALDRICH, Kans. Univ. Quart., II, 23; genus untenable and species unrec-  
ognizable.
- quadrilamellatus* LOEW, Cent., v, 83; Mon. N. A. Dipt., II, 331.—N. J.
- ramifer* LOEW, Neue Beitr., VIII, 19; Mon. N. A. Dipt., II, 52.—L. Winnipeg;  
Nebr.; New Rochelle, N. Y.  
ALDRICH, Kans. Univ. Quart., II, 12.—Mich. to Kans. and Mont.  
Montreal—Chagnon; III., Tex., Wyo.—M. and B.; Ida.—J. M. A.
- reflectus* ALDRICH, Kans. Univ. Quart., II, 12.—Philadelphia.
- remipes* WAHLBERG, Act. Reg. Soc. Sci. Holmiæ, 1838.—Sweden.  
ZETTERSTEDT, Dipt. Scand., II, 518.  
A male has been sent me from Olympia, Wash., by Professor Kincaid.
- remotus* WALKER, List, III, 666.—N. A. (Unrecognizable.)
- renidescens* MELANDER and BRUES, Biolog. Bull., I, 143, figs.—North Park, Col.  
S. D., Idaho—J. M. A.
- ruficornis* LOEW, Neue Beitr., VIII, 21; Mon. N. A. Dipt., I, 63.—Middle States.
- rupestris* HALIDAY, Entomologist's Magazine, I, 164.—England.  
ZETTERSTEDT, Ins. Lapp., 708 (*festinans*); Dipt. Scand., II, 507 (id.); op.  
cit., 510 (*fuscimanus*).  
SCHINER, Fauna Austr., I, 222, syn. and desc.  
COQUILLET, Proc. Wash. Acad. Sci., II, 424, oc. at Kukak Bay and Popof  
Id., Alaska (*festinans*).
- sarotes* LOEW, Cent., VII, 81.—III. Wis.—M. and B.  
Note.—Looking at the single male type, I decided it to be the same as  
*longipennis*; on looking at my specimens after reaching home, I see that  
there is an easy mark of distinction in the fore feet, *sarotes* having the  
third joint much larger, broader and whiter. This illustrates what may  
be done by examining types.
- scapularis* LOEW, Neue Beitr., VIII, 22; Mon. N. A. Dipt., II, 64.—D. C.; III.  
ALDRICH, Kans. Univ. Quart., II, 20.—Kans., Pa., Ohio, Tenn.  
Wis.—M. and B.
- scoparius* LOEW, Mon. N. A. Dipt., II, 70.—Maine, Mass.  
WHEELER, Psyche, May, 1890, 339, male lamellæ.  
ALDRICH, Kans. Univ. Quart., II, 18, pl. I, f. 9.—N. J., Pa., Mass.  
White Mts., N. H.—Slosson; Montreal—Chagnon; III., Wis.—M. and B.;  
Axton, N. Y.—M. and H.
- separatus* WALKER, List, III, 665.—Martin Falls, Canada. (Unrecognizable.)
- sequax* WALKER, see *Campsicnecmus*.
- setifer* LOEW, Neue Beitr., VIII, 12; Mon. N. A. Dipt., II, 30.—D. C.; Trenton  
Falls, N. Y. Newport, R. I.—O. S. Cat.  
ALDRICH, Kans. Univ. Quart., II, 156, oc. in Wis.; note.  
N. J.—Smith Cat.; Mass.—M. and B.; Montreal—Chagnon.
- setosus* LOEW, Cent., II, 63; Mon. N. A. Dipt., II, 73.—Mass.  
Vancouver Id.—M. and B.
- sexarticulatus* LOEW, Mon. N. A. Dipt., II, 62.—D. C. III., La.—M. and B.
- sincerus* MELANDER, Canad. Ent., XXXII, 136, figs.—Price Co., Wis.
- soccatus* WALKER, List, III, 666.—Martin Falls, Canada. (Unrecognizable.)
- socius* LOEW, see *brevimanus*.
- sphæristes* BRUES, Ent. News, XII, 44, fig.—Austin, Tex.
- splendidulus* LOEW, see *splendidus*.
- splendidus* LOEW, Neue Beitr., VIII, 21; Mon. N. A. Dipt., II, 44.—III.



- LOEW, Cent., v, 82; Mon. N. A. Dipt., II, 327 (both *splendidulus*).—White Mts., N. H. [From types.] Ont., Ill.—M. and B.
- stenhammari** ZETTERSTEDT, Ins. Lapp., 710 (*annulipes*, preoc.); Dipt. Scand., II, 521.—N. Sweden and Lapland.
- OSTEN SACKEN, Cat., 108, oc. at Sloop Harbor, Labrador.
- COQUILLET, Proc. Wash. Acad. Sci., II, 424, oc. in Alaska, several places.
- subciliatus** LOEW, Mon. N. A. Dipt., II, 43.—Ft. Resolution, Huds. B. Terr.
- tener** LOEW, Neue Beitr., VIII, 17; Mon. N. A. Dipt., II, 49.—Chicago. Wis.—M. and B.
- tenuipes** ALDRICH, Kans. Univ. Quart., II, 155; Amer. Naturalist, 1894, 35, courtship (*n. sp.*).—Moscow, Ida. Cal.—M. and B.
- terminalis** LOEW, Cent., VII, 78.—Genesee, N. Y. Wis.—M. and B.
- tetricus** LOEW, Mon. N. A. Dipt., I, 33.—Ft. Resolution, Huds. B. Terr.
- tonsus** LOEW, see *eudactylus*.
- variabilis** LOEW, Neue Beitr., VIII, 17; Mon. N. A. Dipt., II, 50.—N. Y. ALDRICH, Kans. Univ. Quart., II, 11, oc. in Mass., Pa., N. J., S. D. Ill., Wis.—M. and B.; Montreal—Chagnon; White Mts., N. H.—Slosson.
- varipes** COQUILLET, Proc. Wash. Acad. Sci., II, 425.—Popof Id., Alaska. Craig's Mt., Ida.—J. M. A.
- varius** WALKER, see *Pelastoneurus pictipennis*.
- vigilans** ALDRICH, Kans. Univ. Quart., II, 13, pl. 1, f. 15.—Kans.
- vittatus** LOEW, Neue Beitr., VIII, 20; Mon. N. A. Dipt., II, 55.—Chicago. N. Y.—O. S. Cat.; S. D.—Aldrich; Wis.—M. and B.; N. J.—Smith Cat.; Montreal—Chagnon.
- wheeleri** MELANDER and BRUES, Biolog. Bull., I, 126, figs. (*Hygrocleuthus*).—Wood's Hole, Mass.
- willistonii** ALDRICH, Kans. Univ. Quart., II, 22, pl. 1, f. 23.—Lawrence, Kans.
- xanthocnemus** LOEW, Mon. N. A. Dipt., II, 21.—Sitka. COQUILLET, Proc. Wash. Acad. Sci., II, 424, oc. in Alaska, several places.

## GYMNOPTERNUS.

- LOEW, Neue Beitr., v, 10, 1857; VIII, 26, 1861; Mon. N. A. Dipt., II, 75, 1864.
- SCHINER, Fauna Austr., I, 205, 1862.
- albiceps** LOEW, Neue Beitr., VIII, 30; Mon. N. A. Dipt., II, 85.—Middle States.
- barbatulus** LOEW, Neue Beitr., VIII, 29; Mon. N. A. Dipt., II, 82.—Middle States. N. J.—Smith Cat.
- chalcochrus** LOEW, Mon. N. A. Dipt., II, 335.—D. C., N. Y.
- coxalis** LOEW, Cent., v, 87; Mon. N. A. Dipt., II, 335.—N. Y.
- crassicauda** LOEW, Neue Beitr., VIII, 35; Mon. N. A. Dipt., II, 95.—N. Y.
- debilis** LOEW, Neue Beitr., VIII, 35; Mon. N. A. Dipt., II, 95.—Pa. N. J.—Smith Cat.; Fla.—Johnson.
- despicatus** LOEW, Neue Beitr., VIII, 33; Mon. N. A. Dipt., II, 90.—Middle States.
- difficilis** LOEW, Neue Beitr., VIII, 33; Mon. N. A. Dipt., II, 91.—N. Y.
- exiguus** LOEW, Mon. N. A. Dipt., II, 337.—Ill.
- exilis** LOEW, Neue Beitr., VIII, 30; Mon. N. A. Dipt., II, 84.—Pa. N. J.—Smith Cat.
- fimbriatus** LOEW, Neue Beitr., VIII, 32; Mon. N. A. Dipt., II, 89.—Md.
- flavus** LOEW, Neue Beitr., VIII, 28; Mon. N. A. Dipt., II, 80.—Pa. N. J.—Smith Cat.
- frequens** LOEW, Neue Beitr., VIII, 32; Mon. N. A. Dipt., II, 88.—Middle States. White Mts., N. H.—Slosson.
- humilis** LOEW, Mon. N. A. Dipt., II, 336.—N. Y., Ill.

*lævigatus* LOEW, Neue Beitr., VIII, 31; Mon. N. A. Dipt., II, 87.—Middle States.  
*lunifer* LOEW, Neue Beitr., VIII, 32; Mon. N. A. Dipt., II, 89.—N. Y.

N. J.—Smith Cat.

*meniscus* LOEW, Cent., V, 88; Mon. N. A. Dipt., II, 336.—D. C.

*minus* LOEW, Neue Beitr., VIII, 35; Mon. N. A. Dipt., II, 96.—Middle States.

*mirificus* MELANDER, Canad. Ent., XXXII, 137, fig. 13.—Mass.

*nigribarba* LOEW, Neue Beitr., VIII, 33; Mon. N. A. Dipt., II, 91.—Pa.

*obscurus* SAY, Jour. Acad. Sci. Phil., III, 85; Compl. Works, II, 75 (*Dolichopus*).  
 —Pa.

WIEDEMANN, Auss. Zw., II, 232 (id.).

LOEW, Mon. N. A. Dipt., II, 290, 296, quotes Say and Wiedemann.

*opacus* LOEW, Neue Beitr., VIII, 34; Mon. N. A. Dipt., II, 93.—N. Y.

*parvicornis* LOEW, Neue Beitr., VIII, 34; Mon. N. A. Dipt., II, 92.—Middle States.

*phylliphorus* LOEW, Cent., VII, 82.—L. George, N. Y.

White Mts., N. H.—Slosson.

*pœnitens* WHEELER, see *Hercostomus unicolor*.

*politus* LOEW, Neue Beitr., VIII, 34; Mon. N. A. Dipt., II, 94 and 334.—N. Y.

*pusillus* LOEW, Mon. N. A. Dipt., II, 334.—Ill.

*ruficornis* ALDRICH, Trans. Ent. Soc. Lond., 1896, 309.—St. Vincent, W. I.

*scotias* LOEW, Neue Beitr., VIII, 29; Mon. N. A. Dipt., II, 81.—L. Winnipeg.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

*spectabilis* LOEW, Neue Beitr., VIII, 30; Mon. N. A. Dipt., II, 85.—N. Y.

N. J.—Smith Cat.

*subdilatatus* LOEW, Neue Beitr., VIII, 31; Mon. N. A. Dipt., II, 86.—Middle

States. N. J.—Smith Cat.

*subulatus* LOEW, Neue Beitr., VIII, 29; Mon. N. A. Dipt., II, 80.—Trenton Falls,  
 N. Y.

*tristis* LOEW, Mon. N. A. Dipt., II, 83.—Sitka.

*ventralis* LOEW, Neue Beitr., VIII, 36; Mon. N. A. Dipt., II, 97.—N. Y.

D. C.—O. S. Cat.; N. J.—Smith Cat.

### HERCOSTOMUS.

LOEW, Neue Beitr., V, 9, 1857; VIII, 42, 1861; Mon. N. A. Dipt., II, 116,  
 1864.

WHEELER, Proc. Cal. Acad. Sci., II, 8, 1899, table of species.

MELANDER, Canad. Ent., XXXII, 138, table of species, 1900.

*Note*.—This genus is not well-defined, and serves as a catch-all for  
 aberrant forms near *Gymnopternus*.

*aurifer* THOMSON, Eugen. Resa, 512 (*Dolichopus*).—Cal.

*anarmostus* MELANDER, Canad. Ent., XXXII, 139, f. 3.—Chicago.

*flavipes* ALDRICH, Biologia, Dipt., I, 336, pl. VI, f. 17.—Guerrero, Mex.

*impudicus* WHEELER, Proc. Cal. Acad. Sci., II, 10, pl. I, f. 11-13.—Monterey, Cal.

*latipes* ALDRICH, Trans. Ent. Soc. Lond., 1896, 311, pl. XII, f. 111.—St. Vincent,  
 W. I. Grenada—Aldrich.

*metatarsalis* THOMSON, Eugen. Resa, 512 (*Dolichopus*).—Cal.

WHEELER, Proc. Cal. Acad. Sci., II, 8, pl. I, f. 9, 10 (*proccrus*).—Monterey,  
 Cal. [J. M. A.]

*proccrus* WHEELER, see *metatarsalis*.

*unicolor* LOEW, Mon. N. A. Dipt., II, 117.—Ft. Resolution, Huds. B. Terr.

WHEELER, Psyche, June, 1890, 356 (*Gymnopternus pœnitens*).—Wis.

MIK, Wien. Ent. Zeit., 1894, 4, gen. ref. of *pœnitens*.

MELANDER, Canad. Ent., XXXII, 138, syn.

Seattle—J. M. A.

*vetitus* MELANDER, Canad. Ent., XXXII, 138, f. 1, 2.—Clementon, N. J.

## PARACLIUS.

LOEW, Mon. N. A. Dipt., II, 97, 1864.

WHEELER, Proc. Cal. Acad. Sci., II, 18, 1899, table of species.

ALDRICH, Biologia, Dipt., I, 337, 1902, table of Mex. species; Kans. Univ. Sci. Bull., I, 47, 1902, table of species.

*Note.*—The genus *Paraclius*, BIGOT, Annales, 1859, 215, is not the same.

**abdominalis** ALDRICH, Kans. Univ. Sci. Bull., I, 78.—Grenada, W. I.

**albonotatus** LOEW, Mon. N. A. Dipt., II, 102.—New Orleans.

Grenada, W. I., and Tabasco, Mex.—Aldrich.

**alternans** LOEW, Cent., v, 91 (*Pelastoneurus*); Mon. N. A. Dipt., II, 339 (id.).—New Rochelle, N. Y. (Gen. ref. from type—J. M. A.)

**arcuatus** LOEW, Neue Beitr., VIII, 39; Mon. N. A. Dipt., II, 101.—Cuba.

ALDRICH, Kans. Univ. Sci. Bull., I, 80, oc. in Grenada and Jamaica, and notes.

**bellus** ALDRICH, Kans. Univ. Sci. Bull., I, 81.—Grenada, W. I.

**claviculatus** LOEW, Cent., VII, 83.—New Rochelle, N. Y.

Grenada—Aldrich.

**discifer** ALDRICH, Kans. Univ. Sci. Bull., I, 80.—Grenada.

**femoratus** ALDRICH, Biologia, Dipt., I, 340.—Vera Cruz, Teapa and Frontera, Mex.

**filifer** ALDRICH, Trans. Ent. Soc. Lond., 1896, 314, pl. XI, f. 102.—St. Vincent, W. I.

WHEELER, Proc. Cal. Acad. Sci., II, 19, notes, and oc. in Fla.

Grenada—Aldrich; Porto Rico—Coquillett.

**fuscicornis** ALDRICH, Kans. Univ. Sci. Bull., I, 79.—Grenada, W. I.

**humeralis** ALDRICH, Biologia, Dipt., I, 340, pl. VI, f. 10.—Vera Cruz, Mex.

**hybridus** MELANDER, Canad. Ent., XXXII, 141, f. 4, 5.—Wood's Hole, Mass.

**nigripes** ALDRICH, Kans. Univ. Sci. Bull., I, 78.—Grenada, W. I.

**propinquus** WHEELER, Proc. Cal. Acad. Sci., II, 18, pl. I, f. 22-24.—Charlotte Harbor and Ormond, Fla.

**pumilio** LOEW, Cent., X, 63.—Texas.

**quadrinotatus** ALDRICH, Kans. Univ. Sci. Bull., I, 81.—Grenada, W. I.

**venustus** ALDRICH, Biologia, Dipt., I, 340, pl. VI, f. 11.—Teapa, Mex.

Grenada—Aldrich.

## TACHYTRECHUS.

LOEW, Neue Beitr., v, 14, 1857; VIII, 40, 1861; Mon. N. A. Dipt., II, 109, 1864.

STANNIUS, Isis, 1831, 261 (*Ammobates*, preoc.).

MIK, Verh. Zool.-Bot. Ges., 1878 (*Macellocerus*, in part).

**angustipennis** LOEW, Cent., II, 64; Mon. N. A. Dipt., II, 113.—D. C.

OSTEN SACKEN, West Dipt., 315, oc. in Cal., Sonoma Co. and Summit Station.

**auratus** ALDRICH, Trans. Amer. Ent. Soc., XXIII, 83 (*Macellocerus*).—Moscow, Ida.

**binodatus** LOEW, Cent., VII, 84.—Saratoga, N. Y.

JOHNSON, Ent. News, XIII, 168, oc. in Morris Co., N. J.

Battle Creek, Mich.—Aldrich.

**floridensis** ALDRICH, Trans. Amer. Ent. Soc., XXIII, 82.—Fla.

**mœchus** LOEW, Neue Beitr., VIII, 40; Mon. N. A. Dipt., II, 110.—Trenton Falls, N. Y.

- olympia** ALDRICH, Trans. Amer. Ent. Soc., xxiii, 83 (*Macellocerus*).—Olympia, Wash. Boise, Ida.—J. M. A.
- protervus** MELANDER, Canad. Ent., xxxii, 143, f. 6, 7.—Clementon and Del. Water Gap, N. J.
- sanus** OSTEN SACKEN, West. Dipt., 316.—Webber L., Cal. Craig's Mt., Ida.—J. M. A.
- volitans** MELANDER, Canad. Ent., xxxii, 143, f. 8.—Lusk, Wyo.
- vorax** LOEW, Neue Beitr., viii, 41; Mon. N. A. Dipt., ii, 112.—D. C. N. J.—Smith Cat.; Mich., Col.—J. M. A.

## POLYMEDON.

- OSTEN SACKEN, West. Dipt., 317, 1877.
- WILLISTON, Synops. Fam. and Gen., 47, 1886.
- ALDRICH, Trans. Ent. Soc. Lond., 1896, 318, amended; Biologia, Dipt., i, 333, 1902, table of species.
- argentatus** ALDRICH, Biologia, Dipt., i, 334, pl. vi, f. 7.—Cuernavaca, Mex.
- castus** WHEELER, Proc. Cal. Acad. Sci., ii, 6, pl. i, f. 8.—Grand Cañon, Ariz. ALDRICH, Biologia, Dipt., i, 333, footnote.
- flabellifer** OSTEN SACKEN, West. Dipt., 317.—Sonoma Co., Cal.; on stones in stream. Juliaetta, Idaho—J. M. A.
- nimius** ALDRICH, Biologia, Dipt., i, 334, pl. vi, f. 8, 9.—Guerrero, Mex., and Hagerman, Ida., about waterfalls.
- superbus** ALDRICH, Trans. Ent. Soc. Lond., 1896, 318-320, pl. xi, f. 103 and pl. xii, f. 113, 118, 119.—St. Vincent, W. I.; on stones in stream.
- triangularis** ALDRICH, Biologia, Dipt., i, 335.—Cuernavaca, Mex.

## SARCIONUS.

- ALDRICH, Biologia, Dipt., i, 341, 1902; Kans. Univ. Sci. Bull., i, 47, 1902.
- flavicoxa** ALDRICH, Biologia, Dipt., i, 341, pl. vi, f. 15.—Teapa, Mex. (on the plate as *Pacilobothrus*).
- lineatus** ALDRICH, Trans. Ent. Soc., Lond., 1896, 312 (*Pelastoneurus*); Biologia, Dipt., i, 341, gen. ref. and oc. in Teapa, Mex.; Kans. Univ. Sci. Bull., i, 82, oc. in Grenada, and notes.—St. Vincent, W. I.

## PELASTONEURUS.

- LOEW, Neue Beitr., viii, 36, 1861; Mon. N. A. Dipt., ii, 103, 1864.
- ALDRICH, Kans. Univ. Quart., ii, 152, 1893 (*Metapelastoneurus*, in part); Ent. News, xi, 532, syn.
- WHEELER, Proc. Cal. Acad. Sci., ii, 11, 1899, table of species.
- ALDRICH, Biologia, Dipt., i, 336, 1902, table of Mex. species; Kans. Univ. Sci. Bull., i, 47, 1902, table of species.
- abbreviatus** LOEW, Cent., v, 89; Mon. N. A. Dipt., ii, 338.—New Rochelle, N. Y. St. Augustine, Fla.—Johnson.
- alternans** LOEW, see *Paraclius*.
- argentifer** ALDRICH, Trans. Ent. Soc. Lond., 1896, 313.—St. Vincent, W. I. Mexico, several places, and Grenada, W. I.—Aldrich.
- bifrons** WALKER, Dipt. Saund., 212 (*Dolichopus*).—U. S. (Unrecognizable.)
- bigeminatus** ALDRICH, Biologia, Dipt., i, 338, pl. vi, f. 13.—Vera Cruz, Mex.
- cognatus** LOEW, Mon. N. A. Dipt., ii, 109.—Middle States. Texas—O. S. Cat. WHEELER, Proc. Cal. Acad. Sci., ii, 12, oc. at Chicago. ALDRICH, Biologia, Dipt., i, 339, male.—Vera Cruz, Mex. St. Augustine, Fla.—Johnson.

- cyaneus** WHEELER, Proc. Cal. Acad. Sci., II, 17, pl. I, f. 16-18.—Monterey, Cal. and Lusk, Wyo.
- dissimilipes** WHEELER, Proc. Cal. Acad. Sci., II, 17.—Monterey, Cal.
- fasciatus** ROEDER, Stett. Ent. Zeit., 1885, 34.—Porto Rico.
- floridanus** WHEELER, Proc. Cal. Acad. Sci., II, 13, pl. II, f. 26.—St. Augustine, Fla.
- furcifer** LOEW, Cent., X, 64.—Texas.
- hamatus** ALDRICH, Biologia, Dipt., I, 338, pl. VI, f. 12.—Mexico City.
- heteroneurus** MACQUART, Dipt. Exot., Suppl., IV, 128, pl. XII, f. 10 (*Dolichopus*).—N. A.
- kansensis** ALDRICH, Kans. Univ. Quart., II, 153, 1893 (*Metapelastoneurus*).—Lawrence, Kans.; Milbank, S. D.—J. M. A.
- lætus** LOEW, Neue Beitr., VIII, 38; Mon. N. A. Dipt., II, 106.—Ga., D. C.  
? WALKER, List, III, 667 (*Dolichopus irrasus*).—Fla. [J. M. A.]
- lamellatus** LOEW, Cent., V, 90; Mon. N. A. Dipt., II, 338.—N. Y.
- longicauda** LOEW, Neue Beitr., VIII, 37; Mon. N. A. Dipt., II, 104.—N. Y.
- lugubris** LOEW, Neue Beitr., VIII, 38; Mon. N. A. Dipt., II, 105.—Trenton Falls, N. Y.  
WHEELER, Proc. Cal. Acad. Sci., II, pl. II, f. 28.—Wis., Ill., Ind. N. J.—Smith Cat.; Vera Cruz, Mex.—Aldrich.
- maculipes** WALKER, Dipt. Saund., 214 (*Dolichopus*).—U. S.
- mexicanus** BIGOT, Bull. Soc. Ent. France, Feb. 22, 1888, p. xxx; Annales, 1890, 294 (*Pacilobothrus*).—Mex. (Unrecognizable.)
- neglectus** WHEELER, Proc. Cal. Acad. Sci., II, 12, pl. I, f. 14.—Chicago and Milwaukee.  
Note.—The specimens were males, not females (Wheeler in litt.).
- occidentalis** WHEELER, Proc. Cal. Acad. Sci., II, 13, pl. I, f. 20.—Pacific Grove, Cal.
- pictipennis** WHEELER, Proc. Cal. Acad. Sci., II, 14, pl. I, f. 19 and pl. II, f. 25.—St. Augustine and Gotha, Fla.  
? WALKER, Dipt. Saund., 215 (*Dolichopus varius*).—U. S. [J. M. A.]
- ? **pilosicornis** WALKER, List, III, 653 (*Porphyrops*).—Martin Falls, Canada. (Unrecognizable.)
- punctipennis** SAY, Jour. Acad. Sci. Phil., VI, 170; Compl. Works, II, 362 (*Mediterus*).—Mex.  
ALDRICH, Biologia, Dipt., I, 339, pl. VI, f. 14 (on the plate *P. variegatus*).—Orizaba, Mex.
- unguiculatus** ALDRICH, Trans. Ent. Soc. Lond., 1896, 310, pl. XI, f. 101 and pl. XII, f. 116 (*Pacilobothrus*).—St. Vincent, W. I.  
Vera Cruz, Mex.—Aldrich.
- vagans** LOEW, Neue Beitr., VIII, 39; Mon. N. A. Dipt., II, 107.—Middle States.  
WHEELER, Proc. Cal. Acad. Sci., II, 15, pl. I, f. 15, oc. in Wis., Ill., Ind., N. M., and Wyo. N. J.—Smith Cat.; Orizaba, Mex.—Aldrich.
- wheeleri** MELANDER, Canad. Ent., XXXII, 140, f. 15.—Austin, Texas.

## LEPTOCORYPHA.

- ALDRICH, Trans. Ent. Soc. London, 1896, 315.
- pavo** ALDRICH, op. cit., pl. XII, f. 112.—St. Vincent, W. I.

## ORTHOCHILE.

- LATREILLE, Gen. Crust. et Ins., IV, 289, 1809.

? *derempta* WALKER, List, III, 667.—N. A. See Osten Sacken, Cat., 243, note 187. The species does not belong to this genus, but not even the genus can be determined from the description.

### EMPIDIDÆ.

BIGOT, Annales, 1889, 114, table of genera of the world.

COQUILLET, Revis. Emp., in Proc. U. S. N. M., XVIII, 1896 (separates in 1895), 387-440, has a table of genera, p. 389.

MELANDER, Monograph Empididæ, in Trans. Amer. Ent. Soc., XXVIII, 1902, 195-367, 5 plates, has a table of genera, p. 201.

COQUILLET, Proc. Wash. Ent. Soc., v, 245-272, types of genera, table, notes, etc. Following my own convictions, and to some extent the advice of Mr. Melander, I have not adopted all the changes proposed in this paper.

### PHONEUSTICA.

LOEW, Cent., III, 35, 1863.

MELANDER, Mon. Empid., I, 204, 1902, def. and table of species.

*bimaculata* LOEW, see *maculipennis*.

*maculipennis* WALKER, List, III, 507 (*Tachydromia*).—Martin Falls, Canada.

LOEW, Cent., III, 35 (*bimaculata*).—Sitka. [Coq.]

MELANDER, Mon. Empid., I, 204 (id.).—Brookings, S. D.

*simplicior* WHEELER and MELANDER, Biologia, Dipt., I, 375.—Chilpancingo in Guerrero, Mex.

MELANDER, Mon. Empid., I, 205.—Guerrero and Vera Cruz, Mex.

### STILPON.

LOEW, Neue Beitr., VI, 34, 43, 1859.

OSTEN SACKEN, Cat., 241, 1878, quotes desc.

MELANDER, Mon. Empid., I, 205, 1902, def. and table of species; the latter revised on p. 339.

*houghi* MELANDER, see *Coloboncura*.

*minuta* MELANDER, Mon. Empid., I, 339.—Cloudcroft and Highrolls, N. M.

*nigripes* MELANDER, Mon. Empid., I, 339.—Alamogordo, Highrolls, and Cloudcroft, N. M.

*pectiniger* MELANDER, see *varipes*.

*varipes* LOEW, Cent., II, 58.—Pa.

MELANDER, Mon. Empid., I, 205, f. 45 (*varipes* and *pectiniger*).—Milwaukee, Wis., and New Bedford, Mass. [Melander, in litt.]

### DRAPETIS.

MEIGEN, Syst. Besch., III, 91, 1822.

SCHINER, Fauna Austr., I, 1862.

WILLISTON, Trans. Ent. Soc. Lond., 1896, 441, table of St. Vincent species.

COQUILLET, Proc. U. S. N. M., XXII, 251, correction of preceding.

MELANDER, Mon. Empid., I, 206, 1902, def. and table of species.

*apicis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 442, pl. XIV, f. 167.—St. Vincent, W. I.

MELANDER, Mon. Empid., I, 209.

*divergens* LOEW, Cent., X, 62.—Texas.

WILLISTON, Trans. Ent. Soc. Lond., 1896, 442, pl. XIV, f. 168 (*minuta*).—St. Vincent, W. I.



- MELANDER, Mon. Empid., 1, 210, f. 15 (*divergens* and *minuta*).—Ala., Ga., N. M. [Mel., *in litt.*]
- dividia** MELANDER, Mon. Empid., 1, 208, f. 16, 18, 23.—Moscow, Idaho.
- femoralis** WHEELER and MELANDER, Biologia, Dipt., 1, 376.—Vera Cruz and Tamasco, Mex.
- MELANDER, Mon. Empid., 1, 211, f. 13.
- flavida** WILLISTON, Trans. Ent. Soc. Lond., 1896, 308, pl. XI, f. 86.—St. Vincent, W. I.
- COQUILLET, Proc. U. S. N. M., XXII, 251, oc. in Porto Rico (*Tachydromia*).
- WHEELER and MELANDER, Biologia, Dipt., 1, 376, oc. in Orizaba and Vera Cruz, Mex.
- MELANDER, Mon. Empid., 1, 213.—Hayti.
- COQUILLET, Proc. Ent. Soc. Wash., v, 265, note.
- gilvipes** LOEW, Cent., x, 61.—Texas.
- WILLISTON, Trans. Ent. Soc. Lond., 1896, pl. IV, f. 85 (*xanthopodus*).—St. Vincent, W. I.
- MELANDER, Mon. Empid., 1, 212, 213, syn. on 340.—Galveston and Bosque Co., Texas.
- latipennis** MELANDER, Mon. Empid., 1, 209, f. 11, 19.—Lawrence, Kans.; Milwaukee, Wis.
- medetera** MELANDER, Mon. Empid., 1, 208, f. 22.—Ida., Wyo., Col., Ariz.
- COQUILLET, Proc. Ent. Soc. Wash., v, 265, note.
- minuta** WILLISTON, see *divergens*.
- nigra** MEIGEN, Syst. Besch., VI, 344.—Europe.
- WALKER, List, III, 511, oc. in N. A.—Martin Falls, Canada.
- MELANDER, Mon. Empid., 1, 208, f. 12, 17, 24.—Brookings, S. D.
- nitida** MELANDER, see *unipila*.
- pubescens** LOEW, Cent., II, 57.—N. Y.
- MELANDER, Mon. Empid., 1, 210, 340.
- septentrionalis** MELANDER, Mon. Empid., 1, 211.—Battle Creek, Mich.
- spectabilis** MELANDER, Mon. Empid., 1, 212, 340, f. 9, 20.—Wood's Hole and Horseneck Beach, Mass.; Bosque Co., Texas.
- unipila** LOEW, Cent., x, 60.—Texas.
- MELANDER, Mon. Empid., 1, 207, f. 10, 14, 21 (*nitida*); 339, syn.—Monterey Co., Cal.; Austin and Granite Mt., Texas.
- xanthopodus** WILLISTON, see *gilvipes*.

## ELAPHROPEZA.

- MACQUART, Dipt. Nord France, 1, 1827; Hist. Nat. Dipt., 1, 359, 1834.
- SCHINER, Fauna Austr., 1, 94, 1862.
- MELANDER, Mon. Empid., 1, 213, 1902.
- montana** MELANDER, Mon. Emp., 1, 213, f. 7, 8.—Col.

## PLATYPALPUS.

- MACQUART, Dipt. Nord France, 94, 1827; Hist. Nat. Dipt., 1, 351, 1834.
- SCHINER, Fauna Austr., 1, 87, 1862.
- OSTEN SACKEN, Cat., 241, note.
- COQUILLET, Revis. Empid., 438, table of species, 1895.
- MELANDER, Mon. Empid., 1, 214, 1902, def. and table of species.
- æqualis** LOEW, Cent., v, 75.—Ill.
- MELANDER, Mon. Emp., 1, 222.—Mass. to La., Ida. to Cal. and Mex.
- N. J.—Smith Cat.; White Mts., N. H.—Slosson. See *crassifemoris*.

- alexippus** WALKER, List, III, 510 (*Tachydromia*).—Martin Falls, Canada.
- apicalis** LOEW, Cent., v, 79.—Pa.  
MELANDER, Mon. Empid., I, 218.—Wood's Hole, Mass. White Mts., N. H.—Slosson.
- caligatus** MELANDER, Mon. Empid., I, 216, f. 27, 35, 46.—Guerrero, Mex.  
WHEELER and MELANDER, Biologia, Dipt., I, 375, had referred the same specimens to *trivialis* LW.
- canus** MELANDER, Mon. Empid., I, 220, f. 29, 40, 45.—Los Angeles Co., Cal.
- crassifemoris** FITCH, N. Y. Repts., I, 301, 1856 (*Oscinis*).—N. Y.  
COQUILLET, Rev. Empid., 438, gen. ref., from type.
- MELANDER, Mon. Empid., I, 223, 342, *trivialis* and *equalis* are probably the same.—Mass., Mich., Ida.
- debilis** LOEW, Cent., III, 37.—D. C.
- discifer** LOEW, Cent., III, 36.—D. C.  
MELANDER, Mon. Empid., I, 222; note on type, 342.
- diversipes** COQUILLET, Proc. Wash. Acad. Sci., II, 422.—Popof Id., Alaska.  
MELANDER, Mon. Empid., I, 218.
- flavirostris** LOEW, Cent., v, 80.—White Mts., N. H.  
COQUILLET, Proc. Wash. Acad. Sci., II, 422.—Popof Id., Alaska.  
MELANDER, Mon. Empid., I, 219; notes on type, 342.
- gilvipes** COQUILLET, Proc. Wash. Acad. Sci., II, 422.—Popof Id., Alaska.  
MELANDER, Mon. Empid., I, 224.
- gravidus** MELANDER, Mon. Empid., I, 221, f. 25, 42.—San Diego Co., Cal.
- hastatus** MELANDER, Mon. Empid., I, 222, f. 30.—Lawrence, Kans.; Craig's Mt., Ida.
- hians** MELANDER, Mon. Empid., I, 220, f. 32, 36, 37.—Col.
- impexus** MELANDER, Mon. Empid., I, 219.—Brookings, S. D.; Battle Creek, Mich.
- incultus** COQUILLET, Rev. Empid., 439.—S. Cal.  
MELANDER, Mon. Empid., I, 218.—Texas.
- incurvus** MELANDER, Mon. Empid., I, 221, f. 31, 33, 44.—Los Angeles Co. and San Diego Co., Cal.
- inops** MELANDER, Mon. Empid., I, 220.—Dubois and Hunter's Cr., Wyo.; Oxford, Idaho.
- lætus** LOEW, Cent., v, 81.—White Mts., N. H.  
MELANDER, Mon. Empid., I, 219; note on type, 341.
- lateralis** LOEW, Cent., v, 78.—White Mts., N. H.  
COQUILLET, Proc. Wash. Acad. Sci., II, 421, oc. in Alaska. several places.  
MELANDER, Mon. Empid., I, 222.
- lupatus** MELANDER, Mon. Empid., I, 340.—Cloudcroft, N. M.
- mesogramma** LOEW, Cent., III, 38.—D. C., N. Y.  
MELANDER, Mon. Empid., I, 219.—Pa., Tenn. N. J.—Smith Cat.
- monticola** MELANDER, Mon. Empid., I, 217, f. 41.—Cameron Pass, Col.
- pachynema** LOEW, Cent., v, 77.—D. C.  
MELANDER, Mon. Empid., I, 217. Tarrytown, N. Y.—O. S.
- pluto** MELANDER, Mon. Empid., I, 217, f. 39.—San Diego, Cal.; doubtfully from Albion and Juliaetta, Idaho.
- rufiventris** MELANDER, Mon. Empid., I, 341.—Cloudcroft, N. M.
- tenellus** MELANDER, Mon. Empid., I, 223, f. 28, 38.—Champaign Co., Ill.; Brookings, S. D.
- tersus** COQUILLET, Rev. Empid., 439.—Ga., N. C.  
MELANDER, Mon. Empid., I, 219.—Ga., La.
- trivialis** LOEW, Cent., v, 76.—Me., D. C.  
MELANDER, Mon. Empid., I, 216, f. 26, 34, 43.—New Bedford, Mass.  
See *caligatus*.

COQUILLET, Proc. Ent. Soc. Wash., v, 265, notes.

White Mts., N. H.—Slosson. See *caligatus* and *crassifemoris*.

*vicarius* WALKER, Trans. Ent. Soc., n. ser., iv, 149 (*Tachydromia*).—U. S.

MELANDER, Mon. Empid., i, 220, quotes desc.

*vierecki* MELANDER, Mon. Empid., i, 340.—Cloudcroft, N. M.

### TACHYDROMIA.

MEIGEN, Illig. Mag., ii, 269, 1803; Syst. Besch., iii, 68, Div. A; vi, 341 (the last *Tachypeza*).

SCHINER, Fauna Austr., i, 92, 1862.

OSTEN SACKEN, Cat., 1878, 241, note.

COQUILLET, Revis. Empid., 1895, 439, table of species.

MELANDER, Mon. Empid., i, 224, 1902, def. and table of species.

HOWARD, Proc. Wash. Acad. Sci., ii, 560, records the rearing of an undetermined species from human excrement.

COQUILLET, Proc. Ent. Soc. Wash., v, 265, notes; recognizes *Tachypeza* as distinct.

*bacis* WALKER, List, iii, 510.—Jamaica.

MELANDER, Mon. Empid., i, 226, quotes desc.

*brachialis* MELANDER, Mon. Empid., i, 343.—Bonnton, N. J.

*clavipes* LOEW, Cent., v, 73 (*Tachypeza*).—Ill.

MELANDER, Mon. Empid., i, 229.

*corticalis* MELANDER, Mon. Empid., i, 343.—Cloudcroft, N. M.

*enecator* MELANDER, Mon. Empid., i, 226.—St. John's Co., Quebec; Lance Cr., Wyo.

*fenestrata* SAY, Jour. Acad. Sci. Phil., iii, 95; Compl. Works, ii, 82 (*Sicus*).—Mid. States.

WIEDEMANN, Auss. Zw., ii, 12.

MELANDER, Mon. Empid., i, 228.

*flavida* WILLISTON, of Coquillett, see *Drapetis*.

*inusta* MELANDER, Mon. Empid., i, 226, f. 50, 54.—Julietta and Craig's Mt., Ida.; Magdalena Mts., N. M.

*lata* COQUILLET, Proc. Ent. Soc. Wash., v, 266.—Biscayne Bay, Fla.

*maculipennis* WALKER, see *Phoncustica*.

*nubifera* COQUILLET, Dipt. Commander Ids., 343.—Bering Id.

MELANDER, Mon. Empid., i, 342.

COQUILLET, Proc. Ent. Soc. Wash., v, 265, note.

*portæcola* WALKER, List, iii, 506.—Martin Falls, Canada.

MELANDER, Mon. Empid., i, 227, quotes desc.

*postica* WALKER, Trans. Ent. Soc., n. ser., iv, 149.—U. S.

? MELANDER, Mon. Empid., i, 227, doubtfully identified from Lawrence, Kans.

*pruinosa* COQUILLET, Proc. Ent. Soc. Wash., v, 267 (*Tachypeza*).—Atherton, Mo.

*pusilla* LOEW, Cent., v, 74 (*Tachypeza*).—Ill.

MELANDER, Mon. Empid., i, 229, f. 51.—Ill., Mass. N. J.—Smith Cat.

*rapax* LOEW, Cent., v, 71 (*Tachypeza*).—Ill.

MELANDER, Mon. Empid., i, 229, f. 55.—Mass., Ind., Ill., Wis., Wyo.

*rostrata* LOEW, Cent., v, 72 (*Tachypeza*).—White Mts., N. H.; N. Y.

MELANDER, Mon. Empid., i, 229.

*schwarzii* COQUILLET, Revis. Empid., 440.—N. Cal. and Utah.

WHEELER and MELANDER, Biologia, Dipt., i, 375, oc. in Guerrero, Mex.

- MELANDER, Mon. Empid., 1, 225, f. 52.—Cal., Utah, Ida., Tex.  
 Franconia, N. H.—Melander *in litt.*
- similis** WALKER, List, III, 506.—Martin Falls, Canada.  
 MELANDER, Mon. Empid., 1, 229, quotes desc.  
 White Mts., N. H.—Slosson.
- varipennis** COQUILLET, Proc. Ent. Soc. Wash., v, 266.—Franconia, N. H.  
 SLOSSON, Ent. News, XIV, 266, habits of adult.
- vittipennis** WALKER, Trans. Ent. Soc., n. ser., IV, 149.—U. S.  
 MELANDER, Mon. Empid., 1, 227, quotes desc.
- winthemi** ZETTERSTEDT, Ins. Lapp., 548; Dipt. Scand., 1, 321 (*Tachypæza*).—Europe.  
 OSTEN SACKEN, Cat., 106, oc. in N. A.—Mt. Washington, N. H.  
 MELANDER, Mon. Empid., 1, 227.

#### COLOBONEURA.

- MELANDER, Mon. Empid., 1, 229, 1902.
- houghi** MELANDER, Mon. Empid., 1, 206, f. 2, 3 (*Stilpon*).—New Bedford, Mass.  
 Gen. ref. by Melander *in litt.*
- inusitata** MELANDER, Mon. Empid., 1, 230, 344, f. 47, 48, 49.—Wood's Hole,  
 Mass.; R. I.; Lake Worth, Fla.  
 SLOSSON, Ent. News, XIV, 268, habits of adult.
- nana** COQUILLET, Proc. Ent. Soc. Wash., v, 267.—Lake Worth, Fla.

#### HEMERODROMIA.

- MEIGEN, Syst. Besch., III, 61, 1822.
- RONDANI, Dipt. Ital. Prod., 1, 148, 1856 (*Mantipæza*). [Mel.]
- SCHINER, Fauna Austr., 1, 82, 1862.
- LOEW, Wien. Ent. Monatschr., 1864, 237.
- COQUILLET, Revis. Empid., 1895, 391, table of species; 392 (*Ncoplasta*).  
 [Mel.]
- WILLISTON, Trans. Ent. Soc. Lond., 1896, 440, on the relations of *Mantipæza*, etc.
- MELANDER, Mon. Empid., 1, 233, 1902, def. and table.
- albipes** WALKER, Walker, List, III, 505.—Martin Falls, Canada.  
 MELANDER, Mon. Empid., 1, 237, quotes desc.
- capta** COQUILLET, Revis. Empid., 391.—N. Y.  
 MELANDER, Mon. Empid., 1, 237.
- collusor** MELANDER, Mon. Empid., 1, 235, f. 57, 58.—Dubois and Dinwiddie Cr.,  
 Wyo.; Col.
- defecta** LOEW, Cent., II, 55.—D. C.  
 MELANDER, Mon. Empid., 1, 235. N. J.—Smith Cat.
- defessa** WILLISTON, Trans. Ent. Soc. Lond., 1896, 439, pl. XIV, f. 166.—St. Vincent,  
 W. I.  
 MELANDER, Mon. Empid., 1, 237.
- empiformis** SAY, Jour. Acad. Sci. Phil., III, 99; Compl. Works, II, 85 (*Ochthera*).—III.  
 LOEW, Cent., II, 56 (*vittata*); Mon. N. A. Dipt., 1, 159, note on Say.  
 OSTEN SACKEN, Cat., 106, syn. with a doubt.  
 MELANDER, Mon. Empid., 1, 236.—Pa.
- mexicana** MELANDER, Mon. Empid., 1, 235, f. 56, 60.—Orizaba, Mex.
- notata** LOEW, Cent., II, 53.—III., Pa.  
 MELANDER, Mon. Empid., 1, 238.

- obsoleta** LOEW, Cent., II, 52.—III.  
MELANDER, Mon. Empid., I, 238. Md.—O. S.
- palloris** COQUILLET, Revis. Empid., 392 (*Mantipiza*).—N. H.  
MELANDER, Mon. Empid., I, 238.
- precatoria** FALLÉN, Empidiae, 10, 34 (*Tachydromia*).—Europe.  
STEPHENS, Illustrations, pl. XLV, f. 3.  
MEIGEN, Syst. Besch., III, 63, pl. XXIII, f. 13; 62, f. 6 (*monostigma*).  
SCHINER, Fauna Austr., I, 83.  
WALKER, List, III, 505, oc. in N. A.—Martin Falls, Canada.  
MELANDER, Mon. Empid., I, 238, notes.
- rogatoris** COQUILLET, Revis. Empid., 392.—N. C.  
MELANDER, Mon. Empid., I, 236, f. 65.—Wis., Wyo.
- scapularis** LOEW, Cent., II, 54.—Md.  
COQUILLET, Revis. Empid., 392, refers to *Neoplata*, n. gen.  
MELANDER, Mon. Empid., I, 234, f. 59.—Me., Pa., Tenn., Wyo.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- superstitiosa** SAY, Long's Exped., Appendix, 376; Compl. Works, I, 256.—N. W. Terr.  
WIEDEMANN, Auss. Zw., II, II.  
OSTEN SACKEN, Cat., 242, quotes a published reference to predaceous habits by Walsh.  
MELANDER, Mon. Empid., I, 236. Drayton, Id., Fla.—Johnson.
- valida** LOEW, Cent., II, 51.—Huds. B. Terr.  
COQUILLET, Proc. Wash. Acad. Sci., II, 423, oc. in Alaska (*Mantipiza*).  
MELANDER, Mon. Empid., I, 238.
- vittata** LOEW, see *empiformis*.

## LITANOYMIA.

- MELANDER, Mon. Empid., I, 231, 1902, def. and table of species.
- elongata** MELANDER, Mon. Empid., I, 232.—Mass., Wis., S. D.
- mexicana** WHEELER and MELANDER, Biologia, Dipt., I, 376 (*Sciodromia*).—Guerrero, Mex.  
MELANDER, Mon. Empid., I, 232.

## CHIROMANTIS.

- RONDANI, Dipt. Ital. Prod., I, 148, 1856.  
MELANDER, Mon. Empid., I, 344, 1902.
- vocatoria** FALLÉN, Empides, 12 (*Tachydromia*).—Europe.  
ZETTERSTEDT, Dipt. Scand., I, 270 (*Phylodromia*).  
MELANDER, Mon. Empid., I, 345.  
N. J.—Smith Cat.,—so far the only record for N. A.

## OREOTHALIA.

- MELANDER, Mon. Empid., I, 233, 1902.
- pelops** MELANDER, Mon. Empid., I, 233.—Kendrick, Idaho.

## HELEODROMIA.

- HALIDAY, Entom. Mag., I, 159, 1833; Westwood's Introd., II, 132, 1840 (the latter *Sciodromia*).  
ZETTERSTEDT, Ins. Lapp., 572, 1838 (*Microccra*).  
SCHINER, Fauna Austr., I, 85, 1862 (*Sciodromia*).  
MELANDER, Mon. Empid., I, 345, 1902 (id.).  
COQUILLET, Proc. Ent. Soc. Wash., V, 250, 1903.

*pullata* MELANDER, Mon. Empid., 1, 345 (*Sciodromia*).—Las Vegas Range, N. M.

*Notc.*—For *Sciodromia bicolor* LOEW, of Coquillett, see *Boreomyia*.

For *Sciodromia palliata* COQUILLET, see *Microphorus*.

For *Sciodromia mexicana* WHEELER and MELANDER, see *Litanomyia*.

#### BOREOMYIA.

COQUILLET, Proc. Ent. Soc. Wash., v, 247, 1903.

*bicolor* LOEW, Cent., III, 34 (*Synamphotera*).—Sitka.

COQUILLET, Revis. Empid., 388; Proc. Wash. Acad. Sci., II, 423, oc. in Popof Id., Alaska (*Sciodromia*); Proc. Wash. Ent. Soc., v, 247, gen. ref.

MELANDER, Mon. Empid., 1, 231, 1902 (*Synamphotera*).

#### ROEDERIOIDES.

COQUILLET, Bull. 47, N. Y. State Mus., 585, 1901.

MELANDER, Mon. Empid., 1, 239, 1902.

*juncta* COQUILLET, loc. cit.—Adirondacks, N. Y.

NEEDHAM, loc. cit., 581, pl. xv, f. 5-8. Reared from aquatic larvæ in creeks.

MELANDER, Mon. Empid., 1, 239.

#### ARDOPTERA.

MACQUART, Dipt. Nord France, 1827; Hist. Nat. Dipt., 1, 358, 1834.

SCHINER, Fauna Austr., 1, 85, 1862.

LOEW, Wien. Ent. Monatsch., II, 7.

MELANDER, Mon. Empid., 1, 239, 1902.

*irrorata* FALLÉN, Empidiæ, 13 (*Tachydromia*).—Europe.

MEIGEN, Syst. Besch., III, 66, pl. XXIII, f. II.

WALKER, Ins. Brit., 1, 103, pl. III, f. 5.

SCHINER, Fauna Austr., 1, 85.

MELANDER, Mon. Empid., 1, 239.

N. A.—“Loew in litt.”—O. S. White Mts., N. H.—Slosson.

#### CLINOCERA.

MEIGEN, Illig. Mag., II, 271, 1803.

LOEW, Wien. Ent. Monatsch., 1858, 238.

SCHINER, Fauna Austr., 1, 84, 1862.

MELANDER, Mon. Empid., 1, 240, 1902, def. and table of species;—the latter amended, p. 346.

MIK, Verh. Zool.-Bot. Ges., 1881, 320, divides into ten genera,—not followed by Melander

*binotata* LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 325.—N. Y.

MELANDER, Mon. Empid., 1, 243.—Montreal, Canada.

*conjuncta* LOEW, Wien. Ent. Monatsch., IV, 79.—Middle States.

MELANDER, Mon. Empid., 1, 242; note on type, 346.

*dolicheretma* MELANDER, Mon. Empid., 1, 241.—Juliaetta, Idaho.

*fuscipennis* LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 324.—White Mts., N. H.

MELANDER, Mon. Empid., 1, 245.

*lecta* MELANDER, Mon. Empid., 1, 243.—Kendrick and Lewiston, Idaho.

*lepida* MELANDER, Mon. Empid., 1, 241.—Juliaetta, Idaho.



*lineata* LOEW, Cent., II, 50.—Pa.

MELANDER, Mon. Empid., I, 241, f. 61, 62.—Seattle, Wash.

*maculata* LOEW, Wien. Ent. Monatsch., IV, 79.—Middle States.

MELANDER, Mon. Empid., I, 244.

*maculipes* BIGOT, Bull. Soc. Zool. France, XII, 22.—Cal.; placed among the Leptidæ.

MELANDER, Mon. Empid., I, 245, notes.

*simplex* LOEW, Cent., II, 49.—Huds. B. Terr.

? WALKER, List, III, 504 (*Heliodromia longipes*).—Martin Falls, Canada. [O. S., with query.]

MELANDER, Mon. Empid., I, 240.

*stagnalis* HALIDAY, Ent. Mag., I, 159 (*Hemcrodromia*).—Europe.

SCHINER, Fauna Austr., I, 84.

LUNDBECK, Dipt. Grœnl., I, 207, oc. in Greenland.

COQUILLET, Proc. Ent. Soc. Wash., V, 264, mentions this as *Hydrodromia*.

*taos* MELANDER, Mon. Empid., I, 242.—Franconia, N. H.

### MEGHYPERUS.

LOEW, Stett. Ent. Zeit., XI, 1850, 303.

SCHINER, Fauna Austr., I, 78, 1862.

MELANDER, Mon. Empid., I, 255, 1902, def. and table of species.

*nitidus* MELANDER, Mon. Empid., I, 255, f. 72, 73.—Moscow, Idaho.

*occidens* COQUILLET, Revis. Empid., 435.—S. Cal.

### SYNECHES.

WALKER, Dipt. Saund., 165, 1852.

RONDANI, Dipt. Ital. Prod., 152, 1856 (*Pterospilus*).

LOEW, Dipterenfauna Südafrika's, 1860, 259; quoted in part by O. S., Cat., 240.

SCHINER, Fauna Austr., I, 77, 1862.

COQUILLET, Revis. Empid., 436, 1895, table of species.

SCHWARZ, Proc. Wash. Acad. Sci., 1891, 146, feeding habits; quoted by Melander, Mon. Empid., I, 251, footnote.

MELANDER, Mon. Empid., I, 251, 1902, def. and table; the latter amended, 346.

COQUILLET, Proc. Ent. Soc. Wash., V, 246, 1903, proposes to replace *Syneches* with *Acromyia* LATR.; but the latter was never published as a generic or subgeneric name.

*albonotatus* LOEW, Cent., II, 18.—D. C.

MELANDER, Mon. Empid., I, 252.

*debilis* COQUILLET, Revis. Empid., 436.—D. C., Md.

MELANDER, Mon. Empid., I, 253.—Ga.

*hyalinus* COQUILLET, Revis. Empid., 437.—Md.

MELANDER, Mon. Empid., I, 252. N. J.—Smith Cat.

*longipennis* MELANDER, Mon. Empid., I, 346.—Hertford Co., N. C.

*pusillus* LOEW, Cent., I, 25.—N. Y., Chicago.

WILLISTON, Trans. Ent. Soc. Lond., 1896, 308, pl. XI, f. 84.—St. Vincent, W. I.

*Note*.—In Scudder's Butterflies of New England, III, 1913, Dr. Williston discusses the case of a specimen of this species supposed to have been bred from the pupa of a butterfly, *Lycæna neglecta*.

MELANDER, Mon. Empid., I, 253.—Wis., Kans., N. M.

- quadrangularis** WHEELER and MELANDER, *Biologia*, Dipt., I, 374.—Tabasco, Mex.  
MELANDER, *Mon. Empid.*, I, 253, redesc.
- rufus** LOEW, *Cent.*, I, 24.—N. Y., Chicago.  
MELANDER, *Mon. Empid.*, I, 253.—Ohio, Ind., Wis.  
N. J.—Smith Cat.
- simplex** WALKER, *Dipt. Saund.*, 165, pl. v, f. 7.—U. S.  
VAN DER WULP, *Tijdschr. v. Ent.*, x, 139, pl. III, f. 18-21 (*punctipennis*).  
Wis.  
LOEW, *Zeitsch. f. Ges. Naturwiss.*, xxxvii, 115, syn.  
MELANDER, *Mon. Empid.*, I, 254, f. 86.—Mass. and Ontario to Wis. and Ill.  
N. J.—Smith Cat.; Charlotte Harbor, Fla.—Johnson.
- thoracicus** SAY, *Jour. Acad. Sci. Phil.*, III, 76; *Compl. Works*, II, 68 (*Hybos*).—Pa.  
WIEDEMANN, *Auss. Zw.*, I, 538 (id.).  
MACQUART, *Dipt. Exot.*, I, 2, 156, pl. XIII, f. I (id.).—Pa.  
MELANDER, *Mon. Empid.*, I, 254, f. 84.—Pa. to Kans.  
N. J.—Smith Cat.

## SYNDYAS.

- LOEW, *Dipterenfauna Südafrika's*, 260, 1860.  
OSTEN SACKEN, *Cat.*, 240, 1878.  
MELANDER, *Mon. Empid.*, I, 254, 1902, def. and table.
- dorsalis** LOEW, *Cent.*, I, 26.—N. Y.  
MELANDER, *Mon. Empid.*, I, 254.—Ill.
- polita** LOEW, *Cent.*, I, 27.—Carolina.  
MELANDER, *Mon. Empid.*, I, 254, f. 83.—Mass., Ga., Ala., La., Kans., Ohio, Mich.

## HYBOS.

- MEIGEN, *Illig. Mag.*, II, 269, 1803; *Syst. Besch.*, II, 246, 1820.  
SCHINER, *Fauna Austr.*, I, 77, 1862.  
OSTEN SACKEN, *Cat.*, 240, note on Walker's types.  
COQUILLET, *Revis. Empid.*, 437, 1895, table of species; *ibid.* (*Euhybos*).  
[Wh. and Mel.]  
WHEELER and MELANDER, *Biologia*, Dipt., I, 372, 1902, table of Mexican species.  
MELANDER, *Mon. Empid.*, I, 245, 1902, def. and table of species.
- dimidiata** BELLARDI, see *sequens*.
- dimidiata** LOEW, see *electus*.
- duplex** WALKER, see *triplex*.
- electus** MELANDER, *Mon. Empid.*, I, 245, change of name; 247, desc.—Tifton, Ga.; New Bedford, Mass.  
LOEW, *Wien. Ent. Monatsch.*, v, 36 (*dimidiata*, preoc.).—Cuba.  
WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 307, pl. XI, f. 83 (*dimidiata* Lw.).—St. Vincent, W. I.
- mellipes** WHEELER and MELANDER, *Biologia*, Dipt., I, 373.—Guerrero, Mex.  
MELANDER, *Mon. Empid.*, I, 247, f. 78, redesc.
- purpureus** WALKER, see *triplex*.
- reversus** WALKER, *List*, III, 487.—Trenton Falls, N. Y.  
MELANDER, *Mon. Empid.*, I, 248.—Jamesburg, N. J.
- sequens** MELANDER, *Mon. Empid.*, I, 245, change of name; 249, desc.  
BELLARDI, *Saggio*, II, 97 (*dimidiata*, preoc.).—Mex.

- slossonæ** COQUILLET, Revis. Empid., 437.—N. H.  
 MELANDER, Mon. Empid., 1, 247.—Mass., Wis.
- spinicosta** WHEELER and MELANDER, Biologia, Dipt., 1, 374.—Guerrero, Mex.  
 MELANDER, Mon. Empid., 1, 246, f. 77, redesc.
- subjectus** WALKER, see *triplex*.
- triplex** WALKER, List, III, 486 and 487 (*triplex*, *purpureus*, *duplex*, and *subjectus*).—Trenton Falls, N. Y.; Ga.; N. Y.; Martin Falls, Canada.  
 [Wheeler and Melander.]  
 COQUILLET, Revis. Empid., 437, refers to *Eulybus*, n. gen.; Proc. U. S. N. M., XXII, 251, oc. of *subjectus* in Porto Rico.  
 WHEELER and MELANDER, Biologia, Dipt., 1, 373, notes on varieties, recognizing as such *triplex*, *purpureus*, *subjectus*, *duplex*, *locwi*, *bakeri*, *tabascensis*, and *yucatanus*.—Tabasco and Yucatan, Mex.  
 MELANDER, Mon. Empid., 1, 248, f. 79, 80, 81.—Eastern half of N. A., from Mass. to Vera Cruz and Yucatan, Mex.  
 COQUILLET, Proc. Ent. Soc. Wash., v, 264, table of three supposedly valid species, *Eulybus subjectus*, *purpureus*, and *triplex*.
- typicus** WHEELER and MELANDER, Biologia, Dipt., 1, 373.—Guerrero, Mex.  
 MELANDER, Mon. Empid., 1, 246, redesc.

## OEDALEA.

- MEIGEN, Syst. Besch., II, 355, 1820.  
 SCHINER, Fauna Austr., 1, 80, 1862.  
 MELANDER, Mon. Empid., 1, 256, 1902.  
 First notice of occurrence in N. A. by Mrs. Slosson, Ent. News, IX, 352.
- ohioensis** MELANDER, Mon. Empid., 256, f. 74, 75, 76.—Vinton, Ohio.  
 N. J.—Smith Cat. (? *stigmatella* ZETT., a European species); syn. and notes by Melander, op. cit., 347.
- pruinosa** COQUILLET, Proc. Ent. Soc. Wash., v, 267.—Franconia, N. H.

## LEPTOPEZA.

- MACQUART, Dipt. du Nord France, 1827; Hist. Nat. Dipt., 1, 320, 1834.  
 SCHINER, Fauna Austr., 1, 82, 1862.  
 COQUILLET, Revis. Empid., 435, 1895, table of species.  
 MELANDER, Mon. Empid., 1, 257, 1902, def. and table of species.
- compta** COQUILLET, Revis. Empid., 435.—N. H., Mass.  
 MELANDER, Mon. Empid., 1, 258, f. 70.—Ohio, Tenn., Ill., Wis., Ida.  
 N. J.—Smith Cat.
- flavipes** MEIGEN, Syst. Besch., II, 353 (*Hybos*).—Europe.  
 SCHINER, Fauna Austr., 1, 82.  
 OSTEN SACKEN, Cat., 104, oc. on Saskatchewan Riv., Canada.  
 MELANDER, Mon. Empid., 1, 258, f. 68.—Dixie Landing, Va.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.

## OCYDROMIA.

- MEIGEN, Syst. Besch., II, 311, 1820.  
 SCHINER, Fauna Austr., 1, 81, 1862.  
 MELANDER, Mon. Empid., 1, 259, 1902.
- glabricula** FALLÉN, Empidiæ, 33 (*Empis*).—Europe.  
 MEIGEN, Syst. Besch., II, 353 and 354 (*rufipes* and *scutellata*); VI, 334 (*dorsalis* and *nigripennis*).

LOEW, Isis, 1840 (*melanopleura*).

SCHINER, Fauna Austr., 1, 81, syn. and desc.

OSTEN SACKEN, Cat., 100, oc. at Sitka—"Loew in litt."

WALKER, List, III, 488 (*peregrinator*).—Trenton Falls, N. Y. [Mel.]

COQUILLET, Proc. Wash. Acad. Sci., 11, 421, oc. in Sitka.

MELANDER, Mon. Empid., 1, 259, f. 66, 67.—Wis., Wyo., Vancouver Id.

#### MEGACYTTARUS.

BIGOT, Bull. Soc. Ent. France, 1880, 47.

COQUILLET, Revis. Empid., 388, 1895, makes a synonym of *Rhamphomyia*.

MELANDER, Mon. Empid., 1, 350, 1902.

*argenteus* BIGOT, loc. cit.—Col.

COQUILLET, Revis. Empid., 388, regards as the female of *Rhamphomyia limbata* Lw.

MELANDER, Mon. Empid., 1, 350, translates pt. desc.; accepts provisionally.

#### BRACHYSTOMA.

MEIGEN, Syst. Besch., III, 12, 1822.

SCHINER, Fauna Austr., 1, 117, 1862.

MELANDER, Mon. Empid., 1, 259, 1902, def. and table of species.

*binnumus* LOEW, see *Blepharoprocta*.

*occidentalis* MELANDER, Mon. Empid., 1, 260, f. 89.—Wash., Idaho.

*robertsonii* COQUILLET, Revis. Empid., 393.—Ill.

MELANDER, Mon. Empid., 1, 260.—Tenn., Ohio.

*serrulata* LOEW, see *Blepharoprocta*.

#### BLEPHAROPROCTA.

LOEW, Cent., II, 17, 1862.

MELANDER, Mon. Empid., 1, 261, 1902, def. and table of species.

*binnumus* LOEW, Cent., II, 16 (*Brachystoma*).—D. C.

MELANDER, Mon. Empid., 1, 261, f. 91, 92.

*nigrimanus* LOEW, Cent., II, 17.—Ill.

MELANDER, Mon. Empid., 1, 261.

*serrulata* LOEW, Cent., 1, 23 (*Brachystoma*).—Ga.

MELANDER, Mon. Empid., 1, 262, f. 90.

Ga. and Ohio—O. S.

#### EMPIMORPHA.

COQUILLET, Revis. Empid., 396, 1895, def. and table of species.

MELANDER, Mon. Empid., 283, note; 329, def. and table of species, 1902.

Doubtfully distinct from *Empis*—Melander.

*barbata* LOEW, Cent., II, 19 (*Empis*).—Cal.

COQUILLET, Revis. Empid., 396, refers to this genus.

MELANDER, Mon. Empid., 1, 329, f. 106.—Cal.

*comantis* COQUILLET, Revis. Empid., 396.—N. Cal.

MELANDER, Mon. Empid., 1, 330, 353, female, etc.—Cal.

*geneatis* MELANDER, Mon. Empid., 1, 329, f. 105.—Cal.

#### PACHYMERIA.

STEPHENS, Syst. Catal., 1829.

MACQUART, Hist. Nat. Dipt., 1, 333 (*Pachymerina*); II, 657, adopts earlier name, 1834.

LOEW, Wien. Ent. Monatsch., VIII, 12.

SCHINER, Fauna Austr., I, 110, 1862.

MELANDER, Mon. Empid., I, 330, 1902, def. and table of species.

**brevis** LOEW, Cent., II, 22.—D. C.

MELANDER, Mon. Empid., I, 330.

**pudica** LOEW, Cent., I, 35; Wien. Ent. Monatsch., VIII, 12 ("The *P. tumida* quoted there as a synonym of *P. pudica* does not exist"—O. S.).—D. C.

MELANDER, Mon. Empid., I, 331.

### EMPIS.

LINNÉ, Fauna Suecica, 2d edition, p. 466, 1761.

MEIGEN, Syst. Besch., III, 15, 1822.

SCHINER, Fauna Austr., I, 102, 1862.

BIGOT, Bull. Soc. Ent. France, 1880, 47 (*Enoplemphis*).

COQUILLET, Revis. Empid., 392-400, 1895, table of species; syn.

WHEELER and MELANDER, Biologia, Dipt., I, 366, 1902, table of Mexican species.

MELANDER, Mon. Empid., I, 282, 1902, full discussion and table of species.

**abcirus** WALKER, List, III, 494.—Ga.

MELANDER, Mon. Empid., I, 299, quotes Walker.

**æripes** MELANDER, Mon. Empid., I, 328, f. 141.—Idaho.

**ærobotica** MELANDER, Mon. Empid., I, 323.—Cal. and Moscow, Idaho.

ALDRICH and TURLEY, Amer. Nat., XXXIII, 809, habits—"A Balloon-making Fly."—Moscow, Idaho; determined as "*Empis* near *poplitea* Lw."

**agasthus** WALKER, List, III, 496.—Martin Falls, Canada.

COQUILLET, Revis. Empid., 397, quotes from Walker.

**alûrichii** MELANDER, Mon. Empid., I, 309, f. 110.—Moscow, Ida., and Mt. Hood, Ore.

**amystis** WALKER, List, III, 493.—N. Y.

MELANDER, Mon. Empid., I, 299.

**annulipes** WHEELER and MELANDER, Biologia, Dipt., I, 369.—Amula in Guerrero, Mex.

MELANDER, Mon. Empid., I, 115, same redesc.

**armipes** LOEW, Cent., I, 300, 353.

**arthritica** MELANDER, Mon. Empid., I, 318, f. 135, 144.—Montgomery Co., Pa.

**asema** MELANDER, Mon. Empid., I, 294, f. 130.—Austin, Tex.

**atra** WIEDEMANN, Auss. Zw., II, 1.—St. Croix.

**atrifemur** WHEELER and MELANDER, Biologia, Dipt., I, 370.—Guerrero, Mex.

MELANDER, Mon. Empid., I, 290, notes.

**avida** COQUILLET, Revis. Empid., 405.—Ill.

MELANDER, Mon. Empid., I, 307.

**azteca** WHEELER and MELANDER, Biologia, Dipt., I, 369.—Amula in Guerrero, Mex.

MELANDER, Mon. Empid., I, 291, f. 119, redesc.

**barbata** LOEW, see *Empimorpha*.

**benigna** OSTEN SACKEN, see *Lampremphis*.

**bicolor** BELLARDI, Saggio, II, 98.—Chiantla, Mex.

WHEELER and MELANDER, Biologia, Dipt., I, 370, oc. in Amula, Mex., and note.

MELANDER, Mon. Empid., I, 291, f. 112, 113, redesc.

**bigoti** MELANDER, Mon. Empid., I, 319, change of name and transl. of desc.

BIGOT, Bull. Soc. Ent. France, 1882, No. 9, p. 112 (*Enoplemphis cinerea*, precoc. in *Empis*).—Cal.

- COQUILLET, Revis. Empid., 388, 397, notes; in Proc. Ent. Soc. Wash., v, 265, he states that *manca* is "almost certainly" the same. Melander, *in litt.*, does not agree.
- brachysoma** COQUILLET, Proc. Wash. Acad. Sci., II, 409.—Saldovia, Alaska.  
MELANDER, Mon. Empid., I, 308.  
*Note.*—For the "*brachystoma* Coq. MSS." of Smith's N. J. cat., see *Hilara umbrosa*.
- cacuminifer** MELANDER, Mon. Empid., I, 304, f. 124.—Ohio, Ala.  
**cæligena** MELANDER, Mon. Empid., I, 314, f. 107.—Ala.  
**canaster** MELANDER, Mon. Empid., I, 326, f. 139, 140.—Idaho, Ore.  
**capta** COQUILLET, Revis. Empid., 405.—N. C., Ga.  
MELANDER, Mon. Empid., I, 310.
- chichimeca** WHEELER and MELANDER, see *Lamprcmphis*.  
**cinerea** BIGOT, see *bigoti*.
- clauda** COQUILLET, Proc. Wash. Acad. Sci., II, 407.—Yakutat, Popof Id., and Kadiak, Alaska.  
MELANDER, Mon. Empid., I, 321.
- clausa** COQUILLET, Revis. Empid., I, 401.—Ill.  
MELANDER, Mon. Empid., I, 293, f. 129.—Western U. S., common.
- colonica** WALKER, List, III, 498.—Nova Scotia.  
MELANDER, Mon. Empid., I, 300.
- comantis** COQUILLET, Revis. Empid., 402.—N. Cal.  
MELANDER, Mon. Empid., I, 308.
- compta** COQUILLET, Revis. Empid., 405.—Ill.  
MELANDER, Mon. Empid., I, 306, male.—Opelousas, La.
- conjuncta** COQUILLET, Proc. Wash. Acad. Sci., II, 411.—Sitka and Orca, Alaska.  
MELANDER, Mon. Empid., I, 277 (*Ragas*). [Coq., Proc. Ent. Soc. Wash., v, 264.]
- cormus** WALKER, List, III, 496.—Martin Falls, Canada.  
MELANDER, Mon. Empid., I, 296, note.
- cyanea** BELLARDI, see *Lamprcmphis*.  
**diaphorina** OSTEN SACKEN, see *Lamprcmphis*.  
**distans** LOEW, Cent., VIII, 54.—Ga.  
MELANDER, Mon. Empid., I, 295, f. 127.—Conn. and La.
- dolobraria** MELANDER, Mon. Empid., I, 325.—Cal.  
subspecies **disconvenita**, loc. cit.—Cal.
- dolorosa** WHEELER and MELANDER, Biologia, Dipt., I, 370.—Amula in Guerrero, Mex.  
MELANDER, Mon. Empid., I, 295, f. 128, redesc.
- enodis** MELANDER, Mon. Empid., I, 303, f. 125.—Glen Ellyn and Chicago, Ill.  
**eudamides** WALKER, List, III, 493.—N. A.  
MELANDER, Mon. Empid., I, 299, quotes desc.
- exilis** COQUILLET, Proc. Ent. Soc. Wash., v, 269.—Atherton, Mo.  
**falcata** MELANDER, Mon. Empid., I, 326, f. 137.—Berkeley, Cal.; Juliaetta, Idaho.  
**frontalis** COQUILLET, Proc. Ent. Soc. Wash., v, 271.—St. George Id., Alaska.  
**fumida** COQUILLET, Proc. Wash. Acad. Sci., II, 409.—Metlakahtla, Virgin Bay, and Kukak Bay, Alaska.  
MELANDER, Mon. Empid., I, 313.
- geniculata** KIRBY, Fauna Boreali Americana, Ins., 311.—Canada; repub. in Canad. Ent., XIII, 165.  
MELANDER, Mon. Empid., I, 296. See *luctuosa*.
- gladiator** MELANDER, Mon. Empid., I, 316, f. 134.—Lawrence, Kans.  
**gulosa** COQUILLET, Revis. Empid., 408.—Ill.  
MELANDER, Mon. Empid., I, 297.



- hirtipes** COQUILLET, Proc. Ent. Soc. Wash., v, 270 (*hirtipes* and *tenebrosa*, male and female).—White Mts., N. M. [Melander, *in litt.*]
- humilis** COQUILLET, Rev. Empid., 403.—Ill.  
MELANDER, Mon. Empid., 1, 297.
- infumata** COQUILLET, Proc. Wash. Acad. Sci., II, 409.—Popof Id., Alaska.  
MELANDER, Mon. Empid., 1, 314.
- johnsoni** MELANDER, Mon. Empid., 1, 303, f. 123.—Montgomery Co., Pa.
- labiata** LOEW, Cent., 1, 33.—D. C.  
MELANDER, Mon. Empid., 1, 294.
- lævigata** LOEW, Cent., v, 49.—White Mts., N. H.  
MELANDER, Mon. Empid., 1, 312.
- laniventris** ESCHOLTZ, Entomographien, 1, 1822, 113.—Unalaska (Fox Ids.).  
WIEDEMANN, Auss. Zw., II, 6, quotes desc.  
MACQUART, Dipt. Exot., 1, 2, 162 (*Eriogaster*, n. gen.).  
COQUILLET, Dipt. of Commander Ids., 343, oc. in Copper Ids., Alaska;  
Proc. Wash. Acad. Sci., II, 408, oc. at Popof Id., Alaska, common.  
MELANDER, Mon. Empid., 1, 300.
- leptogaster** LOEW, Cent., III, 30.—D. C.  
MELANDER, Mon. Empid., 1, 300.
- levicula** COQUILLET, Revis. Empid., 406.—Ill.  
MELANDER, Mon. Empid., 1, 307.
- longipes** LOEW, Cent., v, 51.—N. Y., N. J.  
MELANDER, Mon. Empid., 1, 298, 353.
- loripedis** COQUILLET, Revis. Empid., 400.—Ill.  
MELANDER, Mon. Empid., 1, 316, f. 131.—Ill. and Ohio.  
N. J.—Smith Cat.
- luctuosa** KIRBY, Fauna Boreali Americana, Ins., 311; repub. in Canad. Ent., XIII, 165.—Canada.  
COQUILLET, Revis. Empid., 1, 397, puts *geniculata* as a synonym: I should think both quite unrecognizable.  
MELANDER, Mon. Empid., 1, 296, quotes desc.
- manca** COQUILLET, Revis. Empid., 406.—Cal.  
MELANDER, Mon. Empid., 1, 320.  
See *bigoti*.
- mira** BIGOT, Bull. Soc. Ent. France, 1880, No. 6, p. 63 (*Enoplemphis*).—Cal.  
COQUILLET, Revis. Empid., 388, note.  
MELANDER, Mon. Empid., 1, 319, transl. desc.
- mixopolia** MELANDER, Mon. Empid., 1, 327.—Idaho.
- montezuma** WHEELER and MELANDER, Biologia, Dipt., 1, 369.—Santiago in Jalisco, Mex.  
MELANDER, Mon. Empid., 1, 290, f. 114, redesc.
- neomexicana** MELANDER, Mon. Empid., 1, 352.—Las Vegas Range, N. M.
- nodipes** MELANDER, Mon. Empid., 1, 324, f. 143.—Magdalena, N. M.
- nuda** LOEW, Cent., II, 20.—Ill.  
MELANDER, Mon. Empid., 1, 305, f. 126.—Ill.
- obesa** LOEW, Cent., 1, 28.—Mass.  
COQUILLET, Revis. Empid., 403 (*ravida*).—White Mts., N. H.  
MELANDER, Mon. Empid., 1, 309, 310, 353, desc. and syn. from Loew's type.
- ollius** WALKER, List, III, 493.—Nova Scotia.  
MELANDER, Mon. Empid., 1, 299, quotes desc.
- otiosa** COQUILLET, Revis. Empid., 407, 408.—Ill., Conn.  
MELANDER, Mon. Empid., 1, 302, f. 122.—Mass., N. H., Kans., La.  
Montreal—Chagnon.

- pallida* LOEW, Cent., I, 30.—N. Y.  
MELANDER, Mon. Empid., I, 301.
- pegasus* OSTEN SACKEN, Biologia, Dipt., I, 216.—Panama.  
MELANDER, Mon. Empid., I, 292.
- pellucida* COQUILLET, Proc. Wash. Acad. Sci., II, 408.—Alaska, several places.  
MELANDER, Mon. Empid., I, 313.
- podagra* MELANDER, Mon. Empid., I, 318.—Julietta and Peck, Idaho.
- pæciloptera* LOEW, Cent., I, 31.—N. Y.  
MELANDER, Mon. Empid., I, 298.
- poplitea* LOEW, Cent., III, 29.—Sitka.  
COQUILLET, Proc. Wash. Acad. Sci., II, 407, oc. in Alaska, several places, and in Col.  
MELANDER, Mon. Empid., I, 321, 324, f. 136, 145 (*poplitea* and *serperastrorum*), 353, syn. from Loew's type.—Col. and Ida.  
N. M.—Coq. See *ærobraticus*.
- ravida* COQUILLET, see *obesa*.
- reciproca* WALKER, Trans. Ent. Soc., n. ser., IV, 147.—U. S.
- rubida* WHEELER and MELANDER, Biologia, Dipt., I, 368.—Chilpancingo, Guerrero, Mex.  
MELANDER, Mon. Empid., I, 302, f. 121, redesc.
- rufescens* LOEW, Cent., V, 52.—White Mts., N. H.  
MELANDER, Mon. Empid., I, 302, f. 120.—Mass.  
Axton, N. Y.—M. and H.
- scatophagina* MELANDER, Mon. Empid., I, 351.—Sitka, Alaska.
- scoparia* COQUILLET, Proc. Ent. Soc. Wash., V, 269.—Franconia, N. H.
- serperastrorum* MELANDER, see *poplitea*.
- sociabilis* WILLISTON, see *Rhamphomyia*.
- sordida* LOEW, Cent., I, 29.—D. C.  
MELANDER, Mon. Empid., I, 298.
- spectabilis* LOEW, Cent., II, 21.—Md.  
MELANDER, Mon. Empid., I, 311, f. 109.—Delaware Co., Pa.  
N. J.—Smith Cat.
- spiloptera* WIEDEMANN, Auss. Zw., II, 5.—Mex.  
LOEW, Cent., III, 28 (*picta*); vol. I, p. 261, syn.—Mex.  
MELANDER, Mon. Empid., I, 292.
- squamipes* COQUILLET, Proc. Ent. Soc. Wash., V, 271.—Sierra Madre, Chihuahua, Mex.
- stenoptera* LOEW, Cent., V, 50.—White Mts., N. H.  
MELANDER, Mon. Empid., I, 304, 353.
- suavis* LOEW, see *Lamprcmphis*.
- superba* LOEW, see *Lamprcmphis*.
- tenebrosa* COQUILLET, Revis. Empid., 404.—Texas.  
MELANDER, Mon. Empid., I, 311.
- tenebrosa* COQUILLET (*bis*), see *hirtipes*.
- teres* MELANDER, Mon. Empid., I, 315, f. 133, 142.—Idaho.
- tersa* COQUILLET, Revis. Empid., I, 404.—N. C.  
MELANDER, Mon. Empid., I, 311.
- totipennis* BELLARDI, Saggio, II, 99.—Mex.  
MELANDER, Mon. Empid., I, 292.
- triangula* COQUILLET, Proc. Wash. Acad. Sci., II, 410.—Alaska, several places; British Col.  
MELANDER, Mon. Empid., I, 296. Hudsonian Zone, N. M.—Ckll.

- tridentata* COQUILLET, Proc. U. S. N. M., XXIII, 609.—Delaware Co., Pa.  
MELANDER, Mon. Empid., I, 301, f. 132.  
N. J.—Smith Cat.
- vaginifer* MELANDER, Mon. Empid., I, 352.—D. C.
- valentis* COQUILLET, Revis. Empid., 402.—N. Cal.  
MELANDER, Mon. Empid., I, 320, f. 138.—Cal.
- varipes* LOEW, Cent., I, 34.—Pa.  
MELANDER, Mon. Empid., I, 307.  
White Mts., N. H.—Slosson; Montreal—Chagnon.
- violacea* LOEW, see *Lampyrmpis*.
- virgata* COQUILLET, Revis. Empid., 408; Proc. Wash. Acad. Sci., II, 408, oc.—  
Wash.; Alaska, common.  
MELANDER, Mon. Empid., I, 312, f. 108.
- xochitl* WHEELER and MELANDER, Biologia, Dipt., I, 370.—Chilpancingo in Guerrero, Mex.  
MELANDER, Mon. Empid., I, 292, f. 118, redesc.

## HILARA.

- MEIGEN, Syst. Besch., III, I, 1822.  
SCHINER, Fauna Austr., I, 112, 1862.  
COQUILLET, Revis. Empid., 394, 1895, table of species.  
MELANDER, Mon. Empid., I, 262, 1902, def. and table of species.
- atra* LOEW, Cent., II, 42.—Ill.  
MELANDER, Mon. Empid., I, 266.—Mass., Col., N. M.  
Beulah, N. M.—Skimmer.
- aurata* COQUILLET, Proc. Wash. Acad. Sci., II, 411.—Kukak Bay, Alaska, and Eastport, Me.  
MELANDER, Mon. Empid., I, 269.
- baculifer* MELANDER, Mon. Empid., I, 271, f. 96.—Tifton, Ga.
- basalis* LOEW, Cent., II, 45.—Ill.  
MELANDER, Mon. Empid., I, 267.
- bella* MELANDER, Mon. Empid., I, 271, f. 94.—Mass.
- brevipila* LOEW, Cent., II, 41.—Ill.  
MELANDER, Mon. Empid., I, 266.
- cana* COQUILLET, Revis. Empid., 395.—S. Cal.  
MELANDER, Mon. Empid., I, 269.
- carbonaria* MELANDER, Mon. Empid., I, 272.—New Bedford, Mass.
- congregaria* MELANDER, Mon. Empid., I, 272.—Monterey Co., Cal.  
Mentioned with *nugax* as "*Hilara* species" by Wheeler, Archiv. f. Entwickelungsmechanik der Organismen, 1899, VIII, 375, where their habit of flying in swarms is discussed.
- femorata* LOEW, Cent., II, 35.—Md.  
MELANDER, Mon. Empid., I, 264.—N. J., Ohio, Wis.  
White Mts., N. H.—Slosson; N. J.—Smith Cat.
- gracilis* LOEW, Cent., II, 44.—Pa.  
MELANDER, Mon. Empid., I, 266.  
White Mts., N. H.—Slosson; N. J.—Smith Cat.
- johnsoni* COQUILLET, Revis. Empid., 395.—Ala.  
MELANDER, Mon. Empid., I, 268.—Eufala, Ala.
- leucoptera* LOEW, Cent., II, 43.—Fla.  
MELANDER, Mon. Empid., I, 266.  
N. J.—Smith Cat.; Charlotte Harbor, Fla.—Johnson.

- lutea** LOEW, Cent., III, 33.—D. C.  
MELANDER, Mon. Empid., I, 267. N. J.—Smith Cat.
- macroptera** LOEW, Cent., III, 32.—D. C.  
MELANDER, Mon. Empid., I, 267.
- migrata** WALKER, List, III, 491.—Martin Falls, Canada.  
MELANDER, Mon. Empid., I, 271, quotes desc.
- mutabilis** LOEW, Cent., II, 40.—Ill.  
MELANDER, Mon. Empid., I, 265.  
N. J.—Smith Cat.; Saranac Inn, N. Y.—Needham.
- nigriventris** LOEW, Cent., II, 38.—Pa.  
MELANDER, Mon. Empid., I, 265.
- nugax** MELANDER, Mon. Empid., I, 273.—Monterey Co., Cal.  
See note to *congregaria*.
- plebeia** WALKER, Trans. Ent. Soc., n. ser., IV, 148.—U. S.  
MELANDER, Mon. Empid., I, 270, quotes desc.
- quadrivittata** MEIGEN, Syst. Besch., III, 7.—Europe.  
SCHINER, Fauna Austr., I, 115.  
COQUILLET, Proc. Wash. Acad. Sci., II, 412, oc. at Kukak Bay, Popof Id., and Kadiak, all in Alaska.  
MELANDER, Mon. Empid., I, 264.
- seriata** LOEW, Cent., V, 63.—White Mts., N. H.  
MELANDER, Mon. Empid., I, 268.—N. J.
- testacea** LOEW, Cent., V, 64.—N. H.  
MELANDER, Mon. Empid., I, 268.  
N. J.—Smith Cat.; New Rochelle, N. Y.—O. S.
- transfuga** WALKER, List, III, 491.—Martin Falls, Canada.  
COQUILLET, Proc. Wash. Acad. Sci., II, 411, oc. at Berg Bay and Popof Id., Alaska.  
MELANDER, Mon. Empid., I, 270, quotes desc.
- tristis** LOEW, Cent., V, 62.—N. H.  
MELANDER, Mon. Empid., I, 267.  
SLOSSON, Ent. News, XIV, 267, habits of adult.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.
- trivittata** LOEW, Cent., II, 39.—Ill.  
MELANDER, Mon. Empid., I, 265 (habits on p. 200).—Central Texas.  
White Mts., N. H.—Slosson.
- umbrosa** LOEW, Cent., II, 34.—Ill.  
? MELANDER, Mon. Empid., I, 264.—Wood's Hole, Mass., with a doubt.  
According to Melander, this is the "*Empis brachystoma* Coq. MSS." of Smith's N. J. Cat.; notwithstanding that *umbrosa* is also recorded there.
- unicolor** LOEW, Cent., II, 37.—Md.  
MELANDER, Mon. Empid., I, 265.—Mass.  
Axton, N. Y.—M. and H.
- velutina** LOEW, Cent., II, 36.—D. C.  
MELANDER, Mon. Empid., I, 264.
- viridis** COQUILLET, see *Lamprempis*.
- wheeleri** MELANDER, Psyche, June, 1901, 213, figs.—Wyo.  
MELANDER, Mon. Empid., I, 270, f. 95, redesc.

## OREOGETON.

SCHINER, Wien. Ent. Monatsch., iv, 53, 1860; Fauna Austr., i, 112, 1862.

MELANDER, Mon. Empid., i, 275, def. and table, 1902 (*Gloma* MEIG.—the correction is by Melander in litt.).

The N. A. species have been referred heretofore entirely to *Gloma*.

*obscura* LOEW, Cent., v, 68.—N. H.

COQUILLET, Proc. Wash. Acad. Sci., II, 412, oc. in Yakutat and Virgin Bay, Alaska.

MELANDER, Mon. Empid., i, 276, f. 93.—Idaho.

White Mts., N. H.—Slosson.

*rufa* LOEW, Cent., v, 67.—N. H.

MELANDER, Mon. Empid., i, 275.

? *phthia* WALKER, List, III, 492.—Trenton Falls, N. Y.

"Is not a *Gloma*—Loew in litt."—O. S.

*scopifera* COQUILLET, Proc. Wash. Acad. Sci., II, 412.—Sitka, Alaska.

Melander, Mon. Empid., i, 276.

## RAGAS.

WALKER, Entom. Mag., iv, 1837, 229.

SCHINER, Fauna Austr., i, 111, 1862.

MELANDER, Mon. Empid., i, 276, 1902, def. and table of species.

*conjuncta* COQUILLET, of Melander, see *Empis*.

*mabelæ* MELANDER, Mon. Empid., i, 277, f. 98.—Moscow, Idaho.

## HORMOPEZA.

ZETTERSTEDT, Ins. Lapp., 540, 1840; Dipt. Scand., i, 257, 1842.

SCHINER, Fauna Austr., i, 111, 1862.

MELANDER, Mon. Empid., i, 273, 1902, def. and table of species.

*brevicornis* LOEW, Cent., v, 65.—Yukon R., Alaska.

MELANDER, Mon. Empid., i, 273, f. 87.—S. D., Idaho, Wyoming.

*bullata* MELANDER, Mon. Empid., i, 274, f. 88.—Jackson's Lake, Wyo.

*nigricans* LOEW, Cent., v, 66.—Yukon R., Alaska.

MELANDER, Mon. Empid., i, 275.—Moscow, Idaho.

## LAMPREMPIS.

WHEELER and MELANDER, Biologia, Dipt., i, 366, 1902 (subg. of *Empis*).

MELANDER, Mon. Empid., i, 1902, 278, as separate genus; table of species.

*benigna* OSTEN SACKEN, Biologia, Dipt., i, 215 (*Empis*).—Ciudad in Durango, Mex.

MELANDER, Mon. Empid., i, 281.

*chichimeca* WHEELER and MELANDER, Biologia, Dipt., i, 368.—Amula in Guerrero, Mex.

MELANDER, Mon. Empid., i, 280, redesc.

*cyanea* BELLARDI, Saggio, II, 98 (*Empis*).—Mex.

WHEELER and MELANDER, Biologia, Dipt., i, 367.—Guerrero, Mex.

MELANDER, Mon. Empid., i, 280, additional desc.

*diaphorina* OSTEN SACKEN, Biologia, Dipt., i, 215 (*Empis*).—Ciudad in Durango, Mex.

MELANDER, Mon. Empid., i, 281.

*setigera* COQUILLET, Proc. Ent. Soc. Wash., v, 272.—Baracoa, Cuba.

*suavis* LOEW, Cent., VIII, 56 (*Empis*).—Mex.

- WHEELER and MELANDER, *Biologia, Dipt.*, I, 368, oc. in Chilpancingo, Guerrero, Mex.  
 MELANDER, *Mon. Empid.*, I, 280, redesc.  
**superba** LOEW, *Wien. Ent. Monatsch.*, v, 36 (*Empis*); *Cent.*, VIII, 57 (id.).—Cuba.  
 MELANDER, *Mon. Empid.*, I, 279.  
**violacea** LOEW, *Cent.*, VIII, 55 (*Empis*).—Mex.  
 ? MELANDER, *Mon. Empid.*, I, 278, f. 103, 104, doubtfully identified.—Mex.  
**viridis** COQUILLET, *Revis. Empid.*, 395 (*Hilara*).—Jamaica.  
 MELANDER, *Mon. Empid.*, I, 269 (id.).—Jamaica. (Gen. ref. by Melander, in litt.)

## ITEAPHILA.

- ZETTERSTEDT, *Ins. Lapp.*, 541, 1840; *Dipt. Scand.*, I, 258, 1842.  
 LOEW, *Beschreib. Europ. Dipteren*, II, 250, 1871.  
 SCHINER, *Fauna Austr.*, I, 110, 1862.  
 MELANDER, *Mon. Empid.*, I, 331, 1902.  
**macquartii** ZETTERSTEDT, *Ins. Lapp.*, 541; *Dipt. Scand.*, I, 258.—N. Sweden.  
 OSTEN SACKEN, *Cat.*, 101, oc. in N. A.—White Mts., N. H., and Quebec.  
 MELANDER, *Mon. Empid.*, I, 331.  
**orchestris** MELANDER, *Mon. Empid.*, I, 354.—Las Vegas Range, N. M.  
 ? **peregrina** MELANDER, *Mon. Empid.*, I, 331, f. 97.—San Diego Co., Cal.; query by Mel.

## MICROPHORUS.

- MACQUART, *Dipt. Nord France*, 140, 1827; *Hist. Nat. Dipt.*, I, 345, 1834.  
 MEIGEN, *Syst. Besch.*, VI, 335, 1830 (*Trichina*).  
 SCHINER, *Fauna Austr.*, I, 79, 1862.  
 LOEW, *Schles. Zeit. f. Ent.*, 1863.  
 MELANDER, *Mon. Empid.*, I, 332, 1902 (in litt. he includes his species of *Holoclera* also).  
*Note.*—There is great divergence of views between Coquillett and Melander as to the limits of *Microphorus*, *Anthalia*, and *Euthyneura*. Coquillett, in *Proc. Ent. Soc. Wash.*, v, 263, has distributed the species according to his ideas. I have been guided mainly by Melander's views, communicated to me in letters.  
**atratus** COQUILLET, see *Euthyneura*.  
**bilineatus** MELANDER, *Mon. Empid.*, I, 334, f. 99 (*Holoclera*).—Opelousas, La.  
**crocatus** COQUILLET, see *Euthyneura*.  
**drapetoides** WALKER, *List*, III, 489.—Martin Falls, Canada.  
 MELANDER, *Mon. Empid.*, I, 332, quotes desc.  
**flavipilosus** COQUILLET, see *Euthyneura*.  
**gilvihirtus** COQUILLET, see *Euthyneura*.  
**obscurus** COQUILLET, *Proc. Wash. Ent. Soc.*, v, 268.—Franconia, N. H.  
**palliatius** COQUILLET, *Jour. N. Y. Ent. Soc.*, x, 140 (*Sciodromia*).—Tabasco, Mex.  
**ravidus** COQUILLET, *Revis. Empid.*, 409.—S. Cal.  
 MELANDER, *Mon. Empid.*, I, 333 (*Holoclera*).  
**sycophantor** MELANDER, *Mon. Empid.*, I, 334 (*Holoclera*).—Idaho.

## EUTHYNEURA.

- MACQUART, *Annales*, 1836, 517.  
 SCHINER, *Fauna Austr.*, I, 82, 1862.



- MELANDER, Mon. Empid., 1, 256, def. and table, 1902; the latter amended, p. 347; in litt. includes *Anthalia* as a synonym, following Schiner.
- COQUILLET, Proc. Ent. Soc. Wash., v, 263, 1903, radically disagrees and does not recognize the genus from North America.
- aperta** MELANDER, Mon. Empid., 1, 348.—Cloudcroft, N. M.
- atrata** COQUILLET, Proc. Wash. Acad. Sci., 11, 412 (*Microphorus*); Proc. Ent. Soc. Wash., v, 263, refers to *Anthalia*.—Kadiak, Alaska.
- MELANDER, Mon. Empid., 1, 333 (*Holoclera*).
- atripes** MELANDER, Mon. Empid., 1, 349.—Los Angeles Co., Cal.
- bucinator** MELANDER, Mon. Empid., 1, 348.—Pa.
- bulbosa** MELANDER, Mon. Empid., 1, 349.—Chester Co., Pa.
- crocata** COQUILLET, Proc. Wash. Acad. Sci., 11, 413 (*Microphorus*).—Sitka.
- Gen. ref. by Melander, in litt.
- flava** COQUILLET, Proc. Ent. Soc. Wash., v, 268 (*Anthalia*).—Mt. Washington, N. H.
- SLOSSON, Ent. News, xiv, 266, habits of adult.
- flavipilosa** COQUILLET, Proc. Wash. Acad. Sci., 11, 413 (*Microphorus*); Proc. Ent. Soc. Wash., v, 263, same gen. ref.—Lowe Inlet, Br. Col.
- MELANDER, Mon. Empid., 1, 257.
- gilvihirta** COQUILLET, Proc. Ent. Soc. Wash., v, 268 (*Microphorus*).—Franconia, N. H.
- Gen. ref. by Melander, in litt.
- nura** MELANDER, Mon. Empid., 1, 349.—Mass.
- stentor** MELANDER, Mon. Empid., 1, 348.—Cloudcroft, N. M.
- stigmalis** COQUILLET, Proc. Ent. Soc. Wash., v, 268 (*Anthalia*).—Port Renfrew, B. C.

## CYRTOMA.

- MEIGEN, Syst. Besch., iv, 1, 1824.
- SCHINER, Fauna Austr., 1, 76, 1862.
- MELANDER, Mon. Empid., 1, 335, 1902, def. and table of species.
- COQUILLET, Proc. Ent. Soc. Wash., v, 246, proposes to replace *Cyrtoma* with *Bicellaria* MACQ. I do not feel sure of his data, and hence make no change.
- femorata** LOEW, Cent., v, 69.—N. H.
- MELANDER, Mon. Empid., 1, 335.
- halteralis** LOEW, Cent., 11, 46.—D. C.
- MELANDER, Mon. Empid., 1, 335.—Wis.
- longipes** LOEW, Cent., 11, 47.—Ill.
- MELANDER, Mon. Empid., 1, 336, f. 71.—Mass., N. H., Wis., Ill., Wyo., N. M.
- White Mts., N. H.—Slosson; Pa.—O. S.
- pilipes** LOEW, Cent., 11, 48.—Ill.
- COQUILLET, Proc. Wash. Acad. Sci., 11, 412, oc. in Kukak Bay and Popof Id., Alaska.
- MELANDER, Mon. Empid., 1, 336.
- White Mts., N. H.—Slosson.
- procera** LOEW, Cent., v, 70.—Sitka, Alaska.
- MELANDER, Mon. Empid., 1, 335.

## RHAMPHOMYIA.

- MEIGEN, Syst. Besch., III, 42, 1822.
- SCHINER, Fauna Austr., 1, 96, 1862.

- COQUILLET, Revis. Empid., 410, 1895, table of species; in Proc. Ent. Soc. Wash., v, 252, he proposes to substitute *Macrostomus* WIED. for *Rhamphomyia*. I do not adopt this, as there is considerable risk of error in the old determination upon which it depends.
- abdita* COQUILLET, Revis. Empid., 430.—Wash.
- adversa* COQUILLET, Proc. Wash. Acad. Sci., II, 418.—Sitka, Yakutat, and Orca, Alaska.
- agasicles* WALKER, List, III, 499.—Martin Falls, Canada.
- albata* COQUILLET, Proc. U. S. N. M., XXV, 103.—Williams, Ariz.
- albipilosa* COQUILLET, Proc. Wash. Acad. Sci., II, 418.—Berg Bay, Alaska.
- americana* WIEDEMANN, AUSS. ZW., II, 8.—N. A.
- amplicella* COQUILLET, Revis. Empid., 431.—S. Cal.
- amplipedis* COQUILLET, Revis. Empid., 422.—Mass.
- anaxo* WALKER, List, III, 500.—Martin Falls, Canada.
- angustipennis* LOEW, Cent., I, 55.—N. Y. N. J.—Smith Cat.
- anthracodes* COQUILLET, Proc. Wash. Acad. Sci., II, 420.—Metlakahtla and Sitka, Alaska.
- aperta* LOEW, Cent., II, 27.—Ill.
- arcuata* COQUILLET, Revis. Empid., 421.—Mass.
- atrata* COQUILLET, Proc. Wash. Acad. Sci., II, 420.—Sitka.
- avida* COQUILLET, Revis. Empid., 425.—Mass.
- barypoda* COQUILLET, Proc. Wash. Acad. Sci., II, 417.—Sitka, Yakutat, Virgin Bay, and Kadiak, Alaska.
- basalis* LOEW, Cent., V, 54.—N. H.
- COQUILLET, Revis. Empid., 410, desc. of male, etc.—N. H.
- bifilata* COQUILLET, Revis. Empid., 424.—Cal.
- brevis* LOEW, Cent., I, 52.—D. C.
- californica* COQUILLET, Revis. Empid., 420.—Cal.
- candicans* LOEW, Cent., V, 61.—N. H. N. J.—Smith Cat.
- ciliata* COQUILLET, Revis. Empid., 428.—N. H.
- cilipes* SAY, Jour. Acad. Sci. Phil., III, 95; Compl. Works, III, 83 (*Empis*).—Ohio.
- WIEDEMANN, AUSS. ZW., II, 7.
- cinefacta* COQUILLET, Proc. Wash. Acad. Sci., II, 419.—Sitka.
- cineracea* COQUILLET, Proc. Wash. Acad. Sci., II, 416.—Sitka, Kukak Bay, Popof Id., and Juneau, Alaska.
- clauda* COQUILLET, Proc. U. S. N. M., XXIII, 610.—Clementon, N. J.; Mt. Washington, N. H.
- clavator* COQUILLET, Proc. U. S. N. M., XXIII, 611, correction and change of name; Proc. Wash. Acad. Sci., II, 421 (*macrura*, preoc.).—Sitka, Yakutat, Virgin Bay, Orca, all in Alaska.
- clavigera* LOEW, Cent., I, 53.—N. Y.
- colorata* COQUILLET, Revis. Empid., 420.—Texas.
- compta* COQUILLET, Revis. Empid., 423.—U. S. N. J.—Smith Cat.
- conjuncta* LOEW, Cent., I, 56.—D. C.
- cophas* WALKER, List, III, 499.—N. Y.
- corvina* LOEW, Cent., I, 51.—N. Y.
- COQUILLET, Proc. Wash. Acad. Sci., II, 414, oc. in Alaska, D. C., Pa., and N. C.
- crassinervis* LOEW, see *sordida*.
- cyanogaster* WHEELER and MELANDER, Biologia, Dipt., I, 371.—Omiteme in Guerrero, Mex.

- dana* WALKER, List, III, 502.—Martin Falls, Canada.  
*daría* WALKER, List, III, 503.—N. Y.  
*debilis* LOEW, Cent., I, 45.—Saskatchewan R., Canada.  
*dimidiata* LOEW, Cent., I, 36.—Md., Mass.  
*disparilis* COQUILLET, Proc. Wash. Acad. Sci., II, 415.—Yakutat and Virgin Bay, Alaska.  
*diversa* COQUILLET, Proc. U. S. N. M., XXIII, 611.—Clementon, N. J.  
*duplicis* COQUILLET, Revis. Empid., 424.—Cal.  
*ecetra* WALKER, List, III, 500.—Ga.  
*effera* COQUILLET, Revis. Empid., 427.—Locality omitted.  
*exigua* LOEW, Cent., II, 32.—D. C., Ill.  
*expulsa* WALKER, Trans. Ent. Soc., n. ser., IV, 148.—U. S. White Mts., N. H.—Slosson.  
*ficana* WALKER, List, III, 501.—Martin Falls, Canada.  
*fimbriata* COQUILLET, Revis. Empid., 429.—Cal.  
*flavirostris* WALKER, List, III, 501.—Martin Falls, Canada. Alaska—Coquillett.  
*flexuosa* COQUILLET, Revis. Empid., 433.—Col.  
*frontalis* LOEW, Cent., II, 28.—Ill.  
*fumosa* LOEW, Cent., I, 39.—N. Y., D. C.  
*furcifer* WHEELER and MELANDER, Biologia, Dipt., I, 371.—Omiteme in Guerrero, Mex.  
*geniculata* BIGOT, Annales, 1889, 134.—Cal.  
 "Preoc. and better be cancelled"—Coq., Rev. Emp., 410.  
*gilvipes* LOEW, Cent., I, 48.—N. Y., Ill. White Mts., N. H.—Slosson.  
*gilvipilosa* COQUILLET, Revis. Empid., 434.—Ill.  
*glabra* LOEW, Cent., I, 41.—Va., Ill. D. C.—O. S.; N. J.—Smith Cat.  
*glaucá* COQUILLET, Proc. Wash. Acad. Sci., II, 416.—Metlakahtla and Berg Bay, Alaska.  
*gracilis* LOEW, Cent., I, 43.—Pa. N. J.—Smith Cat.; White Mts., N. H.—Slosson.  
*hirtipes* LOEW, Cent., V, 59.—N. H.  
*hirtula* ZETTERSTEDT, Dipt. Scand., I, 421, obs.—Greenland.  
 LUNDBECK, Dipt. Grœnl., I, 298, full desc.—Greenland.  
*impedita* LOEW, Cent., II, 31.—Ill., D. C.  
*incompleta* LOEW, Cent., III, 31.—D. C.  
*insecta* COQUILLET, Revis. Empid., 426.—Texas.  
*irregularis* LOEW, Cent., V, 60.—N. H.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 414, oc. in Col. and Kukak Bay, Alaska.  
*lævigata* LOEW, Cent., I, 37.—Nebr. Montreal—Chagnon.  
*leucoptera* LOEW, Cent., I, 62.—D. C. N. J.—Smith Cat.  
*limata* COQUILLET, Proc. Wash. Acad. Sci., II, 417.—Popof Id., Alaska.  
*limbata* LOEW, Cent., I, 60.—D. C.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 414, oc. in Alaska and Ill.  
 See *Megacyttarus argenteus* BIGOT.  
*liturata* LOEW, Cent., I, 61.—D. C.  
*longicauda* LOEW, Cent., I, 38.—D. C. N. J.—Smith Cat.  
*longicornis* LOEW, Cent., I, 47.—D. C.  
*longipennis* LOEW, Cent., I, 46.—D. C. White Mts., N. H.—Slosson.  
*loripedis* COQUILLET, Revis. Empid., 419.—Cal.  
*luctifera* LOEW, Cent., I, 50.—N. Y.  
*luctuosa* LOEW, Cent., II, p. 290, change of name; Cent., II, 30 (*lugens*, preoc.).—Cal.

- luteiventris* LOEW, Cent., v, 57.—N. H. N. J.—Smith Cat.  
*macilenta* LOEW, Cent., v, 55.—N. H. N. J.—Smith Cat.; White Mts., N. H.—Slosson.  
*macrura* COQUILLET, see *clavator*.  
*mallos* WALKER, List, III, 502.—Martin Falls, Canada.  
*manca* COQUILLET, Revis. Empid., 427.—N. C.  
 HOWARD, Proc. Wash. Acad. Sci., II, 561, note on habits. N. J.—Smith Cat.  
*minytus* WALKER, List, III, 502.—Martin Falls, Canada.  
 N. J.—Smith Cat.; Alaska—Coq.  
*mutabilis* LOEW, Cent., II, 26.—Ill. White Mts., N. H.—Slosson.  
*nana* LOEW, Cent., I, 64.—Md. N. J.—Smith Cat.  
*nasoni* COQUILLET, Revis. Empid., 423.—Ill.  
*nigricans* LOEW, Cent., v, 58.—N. H. White Mts., N. H.—Slosson.  
 Axton, N. Y.—M. and H.  
*nigrita* ZETTERSTEDT, Ins. Lapp., 567.—Europe.  
 STÆGER, Grœnl. Antl., 357, oc. in Greenland.  
 HOLMGREN, Ins. Nordgrœnl., 100, same.  
 FABRICIUS, O., Fauna Grœnl., 211 (*Empis borealis*).—Greenland.  
 [Schiødte.]  
*nigrita* BIGOT, Annales, 1889, 133.—Cal.  
 COQUILLET, Revis. Empid., 410, note.  
*nitidivittata* MACQUART, Dipt. Exot., Suppl., I, 97.—Galveston, Tex.  
*otiosa* COQUILLET, Revis. Empid., 425.—Col.  
*pachymera* BIGOT, Annales, 1889, 133.—Cal.  
 COQUILLET, Revis. Empid., 410, note.  
*parva* COQUILLET, Rev. Empid., 433.—Mass.  
*pectinata* LOEW, Cent., I, 49.—D. C.  
*pectoris* COQUILLET, Revis. Empid., 420.—St. Catharine Id., Ga.  
*phemius* WALKER, List, III, 500.—Martin Falls, Canada.  
*piligeronis* COQUILLET, Revis. Empid., 432.—Ill.  
*polita* LOEW, Cent., II, 29.—Ill., D. C. N. J.—Smith Cat.  
*priapululus* LOEW, Cent., I, 54.—Md. N. J.—Smith Cat.  
*pulchra* LOEW, Cent., I, 40.—N. Y. N. J.—Smith Cat.  
*pulla* LOEW, Cent., I, 44.—Conn. N. J.—Smith Cat.; Montreal—Chagnon.  
 SLOSSON, Ent. News, XIV, 265, habits of adult.  
*pusio* LOEW, Cent., I, 63.—Md. N. J.—Smith Cat.  
*quinquelineata* SAY, Jour. Acad. Sci. Phil., III, 95; Compl. Works, II, 82 (*Empis*).—Ind.  
 WIEDEMANN, Auss. Zw., II, 7.  
*rava* LOEW, Cent., II, 25.—Ill.  
 COQUILLET, Revis. Empid., 410, notes.  
*ravida* COQUILLET, Revis. Empid., 418.—Ill., Tex., N. M.  
*rufrostris* SAY, Jour. Acad. Sci. Phil., III, 159; Compl. Works, II, 355.—Ind.  
*rustica* LOEW, Cent., v, 56.—N. H. Montreal—Chagnon; White Mts., N. H.—Slosson. Axton, N. Y.—M. and H.  
*scaurissima* WHEELER, Ent. News, VII, 189, figs.—Cal.  
*scolopacea* SAY, Jour. Acad. Sci. Phil., III, 96; Compl. Works, II, 83 (*Empis*).—Pa.  
 WIEDEMANN, Auss. Zw., II, 8. N. J.—Smith Cat.  
*scutellaris* COQUILLET, Revis. Empid., 429.—N. Cal.  
*sellata* LOEW, Cent., I, 42.—D. C.

- setosa* COQUILLET, Revis. Empid., 426; Proc. Wash. Acad. Sci., II, 419, oc. in Alaska, and correction of orig. desc.—N. H.; Alaska, several places.  
White Mts., N. H.—Slosson.
- soccata* LOEW, Cent., I, 67.—Miss.
- sociabilis* WILLISTON, Kans. Univ. Quart., II, 76 (*Empis*).—Wash.  
Common in N. Idaho; is a *Rhamphomyia*—J. M. A.
- sordida* LOEW, Cent., I, 58; *ibid.*, 59 (*crassinervis*).—D. C.; N. Y. [Coq.]
- stylata* COQUILLET, Revis. Empid., 432.—Cal.
- sudigeronis* COQUILLET, Revis. Empid., 431.—Cal.
- tersa* COQUILLET, Revis. Empid., 422.—N. H. N. J.—Smith Cat.
- testacea* LOEW, Cent., II, 24.—Ill. Md., D. C.—O. S.
- tolteca* WHEELER and MELANDER, Biologia, Dipt., I, 371.—Guerrero, Mex.
- tristis* WALKER, Trans. Ent. Soc., n. ser., IV, 148.—U. S.
- umbilicata* LOEW, Cent., I, 65, 66 (*umbilicata* and *ungulata*).—Pa., Me.; Me.  
"Umbilicata is wrongly attributed to Mexico in the Centuries"—O. S.  
SLOSSON, Ent. News, XIV, 268, habits of adult.
- umbrosa* LOEW, Cent., V, 53.—N. H. Montreal—Chagnon; Province of Quebec  
—Fyles.
- unimaculata* LOEW, Cent., II, 33.—Ill. D. C.—O. S.
- valga* COQUILLET, Revis. Empid., 428.—N. H.
- vara* LOEW, Cent., I, 57.—Nebr. N. J.—Smith Cat.
- villipes* COQUILLET, Proc. Wash. Acad. Sci., II, 414.—Popof Id., Alaska.
- virgata* COQUILLET, Revis. Empid., 430.—Mass.  
Axton, N. Y.—M. and H.
- vittata* LOEW, Cent., II, 23.—Ill. N. J.—Smith Cat.; S. D.—J. M. A.

## NEOCOTA.

- COQUILLET, Revis. Empid., 434, 1895.  
*weedii* COQUILLET, Revis. Empid., 434.—Miss.

## LONCHOPTERIDÆ.

## LONCHOPTERA.

- MEIGEN, Illig. Mag., II, 272, 1803; Syst. Besch., IV, 105, 1824.  
ZETTERSTEDT, Dipt. Scand., VII, 2800, 1848.  
SCHINER, Fauna Austr., I, 243, 1862.
- lutea* PANZER, Fauna Germ., CVIII, 20.—Europe.  
MEIGEN, Syst. Besch., IV, 107, 108 (the latter *rivalis*).  
SCHINER, Fauna Austr., I, 243.  
OSTEN SACKEN, Cat., 103, oc. in N. A.  
MEIJERE, Zool. Jahrb., 14, vol. V, 87-132, 3 pl.; full discussion of the larva  
(abstract in Illus. Zeitsch. f. Ent., VI, 61, 1901).  
N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- punctum* MEIGEN, Syst. Besch., IV, 110.—Europe.  
WALKER, Ins. Brit., I, 223.  
SCHINER, Fauna Austr., I, 244.  
WEBSTER, Canad. Ent., 1900, 213, oc. in Ohio.
- riparia* MEIGEN, Syst. Besch., IV, 108.—Europe.  
SCHINER, Fauna Austr., I, 244, notes.  
OSTEN SACKEN, Cat., 118, oc. in N. A.  
N. J.—Smith Cat.

## PHORIDÆ.

- BECKER, Die Phoriden, in Abhandlungen d. K. K. Zool.-Bot. Ges., I, 1-100, 5 plates, 1901, is an admirable monograph of the European members of the family.
- BRUES, Monograph of the N. A. Phoridæ, in Trans. Amer. Ent. Soc., XXIX, 331-404, 5 plates, describes the genera of the world and all the N. A. species, with a new generic arrangement. It is dated 1903, but really appeared in January, 1904. This would exclude it from the present catalogue, which closes with Jan. 1, 1904, but I deem it necessary to make an exception here, in order to avoid having this part of the work out of date on publication. There are full tables of genera and species, etc.; it is a very valuable work.
- OSTEN SACKEN, Ent. Mo. Mag., sec. ser., XIII, 204, 1902, discusses the position of this family.

## PHORA.

- LATREILLE, Précis. car. gén. Ins., 1796; Hist. nat. Crust. et Ins., III, 464, 1802, and XIV, 394, 1804. In 1802 he gives *Musca aterrima* as type.
- MEIGEN, Syst. Besch., VI, 210, 1830, inclusive of *Trineura*.
- SCHINER, Fauna Austr., II, 335, 1864.
- ALDRICH, Canad. Ent., XXIV, 142, 1892.
- COQUILLETT, Canad. Ent., XXVII, 104, 1895.
- LINTNER, 10th N. Y. Rept., 404, 1895, literature of *Phora*.
- WICKHAM, Canad. Ent., XXVI, 41, rearing of *Phora* sp. from pupa of *Tropisternus glaber*.
- BRUES, Mon. Phoridæ, 339, 1904, def. and table of species, in restricted sense.
- cimbicis* ALDRICH, Canad. Ent., XXIV, 143, fig.—Brookings, S. D.; reared from cocoons of *Cimbex americana*.
- BRUES, Mon. Phoridæ, 348, f. 15.—Mass.; Toronto, Can.
- comstocki* ALDRICH in Brues, Mon. Phoridæ, 346, f. 12.—Ithaca, N. Y.
- cornuta* BIGOT, in Sagra's Cuba, 827.—Cuba.
- divaricata* ALDRICH, Trans. Ent. Soc. Lond., 1896, 437.—St. Vincent, W. I.
- BRUES, Mon. Phoridæ, 349, types redesc.; oc. in Granada, W. I.
- var. *perplexa* BRUES, Mon. Phoridæ, 350.—Ga., Fla. This is the *Phora incisuralis* of Coquillett, Canad. Ent., XXVII, 104. [Brues.]
- fratercula* BRUES, Mon. Phoridæ, 341, f. 3.—Jackson's Lake, Wyo.
- grœnlandica* LUNDBECK, Dipt. Grœnl., II, 307, fig.—Greenland.
- BRUES, Mon. Phoridæ, 350, transl. and fig. reproduced.
- incisuralis* LOEW, Cent., VII, 98.—D. C.
- JOHNSON, Dipt. of Florida, oc. and note on female.—Tick Id., Fla.
- BRUES, Mon. Phoridæ, 348, f. 6.—Fla., Ga., La.
- luggeri* ALDRICH, Canad. Ent., XXIV, 145, fig.—Minn.
- BRUES, Mon. Phoridæ, 347, f. 13.—Kans., Pa., Mass.
- microcephala* LOEW, Cent., VII, 96.—D. C.
- BRUES, Mon. Phoridæ, 342, type redesc.
- multiseriata* ALDRICH in Brues, Mon. Phoridæ, 345, f. 9 and 10.—Lawrence, Kans.; Ithaca, N. Y.
- nitidifrons* BRUES, Mon. Phoridæ, 347, f. 14.—Mass., N. Y., Pa.
- olympicæ* ALDRICH in Brues, Mon. Phoridæ, 344, f. 6.—Olympia, Wash.
- pachyneura* LOEW, Cent., VII, 97.—Alaska.
- BRUES, Mon. Phoridæ, 341, f. 12.—Idaho, Wis., Wash., Montreal.
- scutellata* BRUES, Mon. Phoridæ, 344, f. 8 and 11.—Grenada, W. I.



- spinipes** COQUILLET, *Canad. Ent.*, xxvii, 105.—Conn.  
BRUES, *Mon. Phoridæ*, 343, f. 5, 6.—Moscow, Ida.; Wash.  
Ohio—Webster.
- thoracica** MEIGEN, *Klassif.*, 313 (*Trineura*); *Syst. Besch.*, vi, 214.—Europe.  
FALLÉN, *Phytomyzides*, 6 (*Trineura*).  
ZETTERSTEDT, *Ins. Lapp.*, 795 (id.); *Dipt. Scand.*, vii, 2852 (id.).  
SCHINER, *Fauna Austr.*, ii, 342.  
BECKER, *Die Phoriden*, 20.  
BRUES, *Mon. Phoridæ*, 342, f. 4, desc. and oc. in N. A.—White Mts., N. H.
- venusta** COQUILLET, *Canad. Ent.*, xxvii, 107.—Mass.  
BRUES, *Mon. Phoridæ*, 346, desc. quoted.

## HYPOCERA.

- LLOY, *Atti Inst. Venet.*, 1864, 78 (*Hypocera* and *Gymnocera*).  
BRUES, *Mon. Phoridæ*, 351, 1901, def. and table of species.
- clavata** LOEW, *Cent.*, vii, 95 (*Phora*).—D. C.  
MOTTER, *Jour. N. Y. Ent. Soc.*, vi, 223, oc. in human graves (*Phora*).  
BRUES, *Mon. Phoridæ*, 355, f. 22, 23.—N. H., Mass., Pa., Kans.
- ehrmanni** ALDRICH in Brues, *Mon. Phoridæ*, 353, f. 20.—Pittsburgh, Pa.
- femorata** MEIGEN, *Syst. Besch.*, vi, 213 (*Phora femorata* and *flavimana*).—Europe.  
ZETTERSTEDT, *Dipt. Scand.*, vii, 2886 (*Trineura*).  
SCHINER, *Fauna Austr.*, ii, 339 (id.).  
SLOSSON, *Ent. News*, oc. in N. A.—White Mts., N. H. (id.).  
BECKER, *Die Phoriden*, 41 (id.).  
HOWARD, *Proc. Wash. Acad. Sci.*, ii, 598, oc. and note (*Phora*).—W. Va.  
BRUES, *Mon. Phoridæ*, 354, f. 21.—N. H., Mass., R. I.
- grenadensis** BRUES, *Mon. Phoridæ*, 356, f. 24.—Grenada, W. I.
- johnsoni** BRUES, *Mon. Phoridæ*, 352, f. 18, 19.—Riverton, N. J.
- mordellaria** FALLÉN, *Phytomyzides*, 6 (*Trineura*).—Europe.  
MEIGEN, *Syst. Besch.*, vi, 212 (*Phora*).  
MACQUART, *Hist. Nat. Dipt.*, ii, 630 (id.).  
ZETTERSTEDT, *Dipt. Scand.*, vii, 2883 (*Trineura*).  
SCHINER, *Fauna Austr.*, ii, 339 (*Phora*).  
COQUILLET, *Canad. Ent.*, xxvii, 104, oc. in N. A. (id.).  
BECKER, *Die Phoriden*, 40 (id.).  
BRUES, *Mon. Phoridæ*, 355, not seen from N. A.

## APHIOCHÆTA.

- BRUES, *Mon. Phoridæ*, 337, 357, 1904, diagnosis and table of species; the definition of the genus is accidentally omitted.
- agarici** LINTNER, 10th N. Y. Report, 399, 406, plate (*Phora*).—N. Y.; the larvæ feed in edible mushrooms, *Agaricus* spp.  
ALDRICH, *Canad. Ent.*, xxiv, 141, fig. (*Phora setacea*, female; the male being a different species, retains the name *setacca*).—Brookings, S. D.; larvæ reared from cocoons of *Cimbex americana*.  
BRUES, *Mon. Phoridæ*, 369, f. 41, no locality.  
N. J.—Smith Cat.
- albidihalteris** FELT, in Lintner's 12th N. Y. Rept., 228 (*Phora*).—New Brunswick, N. J.; reared from mushrooms.  
BRUES, *Mon. Phoridæ*, 368.—N. J.
- atlantica** BRUES, *Mon. Phoridæ*, 362, f. 30.—N. J., Pa., Mass.

- aurea** ALDRICH, Trans. Ent. Soc. Lond., 1896, 437 (*Phora*).—St. Vincent, W. I.  
COQUILLET, Proc. U. S. N. M., XXII, 253, oc. in Porto Rico (*Phora*).  
BRUES, Mon. Phoridae, 365, f. 35.—Grenada, W. I.  
Lawrence, Kans., shown me by Kahl.
- cata** MELANDER and BRUES, Biol. Bull., v, 16, f. 5 (*Phora*).—Woods Hole, Mass.,  
breeding in nests of *Halictus prunosus* RBTSN.  
BRUES, Mon. Phoridae, 371, desc. quoted.
- epeiræ** BRUES, Psyche, June, 1902, 351, fig. (*Phora*); Mon. Phoridae, 358, f. 25.  
—Austin, Texas, bred from eggs of a spider, *Epeira* sp.; La., Fla., Pa.
- fasciata** FALLÉN, Phytomyzides, 7 (*Trineura*).—Europe.  
ZETTERSTEDT, Dipt. Scand., VII, 2879 (id.).  
CURTIS, Brit. Entom., 437 (*Phora atricapilla*). [Schiner.]  
SCHINER, Fauna Austr., II, 344 (*Phora*).  
COQUILLET, Canad. Ent., XXVII, 104, oc. in N. A. (*Phora*).  
BECKER, Die Phoriden, 50 (*Phora*).  
BRUES, Mon. Phoridae, 360, desc.; not seen from N. A.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson; Fla.—Johnson; St. Vincent, W. I.—Aldrich.
- flava** FALLÉN, Phytomyzides, 7 (*Trineura*).—Europe.  
ZETTERSTEDT, Dipt. Scand., VII, 2876 (*Trineura*).  
SCHINER, Fauna Austr., II, 343 (*Phora*).  
BECKER, Die Phoriden, 54 (id.).  
BRUES, Mon. Phoridae, 361, f. 29.—Wis., N. J.
- fungicola** COQUILLET, Canad. Ent., XXVII, 106 (*Phora*); Proc. Wash. Acad. Sci.,  
II, 437, oc.—Las Cruces, N. M., bred from the fungus *Trametes pecki*;  
Alaska and N. J.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson; St. Vincent, W. I.—  
Aldrich.
- furtiva** ALDRICH, Trans. Ent. Soc. Lond., 1896, 436 (*Phora*).—St. Vincent, W. I.  
BRUES, Mon. Phoridae, 367, f. 39.—St. Vincent, W. I.
- giraudii** EGGER, Verh. Zool.-Bot. Ges., 1862, 1235 (*Phora*).—Europe; reared  
from cocoons of *Cimbex variabilis*.  
SLOSSON, Ent. News, VI, 7, oc. in N. A.—White Mts., N. H. (id.).  
BECKER, Die Phoriden, 58 (id.).  
BRUES, Mon. Phoridae, 366, desc.; not seen from N. A.
- halictorum** MELANDER and BRUES, Biol. Bull., v, 14, 1902 (*Phora*).—Woods Hole,  
Mass., breeding in nests of *Halictus prunosus* RBTSN.  
BRUES, Mon. Phoridae, 366, f. 37.
- lutea** MEIGEN, Syst. Besch., VI, 219, 220 (*Phora sutphuripes, bicolor, flava, lutea*).—Europe. [Becker.]  
FALLÉN, Phytomyzides, 7 (var. of *Trineura flava*).  
MACQUART, Hist. Nat. Dipt., II, 628 (*Phora*).  
ZETTERSTEDT, Ins. Lapp., 797 (*Trineura*); Dipt. Scand., II, 2877 (id.).  
BECKER, Die Phoriden, 54 (*Phora*).  
BRUES, Mon. Phoridae, 362, f. 31, oc. in N. A. and desc.—Opelousas, La.;  
Wis.
- magnipalpis** ALDRICH, Trans. Ent. Soc. Lond., 1896, 438 (*Phora*).—St. Vincent,  
W. I.  
BRUES, Mon. Phoridae, 365, f. 36.—Grenada, W. I.
- minuta** ALDRICH, Canad. Ent., XXIV, 146, fig. (*Phora*).—Brookings, S. D.; bred  
from cocoons of *Cimbex americana*.  
BRUES, Mon. Phoridae, 366, f. 38.—Mass., N. J., N. Y., Ohio, Ida., Cal.  
White Mts., N. H.—Slosson.

- nigriceps** LOEW, Cent., VII, 99 (*Phora*).—D. C.  
 COMSTOCK, Dept. Agr. Rept., 1879, 208-211 (*Phora aletia*).—Southern States; reared from pupæ of the Cotton Worm, *Aletia argillacea*.  
 RILEY, 4th Rept. U. S. Ent. Comm., 116-119, discusses habits—not a parasite (*Phora aletia*).  
 ALDRICH, 21st Report Dept. Geol. Ind., 1896, 190, oc. in cavern in Ind. (*Phora*).  
 BRUES, Mon. Phoridae, 363, f. 34.—Mass., Ill., Tenn., N. Y., Texas; in Texas bred from an artificial nest of *Pogonomyrmex barbatus* by Dr. Wm. M. Wheeler.
- obscura** BRUES, Mon. Phoridae, 360, f. 27.—St. Vincent, W. I.
- picta** LEHMANN, Hamb. Observ., 1822, 43, pl. I, f. 6 (*Phora*).—Europe.  
 ZETTERSTEDT, Ins. Lapp., 797 (*Trincura interrupta*); Dipt. Scand., VII, 2878 (id.). [BERGROTH, Wien. Ent. Zeit., 1896, 112.]  
 SCHINER, Fauna Austr., II, 337 (*Phora interrupta*).  
 COQUILLET, Canad. Ent., XXVII, 104, oc. in N. A. (*Phora interrupta*).  
 BECKER, Die Phoriden, 52 (*Phora*).  
 BRUES, Mon. Phoridae, 361, f. 28.—Wis.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson; St. Vincent, W. I.—Aldrich.
- pulicaria** FALLÉN, Phytomyzides, 7 (*Trincura*).—Europe.  
 MEIGEN, Syst. Besch., VI, 217 (*Phora*).  
 ZETTERSTEDT, Ins. Lapp., 795 (*Trincura*); Dipt. Scand., VII, 2859 and 2873 (*Trincura pulicaria* and *pumila*).  
 SCHINER, Fauna Austr., II, 341 (*Phora*).  
 STROBL, Wien. Ent. Zeitung, XI (*Phora pulicaria, nigra, luctuosa, pumila*). [Becker.]  
 BECKER, Die Phoriden, 62 (*Phora*).  
 BRUES, Mon. Phoridae, 371, f. 45, oc. in N. A. and desc.—Mass., La., S. D., Ida., Cal.
- pygmaea** ZETTERSTEDT, Dipt. Scand., VII, 2860 (*Trincura*).—Europe.  
 EGGER, Verh. Zool.-Bot. Ges., 1862, 1236 (*Phora brachyneura*).  
 SCHINER, Fauna Austr., II, 344 (id.).  
 STROBL, Wien. Ent. Zeit., XI, 196 (id.).  
 BECKER, Die Phoriden, 49 (*Phora*).  
 BRUES, Mon. Phoridae, 359, f. 26.—Ida., Cal., Texas.
- rostrata** MELANDER and BRUES, Biol. Bull., V, 15, 1903 (*Phora*).—Woods Hole, Mass.; about the burrows of *Halictus pruinosis* RBTSN.  
 BRUES, Mon. Phoridae, 370, f. 43, 44, redesc. type.
- rufipes** MEIGEN, Klassif., 313, pl. XV, f. 23 (*Trincura*); Syst. Besch., VI, 216 (*Phora rufipes* and *annulata*).—Europe.  
 FABRICIUS, Syst. Antl., 336 (*Trincura*).  
 FALLÉN, Phytomyzides, 6 (*Trincura vulgaris*). [Meigen.]  
 LATREILLE, Gen. Ins., IV, 360 (*Phora pallipes*).  
 MACQUART, Hist. Nat. Dipt., II, 627 (*Phora pallipes* and *annulata*).  
 DUFOUR, Mém. Soc. R. Paris, 1840, 54, pl. III, f. 107-110 (*Phora pallipes*).  
 ZETTERSTEDT, Ins. Lapp., 795 (*Trincura*); Dipt. Scand., VII, 2857 (id.).  
 SCHINER, Fauna Austr., II, 340 (*Phora*).  
 STROBL, Wien. Ent. Zeit., XI, (*Phora rufipes* and *heracleella*). [Becker.]  
 COQUILLET, Amer. Naturalist, XXXI, 386 (*Phora*), oc. in N. A.—Mammoth Cave, Ky.; Proc. Wash. Acad. Sci., II, 437 (id), oc. in Alaska.  
 BECKER, Die Phoriden, 59 (*Phora*).  
 BRUES, Mon. Phoridae, 368, f. 40.—Mass., Pa., Mich., N. Y., Ill., Ida.  
 White Mts., N. H.—Slosson; N. J.—Smith Cat.

*scalaris* LOEW, Cent., VII, 100 (*Phora*).—Cuba.

BRUES, Mon. Phoridae, 364, f. 33.—St. Vincent and Grenada, W. I.; Pa. N. J.—Smith Cat.

*setacea* ALDRICH, Canad. Ent., XXIV, 144, fig. (*Phora*—the female there described belongs to *agarici*).—Brookings, S. D.; bred from cocoons of *Cimbex americana*.

BRUES, Mon. Phoridae, 370, f. 42.—D. C.

#### APOCEPHALUS.

COQUILLET, Proc. Ent. Soc. Wash., IV, 501, 1901.

BRUES, Mon. Phoridae, 372, 1904.

*pergandei* COQUILLET, loc. cit., figs.—Cabin John Bridge, Md.; the larvæ are internal parasites of the ant *Camponotus pennsylvanicus*; in the observed instance it ate out the head after separating it from the body.

BRUES, Mon. Phoridae, 373, f. 47, 48.—Frankford, Pa., and Austin, Texas; at the latter place found in a nest of *Camponotus maculatus* var. *sansabeanus* BKLY.

*wheeleri* BRUES, Mon. Phoridae, 373, f. 49.—Pine Lake, Wis.

#### TRINEURA.

MEIGEN, Illiger's Mag., II, 276, 1803; Klassif., 312, 1804.

SCHINER, Fauna Austr., II, 347, 1862.

BECKER, Die Phoriden, 78, 1901.

BRUES, Mon. Phoridae, 375, 1904, def. and table of species

*aterrima* FABRICIUS, Syst. Ent., IV, 334, 1794 (*Musca*); Syst. Antl., 323 (*Tephritis*).—Europe.

COQUEBERT, Illust. Icon. Ins., pl. XXIV, f. 3 (*Musca*).

LATREILLE, Hist. Nat. Crust. et Ins., III, 464, 1802, type of *Phora*; XIV, 394 and Dict. d'Hist. Nat., XXIV, 197, both 1804 (*Phora*).

MEIGEN, Klassif., 313, pl. XV, f. 22 (*atra*); Syst. Besch., VI, 224, 225 (*aterrima* and *stictica*).

FALLÉN, Phytomyzides, 7 (*atra*).

WALKER, List, IV, 1138 (*Phora*), oc. in N. A.—Martin Falls, Canada.

SCHINER, Fauna Austr., II, 349.

STROBL, Wien. Ent. Zeit., XI, 204, makes *stictica* a var.

BECKER, Die Phoriden, 80.

BRUES, Mon. Phoridae, 377, f. 50.—Mass. to Kans. and Texas.

Alaska and N. H.—Coquillett; White Mts., N. H.—Slosson.

*montana* BRUES, Mon. Phoridae, 378, f. 52, 53.—Magdalena Mts., N. M.; Kans.

*velutina* MEIGEN, Syst. Besch., VI, 224 (*Phora*).—Europe.

BECKER, Die Phoriden, 80.

BRUES, Mon. Phoridae, 378, f. 51.—Mass., Mich., Kans., Ida., Cal.

#### CONICERA.

MEIGEN, Syst. Besch., VI, 226, 1830.

SCHINER, Fauna Austr., II, 335, 1864.

BECKER, Die Phoriden, 80, 1901.

BRUES, Mon. Phoridae, 379, def. and table of species, 1904.

*aldrichii* BRUES, Mon. Phoridae, 379, f. 54.—Juliaetta, Idaho.

*atra* MEIGEN, Syst. Besch., VI, 226, pl. LXIII, f. 13.—Europe. Also op. cit., 223 (*Phora dauci* and *albipennis*). [Becker.]

? WEBSTER, Ins. Life, II, 356, larvæ in human remains after burial (mentioned as *Conicera* sp.).—Indiana.

RILEY and HOWARD, Ins. Life, II, 351, note on preceding (id.).

KOWARZ, Fliegen Böhmens, 1894 (*Phora nickerli*). [Becker.]

BECKER, Die Phoriden, 81.

BRUES, Mon. Phoridæ, 380, f. 55, 56.—Mass., N. J., D. C., Canada, Mich., N. Y.

var. **neotropica** BRUES, Mon. Phoridæ, 380.—Grenada, W. I.

#### GYMNOPHORA.

MACQUART, Hist. Nat. Dipt., II, 631, 1835.

SCHINER, Fauna Austr., II, 346, 1864.

BECKER, Die Phoriden, 82, 1901.

BRUES, Mon. Phoridæ, 381, 1904.

**arcuata** MEIGEN, Syst. Beschreibung, VI, 215 and 222, pl. LXIII, f. 9 (*Phora fuliginosa* and *arcuata*).—Europe. [Becker.]

FALLÉN, Mytomyzides, 5 (*Trincura rufipes* Mg.). [Meigen.]

HALIDAY, Entom. Mag., I, 179 (*Phora debilis*).

MACQUART, Hist. Nat. Dipt., II, 631.

SCHINER, Fauna Austr., II, 346.

OSTEN SACKEN, Cat., 212, oc. in N. A.

BECKER, Die Phoriden, 82.

BRUES, Mon. Phoridæ, 381, f. 57.—Kans., Tex., Wis., Pa., Mass.

White Mts., N. H.—Slosson.

#### PACHYNEURELLA.

BRUES, Mon. Phoridæ, 382, 1904.

**venata** ALDRICH, Trans. Ent. Soc. Lond., 1896, 436 (*Phora*).—St. Vincent, W. I.

BRUES, Mon. Phoridæ, 382, f. 58, 59, type redesc.

#### SYNEURA.

BRUES, Mon. Phoridæ, 383, 1904.

**cocciphila** COQUILLET, Canad. Ent., XXVII, 106 (*Phora*).—Magdalena, Victoria and Tamaulipas, Mex.; bred from larvæ infesting dead adults of *Iccrya purchasi*.

BRUES, Mon. Phoridæ, 383, types redesc.

#### METOPINA.

MACQUART, Hist. Nat. Dipt., II, 666, 1835.

STROBL, Funde am Seitenst., 1880 (*Drepanophora*).

SIX, Tidschr. v. Ent., XXI, 126 (*Leptophora*).

BECKER, Die Phoriden, 83, syn. and desc., 1901.

BRUES, Mon. Phoridæ, 384, 1904.

**pachycondylæ** BRUES, Mon. Phoridæ, 384.—Austin, Texas; the larvæ live as commensals with those of the ant *Pachycondyla harpax*. The habits of the larvæ are described by Professor Wm. M. Wheeler in an illustrated article, "An Extraordinary Ant-Guest," in American Naturalist, Dec., 1901,—one of the most interesting contributions to knowledge that ever came under my notice.

## COMMOPTERA.

- BRUES, Amer. Naturalist, xxxv, 344, 1901; Mon. Phoridæ, 385, 1904.  
*solenopsidis* BRUES, Amer. Naturalist, xxxv, 344, figs.; Mon. Phoridæ, 386, brief desc.—Austin, Texas; in nests of *Solenopsis geminata* FABR.

## ÆNIGMATIAS.

- MEINERT, Entom. Meddelelser, II, 213, 1890.  
 BECKER, Die Phoriden, 89, 1901.  
 COQUILLET, Canad. Ent., xxxv, 20, notes.  
 BRUES, Mon. Phoridæ, 386, 1904.  
*schwarzii* COQUILLET, Canad. Ent., xxxv, 21.—Flagstaff, Ariz.  
 BRUES, Mon. Phoridæ, 387, quotes desc.

## ECITOMYIA.

- BRUES, Amer. Naturalist, xxxv, 347, 1901; Mon. Phoridæ, 387, 1904.  
*wheeleri* BRUES, Amer. Nat., xxxv, 347, figs.; Mon. Phoridæ, 388, brief desc.—Austin, Tex.; from nests of *Eciton cæcum* LATR. and *schmitti* EMERY.

## ACONTISTOPTERA.

- BRUES, Amer. Naturalist, xxxvi, 1902, 373; Mon. Phoridæ, 388, 1904.  
*melanderi* BRUES, Amer. Nat., xxxv, 373, figs.; Mon. Phoridæ, 389, brief desc.—Austin, Texas; in nests of *Eciton opacithorax* EMERY.

## XAINONOTUM.

- BRUES, Amer. Naturalist, xxxvi, 1902, 376; Mon. Phoridæ, 389, 1904.  
*hystrix* BRUES, Amer. Nat., xxxvi, 376, figs.; Mon. Phoridæ, 390, brief desc.—Austin, Texas; in nests of *Eciton opacithorax* EMERY.

## PULICIPHORA.

- DAHL, Zool. Anzeiger, xx, 410, 1897; Sitzungsber. d. Naturforsch. Freunde, 185, 1898; Zool. Anzeiger, xxi, 308, 1898.  
 WANDOLLECK, Zool. Jahrbuch, Abth. f. Syst., 424, 1898 (*Stethopathus*).  
 BRUES, Amer. Naturalist, May, 1901, 354 (id.).  
 MELANDER and BRUES, Biol. Bull., June, 1903 (id.).  
 BRUES, Mon. Phoridæ, 390, 1904, syn. and desc.  
*occidentalis* MELANDER and BRUES, Biol. Bull., v, 17, f. 6, 7 (*Stethopathus*).—Woods Hole, Mass., about burrows of *Halictus*.  
 BRUES, Mon. Phoridæ, 391, quotes desc.

## PLATYPEZIDÆ.

- SNOW, Kans. Univ. Quart., III, 143, 1894, table of genera, etc.  
 VERRALL, British Flies, VIII, 15, table of genera, 1901.

## AGATHOMYIA.

- VERRALL, British Flies, VIII, 30, 1901.  
*notata* LOEW, Cent., VI, 76 (*Callomyia*); IX, 82 (*Callomyia tenera*).—Pa.; N. Y.  
 SNOW, Kans. Univ. Quart., III, 152 (*Callomyia aldrichii*).—Lawrence, Kans.  
 Gen. ref. and synonymy were communicated to me by Mr. Kahl.



## CALLIMYIA.

- MEIGEN, *Klassifikation*, 311, 1804; *Syst. Besch.*, iv, 10, 1824 (the latter *Callomyia*).  
 SCHINER, *Fauna Austr.*, i, 239, 1862 (id.).  
 VERRALL, *British Flies*, viii, 22, 1901.  
 de MEIJERE, *Tijdschr. v. Ent.*, 1901, 223-234, desc. of larva of a European species.  
*aldrichii* SNOW, see *Agathomyia notata*.  
*bella* WILLISTON, *Biologia, Dipt.*, iii, 89.—Guerrero, Mex.  
*divergens* LOEW, *Cent.*, vi, 77.—Pa.  
*notata* LOEW, see *Agathomyia*.  
*talpula* LOEW, *Cent.*, ix, 81.—N. H.  
*tenera* LOEW, see *Agathomyia notata*.  
*venusta* LOEW, *Kans. Univ. Quart.*, iii, 151, pl. xii, f. 9, 10.—Magdalena Mts., N. M.

## CALOTARSA.

- TOWNSEND, *Canad. Ent.*, xxvi, 51, 102, 1894.  
 SNOW, *Kans. Univ. Quart.*, iii, 143, makes it a synonym of *Platypezza*; Mr. Kahl inclines to the view that it may be retained.  
*calceata* SNOW, *Kans. Univ. Quart.*, iii, 146, pl. xii, f. 1, 3 (*Platypezza*).—Magdalena Mts., N. M.  
*ornatipes* TOWNSEND, *Canad. Ent.*, 1894, 52, 102.—Ill.  
 BANKS, *Canad. Ent.*, xxvi, 88, oc. at Ithaca, N. Y.  
 Brookings, S. D.—Aldrich; see SNOW, *Kans. Univ. Quart.*, iii, 207.

## PLATYPEZA.

- MEIGEN, *Illig. Mag.*, ii, 272, 1803; *Syst. Besch.*, iv, 4, 1824.  
 SCHINER, *Fauna Austr.*, i, 241, 1862.  
 VERRALL, *British Flies*, viii, 34, 1901.  
 SNOW, *Kans. Univ. Quart.*, iii, 145, 1894, table of species.  
*abscondita* SNOW, *Kans. Univ. Quart.*, iii, 205.—Craig's Mt., Idaho.  
*anthrax* LOEW, *Cent.*, ix, 83.—N. Y.  
*calceata* SNOW, see *Calotarsa*.  
*cinerea* SNOW, *Kans. Univ. Quart.*, iii, 150; 148 (*velutina* LOEW); 206 (*pulla*).—Magdalena Mts., N. M., 9,500 ft. [Kahl, in litt.]  
*egregia* SNOW, see *umbrosa*.  
*flavicornis* LOEW, *Cent.*, vi, 79.—Pa.  
*obscura* LOEW, *Cent.*, vi, 80.—Pa. White Mts., N. H.—Slosson.  
*ornatipes* TOWNSEND, see *Calotarsa*.  
*pallipes* LOEW, *Cent.*, vi, 81.—D. C.  
*pulchra* SNOW, *Kans. Univ. Quart.*, iii, 149, pl. xii, f. 6.—Magdalena Mts., N. M., 8,000 ft.  
*pulla* SNOW, see *cinerea*.  
*tæniata* SNOW, *Kans. Univ. Quart.*, iii, 149.—Ill.  
*umbrosa* SNOW, *Kans. Univ. Quart.*, iii, 148, pl. xii, f. 7; p. 150 (*egregia*).—Magdalena Mts., N. M., 8,000 ft. [Kahl.]  
*unicolor* SNOW, *Kans. Univ. Quart.*, iii, 206.—Moscow, Idaho.  
*velutina* LOEW, *Cent.*, vi, 79.—Pa.  
 N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.  
 For SNOW's *velutina* see *cinerea*.

## PLATYCNEMA.

ZETTERSTEDT, Dipt. Scand., I, 332, 1842.

SCHINER, Fauna Austr., I, 242, 1862.

VERRALL, British Flies, VIII, 19, 1901.

? *imperfecta* LOEW (Cent., VI, 82.—D. C.). On examining the type, at Mr. Kahl's request, I found it to be a small Empid.

The genus occurs in the United States, however, for Mr. Kahl had a species, captured at Lawrence, Kans.

## PIPUNCULIDÆ.

HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 77-86, 1899, paper containing table of genera.

BECKER, Berl. Ent. Zeitsch., XLII, 25-100, 1897, has a revision of the European members of the family.

VERRALL, British Flies, VIII, 1901, contains a monograph of the British species.

## CHALARUS.

WALKER, Entomologist's Magazine, II, 269, 1834.

MACQUART, Hist. Nat. Dipt., II, 12, 1835 (*Atelcneura*).

SCHINER, Fauna Austr., I, 244, 1862.

BECKER, Berl. Ent. Zeitsch., XLII, 96, 1897.

VERRALL, British Flies, VIII, 67, 1901.

*spurius* FALLÉN, Syrph., 16 (*Cephalops*).—N. Europe.

MEIGEN, Syst. Besch., IV, 24 (*Pipunculus*).

MACQUART, Hist. Nat. Dipt., II, 12 (*Atelcneura nigripes*).

SCHINER, Fauna Austr., I, 245.

BECKER, Berl. Ent. Zeitsch., XLII, 96, bibliography, etc.

GIARD, Compt. Rend. Acad. Sci. Paris, CIX, records rearing the species from *Typhlocyba rosæ*, a leaf-hopper.

VERRALL, British Flies, VIII, 68.

N. J.—Smith Cat.; White Mts., N. H.—Slosson. Mr. Kahl has compared American with European specimens, and confirms the identity. We also have an undescribed species.

## NEPHROCERUS.

ZETTERSTEDT, Ins. Lapp., 578, 1840; Dipt. Scand., III, 946, 1844.

BECKER, Berl. Ent. Zeitsch., XLII, 47, 1897.

VERRALL, British Flies, VIII, 77, 1901.

*dæcki* JOHNSON, Ent. News, XIV, 107.—Long Id., N. Y.

Mr. Coquillett determined an undescribed species from the White Mts. for Mrs. Slosson's list; Mr. Kahl also has reported the genus to me from Kansas.

## PIPUNCULUS.

LATREILLE, Hist. Nat. Crust. et Ins., III, 463, 1802; XIV, 393, 1804.

FALLÉN, Syrphici, 14, 1816 (*Cephalops*).

MACQUART, Hist. Nat. Dipt., II, 9, 1835.

ZETTERSTEDT, Dipt. Scand., III, 949, 1844.

SCHINER, Fauna Austr., I, 245, 1862.

BECKER, Berl. Ent. Zeitsch., XLII, 35, 1897.

- VERRALL, Brit. Flies, VIII, 79, 1901.  
 HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 77 et seq., table of species.  
 WILLISTON, Biologia, Dipt., III, 86, table of Mex. species, 1892.  
 BECKER, loc. cit., 28, gives references to observations on the larvæ;—they parasitize leaf-hoppers.
- aculeatus** WILLISTON, see *willistonii*.
- albofasciatus** HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 85.—Opelousas, La. N. J.—Smith Cat.
- aridus** WILLISTON, see *subvirescens*.
- atlanticus** HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 80.—New Bedford, Mass.; Montgomery Co., Pa. N. J.—Smith Cat.; Montreal—Chagnon.
- cingulatus** LOEW, Cent., VI, 73.—D. C.  
 HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 81, type redesc.  
 White Mts., N. H.—Slosson.
- elegantulus** WILLISTON, Biologia, Dipt., III, 87.—Guerrero, Mex.
- fasciatus** LOEW, Cent., X, 59.—Texas.  
 HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 78, type redesc.  
 KERTÉSZ, Wien. Ent. Zeitung, XIX, 270, would change name to *locwi*, because there was once a *fasciatus* described, which turned out to be a synonym. I should strongly object to admitting the principle.
- flavicornis** WILLISTON, Biologia, Dipt., III, 88.—Guerrero, Mex.  
 GIGLIO-TOS, Ditt. del Mess., II, 71, note on male.—Tuxpango, Mex.
- flavitaris** WILLISTON, Biologia, Dipt., III, 87.—Guerrero, Mex.
- flavomaculatus** HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 84.—Horse Neck Beach, Mass.
- fuscitarsis** ADAMS, Kans. Univ. Sci. Bull., II, 36.—Atherton, Mo.
- fuscus** LOEW, Cent., VI, 71.—Md.  
 ? WALKER, List, III, 639 (*reipublicæ*).—N. Y. [Hough, with query.]  
 HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 82, type redesc.  
 White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.  
 See *nitidiventris*.
- houghi** of Smith's Cat. is a manuscript name;—Ent. News, XII, 96 and XIV, 107.
- houghi** of KERTÉSZ, see *lateralis*.
- lateralis** WALKER, Dipt. Saund., 216.—N. A.  
 COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 331, refers to *Prothccus*.  
 KERTÉSZ, Wien. Ent. Zeitung, 1900, 244, refers to *Pipunculus*, and changes name to *houghi* on account of preoccupation.  
 VERRALL, Brit. Flies, VIII, 120, shows that there was no preoccupation, as Meigen's *lateralis* is a synonym of *maculatus* WALKER.  
 St. Augustine, Fla.—Johnson.
- nigricornis** ADAMS, Kans. Univ. Sci. Bull., II, 36.—Atherton, Mo.
- nigripes** LOEW, Cent., VI, 75.—Pa.  
 HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 79, type redesc.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- nitidiventris** LOEW, Cent., VI, 72.—D. C.  
 HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 82, type redesc.; may be the female of *fuscus*.  
 White Mts., N. H.—Slosson; Montreal—Chagnon.
- opacus** WILLISTON, see *Verrallia*.
- pallipes** JOHNSON, Ent. News, XIV, 107.—Wildwood, N. J.
- politus** WILLISTON, Trans. Ent. Soc. London, 1896, 351, pl. XI, f. 88.—St. Vincent, W. I.
- similis** HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 83.—Tifton, Ga.; Ala. N. J.—Smith Cat.

**subopacus** LOEW, Cent., VI, 74.—D. C.

WILLISTON, Biologia, Dipt., III, 88, oc. and note.—Guerrero, Mex.  
HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 79, type redesc.  
Montreal—Chagnon.

**subvirescens** LOEW, Cent., X, 58.—Texas.

? WALKER, Trans. Ent. Soc., IV, 150 (*translatus*).—U. S. [Hough, with  
a ?]

WILLISTON, Dipt. of Death Val. Exped., 255 (*aridus*).—Argus Mt., Cal.  
[Hgh.]

HOUGH, Boston Soc. Nat. Hist., XXIX, 84.—New Bedford, Mass.; Tifton,  
Ga.; Opelousas, La.

Montreal—Chagnon.

**willistonii** KERTÉSZ, Wien. Ent. Zeit., XIX, 1900, 244, change of name.

WILLISTON, Biologia, Dipt., III, 88 (*aculeatus*, preoc.); Trans. Ent. Soc.  
Lond., 1896, 351 (id.).—Tabasco, Mex.; St. Vincent, W. I.

**xanthopodus** WILLISTON, Biologia, Dipt., III, 87.—Guerrero, Mex.

### VERRALLIA.

MIK, Wien. Ent. Zeit., XVIII, 137, 1899.

BECKER, Berl. Ent. Zeitsch., XLII, 1897, 93 (*Prothecus* ROND.).

*Note.*—According to Mik, loc. cit., Rondani made an error of identification, and the species he named as the type is not *auctus*, but has an acuminate third antennal joint. This antennal character is mentioned in the definition, hence *Prothecus* could not be used for the present group, in which the lack of a point on the third antennal joint is one of the principal characteristics.

**opaca** WILLISTON, Trans. Amer. Ent. Soc., XIII, 295 (*Pipunculus*).—Wash.

HOUGH, Proc. Boston Soc. Nat. Hist., XXIX, 77, refers to *Prothecus*, in  
Becker's sense.

KERTÉSZ, Wien. Ent. Zeitung, XIX, 244, refers to *Verrallia*.

### SYRPHIDÆ.

WILLISTON, Synop. N. A. Syrphidæ. Bulletin of The United States National  
Museum, No. 31. Washington, 1886, xxx and 335 pages, with 12 plates.  
The largest and most complete family monograph yet published on North  
American Diptera.

VERRALL, British Flies. Syrphidæ, etc. Gurney and Jackson, London, 1901.  
690 pages, portrait and many excellent text figures. Includes also in an  
appendix of 121 pages a full catalogue and bibliography of the British rep-  
resentatives of the three families described, which are the Platypezidæ, Pipun-  
culidæ and Syrphidæ. This massive volume is an encyclopedia on the three  
families indispensable to the advanced worker. Many of the British species  
and most of the genera occur also in America.

CHAGNON, G., Études Préliminaires sur les Syrphides de la Province de Que-  
bec. Chicotini, Quebec, 1901, 75 pages. Originally published in parts in "Le  
Naturaliste Canadien," 1901. I quote the separate edition. It is a convenient  
and useful compilation on the commoner species of that region.

### MICRODON.

MEIGEN, Illig. Mag., II, 275, 1803; Syst. Besch., III, 162, 1822.

LATREILLE, Hist. Nat. Crust. et Ins., XIV, 358; 1805 (*Aphritis*).

- WIEDEMANN, Auss. Zweifl., II, 79, 1830 (*Ceratophya*).  
 MACQUART, Hist. Nat. Dipt., I, 486, 1834 (*Chymophila*). [O. S.]  
 NEWMAN, Ent. Mag., v, 372, 1838 (*Dimeraspis*).  
 WALKER, List, IV, 1157, 1849 (*Mesophila*); Dipt. Saund., 217, 1856 (*Ubristes*).  
 SCHINER, Fauna Austr., I, 249, 1862.  
 WILLISTON, Synop. N. A. Syrph., 3, 1886, def. and table of species; Biologia, Dipt., III, 2, 1891, syn., etc.  
 GIGLIO-TOS, Boll. Mus. Zool., VI, No. 108, 4, 1891; Ditt. del Mess., I, 38, 1892 (both *Omegasyrphus*). [Will.]  
 WHEELER, Psyche, July, 1901, larva in nest of *Pseudomyrmex* in Mex.  
 VERRALL, Brit. Flies, VIII, 658, 1901.  
 CHAGNON, Ét. Prélim. les Syrph., 13, 190, table of Quebec species, 1901.
- aquilinus** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., I, 37.—Tuxpango, Mex.
- aurifex** WIEDEMANN, Auss. Zweifl., II, 85.—Brazil.  
 MACQUART, Hist. Nat. Dipt., I, 486 (*Chymophila splendens*); Dipt. Exot., II, 2, 10 (id.); II, 3, 11 (*Aphritis aurifex*).—Philadelphia; Para.  
 WALKER, Ins. Saund., 216 (*trochilus*).—Mex. [Will.]  
 OSTEN SACKEN, Bull. Buff. Soc. Nat. Hist., Nov., 1875, on type of *Chymophila splendens*; quoted by Williston, Synops., 12.  
 WILLISTON, Synop. N. A. Syrph., 9, 10; Biologia, Dipt., III, 2, pl. I, f. 2.—Mex.; Guerrero and Tehuantepec.
- aurantulus** FABRICIUS, Syst. Antl., 185 (*Mulio*).—Carolina.  
 WIEDEMANN, Auss. Zweifl., II, 86.  
 MACQUART, Dipt. Exot., II, 2, 12, pl. II, f. I (*Aphritis*); Suppl. II, 2, 38 (*Aphritis crassitarsis*).—Carolina; Rio Negro.  
 F. LYNCH ARRIBALZAGA, Dipt. Argent., 126 (*crassitarsis*).—Argentina.  
 WILLISTON, Synop. N. A. Syrph., 11, transl. Wied. and Macq.  
 GIGLIO-TOS, Ditt. del Mess., I, 35, oc. in Orizaba.  
 JOHNSON, Ent. News, XII, 94, oc. in Pa.
- baliopterus** LOEW, Cent., x, 56.—Texas.  
 WILLISTON, Synop. N. A. Syrph., 5, pl. I, f. 4.  
 Charlotte Harbor, Fla.—Johnson (*Omegasyrphus*).  
 WILLISTON, Biologia, Dipt., III, 3, oc. and note.—Texas; Guerrero and N. Yucatan, Mex.
- bombiformis** TOWNSEND, see *megalogaster*.
- chrysopyga** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892 (*Ubristes*); Ditt. del Mess., I, 37 (id.).—Orizaba, Mex.
- coarctatus** LOEW, Cent., v, 47.—D. C.  
 WILLISTON, Synop. N. A. Syrph., 6, transl. orig. desc.  
 GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 118, 1892; Ditt. del Mess., I, 39, pl. I, f. II (both *Omegasyrphus*, type of new genus).—Tuxpango, Mex.  
 Orlando, Fla.—Johnson (*Omegasyrphus*).
- cothurnatus** BIGOT, see *tristis*.
- falcatus** WILLISTON, Synop. N. A. Syrph., 9; Biologia, Dipt., III, 3, notes.—Guerrero and Tehuantepec, Mex.  
 GIGLIO-TOS, Ditt. del Mess., I, 36.—Tehuacan, Mex.
- fulgens** WIEDEMANN, Auss. Zweifl., II, 82.—Ga.  
 GRAY, in Griffith's An. Kingd., Ins., II, pl. CXXV, f. 2 (*euglossoides*).  
 MACQUART, Dipt. Exot., Suppl., I, 122 (*Aphritis*).—Guiana, Fla.  
 WILLISTON, Synop. N. A. Syrph., II, orig. desc., etc.

- St. Augustine and Suwanee, Fla.; pupæ found in decaying pine logs—  
Johnson.
- HUNTER, *Canad. Ent.*, xxviii, 89.—Fla.
- fuscipennis** MACQUART, *Hist. Nat. Dipt.*, 1, 488 (*Ceratophya*).—Philadelphia.
- WALKER, *List.*, III, 539 (*agapenor*); IV, 1157, gen. ref. (*Mesophila*).—Ga.
- WILLISTON, *Synop. N. A. Syrph.*, 4, pl. 1, f. 2 (*globosus* FAB.).—Atlantic States; Mich. [Syn. by Snow.]
- TOWNSEND, *Trans. Amer. Ent. Soc.*, xxii, 33, female.—D. C.
- CHAGNON, *Ét. Prélim. les Syrph.*, 14; *Le Nat. Canadien*, Nov., 1900 (the latter as *globosus*).—Montreal.
- N. J.—Smith Cat.; Georgiana, Fla.—Johnson.
- globosus** FABRICIUS, *Syst. Antl.*, 185 (*Mulio*).—Carolina.
- WIEDEMANN, *Auss. Zweifl.*, II, 86, transl. orig. desc.
- MACQUART, *Dipt. Exot.*, II, 2, 13, pl. 1, f. 4 (*Aphritis*).—Carolina.
- NEWMAN, *Ent. Mag.*, v, 373 (*Dimercaspis podagra*).
- WILLISTON, *Synop. N. A. Syrph.*, 4, pl. 1, f. 1 (*fuscipennis* MACQ.).—Va., Fla., Tex., Col. [Snow.]
- LINTNER, *2d N. Y. Rept.*, 116, figs.; larvæ in ants' nests in decaying wood.—N. Y.
- CHAGNON, *Ét. Prélim. les Syrph.*, 15.—N. J.
- gracilis** BIGOT, *Annales*, 1883, 320.—Mex.
- WILLISTON, *Biologia, Dipt.*, III, 3.—Orizaba, Mex.
- inequalis** LOEW, *Cent.*, VII, 70.—Cuba.
- lætus** LOEW, *Cent.*, v, 46.—Cuba.
- lanceolatus** ADAMS, *Kans. Univ. Sci. Bull.*, II, 222.—Englewood, Kans.
- limbus** WILLISTON, *Synop. N. A. Syrph.*, 8.—Fla.
- marmoratus** BIGOT, *Annales*, 1883, 320.—Cal.
- WILLISTON, *Synop. N. A. Syrph.*, 10, transl. of orig. desc.
- megalogaster** SNOW, *Kans. Univ. Quart.*, 1, 34, pl. VII, f. 1.—Col.
- TOWNSEND, *Trans. Amer. Ent. Soc.*, xxii, 33 (*bombiformis*).—Dixie Landing, Va. [Hunter.]
- JOHNSON, *Ent. News*, XII, 95, oc. in N. J. and Pa.
- niger** WILLISTON, *Biologia, Dipt.*, III, 4, pl. 1, f. 4.—Vera Cruz, Mex.
- pachystylum** WILLISTON, *Synop. N. A. Syrph.*, 8.—Ga.
- St. Augustine, Fla.—Johnson.
- pulcher** WILLISTON, *Synop. N. A. Syrph.*, 5.—San Domingo.
- rufipes** MACQUART, *Dipt. Exot.*, II, 2, 11, pl. II, f. 3 (*Aphritis*).—Pa.
- WILLISTON, *Synop. N. A. Syrph.*, 12, transl. orig. desc.
- JOHNSON, *Ent. News*, XII, 95, oc. in La.
- scitulus** WILLISTON, *Synop. N. A. Syrph.*, 10.—Fla.
- tristis** LOEW, *Cent.*, v, 45.—Va.
- WILLISTON, *Synop. N. A. Syrph.*, 6, pl. 1, f. 3.—Conn., Ore.
- CHAGNON, *Ét. Prélim. les Syrph.*, 14.—Montreal.
- Mackenzie R.—O. S.; N. J.—Smith Cat.; Axton, N. Y.—M. and H.
- var. **cothurnatus** BIGOT, *Annales*, 1883, 320.—Wash.
- WILLISTON, *Synop. N. A. Dipt.*, 8.—Mt. Hood, Ore.
- var. **ruficrus** WILLISTON, *Synop. N. A. Syrph.*, 7.—Conn.
- violens** TOWNSEND, *Trans. Amer. Ent. Soc.*, xxii, 34.—Jamaica.
- viridis** TOWNSEND, *Pr. Cal. Acad. Sci.*, IV, 610.—Lower Cal.
- HUNTER, *Canad. Ent.*, xxix, 123, oc. in Tenn.
- xanthophilus** TOWNSEND, *Pr. Cal. Acad. Sci.*, IV, 611.—Cal.



## RHOPALOSYRPHUS.

GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 108, 1891; Ditt. del Mess., I, 34, 1892.

F. LYNCH ARRIBALZAGA, Dipt. Argentina, 1891, 37 (*Holmbergia*).

WILLISTON, Biologia, Dipt., III, 78, 1891, notes.

*güntheri* F. LYNCH ARRIBALZAGA, Dipt. Argent., 1891, 37 (*Holmbergia*).—Buenos Aires.

GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 118; Ditt. del Mess., I, 35, pl. I, f. 10.—Chinantla, Mex.

## MIXOGASTER.

MACQUART, Dipt. Exot., II, 2, 14, 1842.

KAHL, Kans. Univ. Quart., VI, 140, list of species, etc., 1897.

*bellula* WILLISTON, Biologia, Dipt., III, I, pl. I, f. 1.—Guerrero, Mex.

*breviventris* KAHL, Kans. Univ. Quart., VI, 137.—Kans.

*dimidiata* GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 123, 1892; Ditt. del Mess., I, 33, pl. I, f. 9.—Tuxpango, Mex.

*mexicana* MACQUART, Dipt. Exot., Suppl., I, 123, pl. x, f. 15.—Mex.

WILLISTON, Biologia, Dipt., III, I, oc. and note.—Guerrero, Mex.

## CALLICERA.

PANZER, Fauna Germanica, CIV, 1806.

MEIGEN, Syst. Besch., III, 155, 1822.

SCHINER, Fauna Austr., I, 248, 1862.

SNOW, Kans. Univ. Quart., I, 33, 1892.

VERRALL, Brit. Flies, VIII, 655, 1901.

*johsoni* HUNTER, Canad. Ent., XXVIII, 87.—Pa.

*montensis* SNOW, Kans. Univ. Quart., I, 34, pl. VII, f. 4; III, 225, notes.—Col., 9,000 ft.; N. M., 9,500 ft.

## CHRYSOTOXUM.

MEIGEN, Illig. Mag., II, 259, 1803; Syst. Besch., III, 166, 1822.

SCHINER, Fauna Austr., I, 252, 1862.

WILLISTON, Synop. N. A. Syrph., 13, 1886, table of species, etc.

CHAGNON, Ét. Prélim. les Syrph., 73, 1901.

VERRALL, Brit. Flies, VIII, 641, 1901.

*derivatum* WALKER, List, III, 542.—Martin Falls, Canada.

BIGOT, Annales, 1883, 323 (*villosulum*).—Wash. [Will.]

WILLISTON, Synop. N. A. Syrph., 16, pl. I, f. 5.—Alaska, Colorado Mts., Cal., Ore.

SNOW, Kans. Univ. Quart., I, 34, oc. and notes; III, 226, oc. and notes.—Col.

TOWNSEND, Trans. Amer. Ent. Soc., XXII, 35, notes on the male.

HUNTER, Canad. Ent., XXVIII, 89.—Wyo., Nebr.

N. M.—Coq.

*flavifrons* MACQUART, Dipt. Exot., II, 2, 17.—Newfoundland.

WILLISTON, Synop. N. A. Syrph., 17, would drop.

*integrum* WILLISTON, Synop. N. A. Syrph., 16; Biologia, Dipt., III, 5, oc. and note.—Ariz.; Sonora, Mex.

GIGLIO-TOS, Ditt. del Mess., I, 39.—Mex.

SNOW, Kans. Univ. Quart., III, 227, oc. in N. M., and note.

*laterale* LOEW, Cent., v, 42.—Nebr.

WILLISTON, Synop. N. A. Syrph., 14, transl. orig. desc.—N. Y.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 35, oc. in Mex. and notes.

N. J.—Smith Cat.

*nigratum* FABRICIUS, Ent. Syst., iv, 292 (*Syrphus*); Syst. Antl., 183 (*Mulio*).—Jamaica.

WIEDEMANN, Auss. Zweifl., ii, 88.

*pubescens* LOEW, Wien. Ent. Monatsch., iv, 84; Cent., v, 43.—Ill.

WILLISTON, Synop. N. A. Syrph., 15, transl. orig. desc.—N. Y.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 35.—Mich., Va.

HUNTER, Canad. Ent., xxviii, 91, desc.

CHAGNON, Ét. Prélim. les Syrph., 73.—Isle Jesus, P. Q.

N. J.—Smith Cat.

*ventricosum* LOEW, Cent., v, 44.—D. C.

WILLISTON, Synop. N. A. Syrph., 15, transl. orig. desc.—Canada.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 36.—Ariz.

N. J.—Smith Cat.

*villosulum* BIGOT, see *derivatum*.

*ypsilon* WILLISTON, Synop. N. A. Syrph., 14.—N. M.

SNOW, Kans. Univ. Quart., iii, 226, notes on a female.

#### LEPROMYIA.

WILLISTON, Synop. N. A. Syrph., 31, 1886, change of name.

LOEW, Cent., v, 38, 1864 (*Lepidomyia*, preoc.).

*calopus* LOEW, Cent., v, 38 (*Lepidomyia*).—Cuba.

WILLISTON, Synop. N. A. Syrph., 31, transl. orig. desc.

*cincta* BIGOT, see *Chilosia*.

#### CHRYSOGASTER.

MEIGEN, Illig. Mag., ii, 274, 1803; Syst. Besch., iii, 265, 1822.

MACQUART, Hist. Nat. Dipt., i, 563 (*Orthoncura*), 1834.

BIGOT, Rev. et Mag. Zool., 1859, 3 (*Cryptineura*).

SCHINER, Fauna Austr., i, 266 and 271 (*Chrysogaster* and *Orthoncura*), 1862.

WILLISTON, Synop. N. A. Syrph., 31, 1886, table of species, etc.

VERRALL, Brit. Flies, viii, 185, 186, 1901 (*Chrysogaster* and *Orthoncura*).

CHAGNON, Ét. Prélim. les Syrph., 16, 1901, table of Quebec species.

*apisaon* WALKER, List, iii, 572.—N. Y.

*bellula* WILLISTON, Proc. Amer. Phil. Soc., xx, 304; Synop. N. A. Syrph., 36, pl. ii, f. 6; Biologia, Dipt., iii, 7.—Col., Wash., Cal.; Durango and Patzcuaro, Mex.

N. M.—Snow.

*lata* LOEW, Cent., iv, 59.—Br. N. A., English R.

WILLISTON, Synop. N. A. Syrph., 36, transl. orig. desc.—Ore.

*nigripes* LOEW, Cent., iv, 60, male; ix, 80, female (*Orthoncura ustulata*).—N. Y., N. J. [Will.]

? WALKER, List, iii, 572 (*antitheus*).—N. Y. [Will., with a doubt.]

WILLISTON, Synop. N. A. Syrph., 33, pl. ii, f. 10.—Conn., N. C.

CHAGNON, Ét. Prélim. les Syrph., 17.—Rigaud, Quebec.

N. J.—Smith Cat.; Sea Cliff, N. Y.—Banks.

*nigrovittata* LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 378 (*Orthoncura*).—San Francisco.

WILLISTON, Proc. Amer. Phil. Soc., xx, 304; Synop. N. A. Syrph., 34, pl. ii, f. 11.—Wash., Cal., Col.

- nitida** WIEDEMANN, Auss. Zweifl., II, 116.—N. A.  
 WALKER, List, III, 545 (*Paragus ancus*).—Ohio.  
 BIGOT, Rev. et Mag. Zool., 1859, 4 (*Cryptineura hieroglyphica*); Annales, 1883, 315, protests against making this a synonym.  
 LOEW, Cent., IV, 58, note (*Orthoncurea*).  
 SCHINER, Novara, 368 (*Orthoncurea*), oc. in S. A.  
 WILLISTON, Synop. N. A. Syrph., 35, pl. II, f. 7; Biologia, Dipt., III, 7, oc. in Mex.—New England, Pa., Va., S. C., Kans.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 36, note.—Va., D. C.  
 N. J.—Smith Cat.; Sea Cliff, N. Y.—Banks; Fla.—Johnson.
- pictipennis** LOEW, Cent., IV, 58 (*Orthoncurea*).—N. Y.  
 WILLISTON, Synop. N. A. Syrph., 37.—Conn., N. Y., N. J.  
 HUNTER, Canad. Ent., XXIX, 124, oc. in Neb.  
 CHAGNON, Ét. Prélim. les Syrph., 18.—Montreal.
- pulchella** WILLISTON, Synop. N. A. Syrph., 35, pl. II, f. 9.—N. H., Conn., Canada.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 36, note on var.—Mich.  
 CHAGNON, Ét. Prélim. les Syrph., 17.—Montreal.  
 N. J.—Smith Cat.
- recedens** WALKER, Dipt. Saund., 228.—U. S.
- stigmata** WILLISTON, Proc. Amer. Phil. Soc., XX, 303; Synop. N. A. Syrph., 34, pl. II, f. 8.—Cal.  
 BIGOT, Annales, 1884, 556 (*Orthoncurea sinuosa*).—Wash. [Will.]  
 Northern Ida.—J. M. A.

## PSILOTA.

- MEIGEN, Syst. Besch., III, 256, 1822.  
 SCHINER, Fauna Austr., I, 266, 1862.  
 WILLISTON, Synop. N. A. Syrph., 30, 1886.  
 VERRALL, Brit. Flies, VIII, 181, 1901.
- buccata** MACQUART, Dipt. Exot., II, 2, 107, pl. XVIII, f. 2 (*Pipiza*).—Carolina.  
 WILLISTON, Synop. N. A. Syrph., 30 and 291.—Texas, Ga.  
 HUNTER, Canad. Ent., XXVIII, 91, historical account, syn., etc.  
 Inverness, Fla.—Johnson.
- flavipennis** MACQUART, Dipt. Exot., Suppl. v, 97, pl. v, f. 5.—Philadelphia.  
 WILLISTON, Synop. N. A. Syrph., 30, quotes orig. desc.

## PIPIZA.

- FALLÉN, Syrphidi, 58, 1816.  
 MEIGEN, Syst. Besch., III, 241, 1822.  
 LOEW, Oken's Isis, 1840, 512 (*Triglyphus*).  
 RONDANI, Dipt. Ital. Prod., I, 53, 1856 (*Heringia*); II, 185, 1857 (*Pipizella*).  
 EGGER, Verh. Zool.-Bot. Ges., XV, 573, 1865 (*Cnemodon*).  
 PHILIPPI, Verh. Zool.-Bot. Ges., XV, 1865, 741 (*Penium*).  
 SCHINER, Fauna Austr., I, 261, 1862.  
 WILLISTON, Synop. N. A. Syrph., 22, def. and table of species, 1886; Biologia, Dipt., III, 6, bibl.  
 VERRALL, Brit. Flies, VIII, 161, 1901.  
 CHAGNON, Ét. Prélim. les Syrph., 18, 1901.
- albipilosa** WILLISTON, Synop. N. A. Syrph., 28.—Pa.  
**bellula** WILLISTON, Biologia, Dipt., III, 6.—Guerrero, Mex.

- calcarata* LOEW, Cent., vi, 42.—N. Y.  
WILLISTON, Synop. N. A. Syrph., 24, transl. orig. desc.  
N. J.—Smith Cat.
- crassipes* BIGOT, Annales, 1884, 557.—N. A.  
WILLISTON, Synop. N. A. Syrph., 291, quotes orig. desc.
- divisa* WALKER, see *Ocyrtamus dimidiatus*.
- femoralis* LOEW, Cent., vi, 38.—Ill.  
? RILEY, 1st Mo. Rept., 121, f. 66; 6th Rept., 52; Amer. Entom., 1, 83  
(*radicum*).—Mo.; larvæ feed on *Schizonocura lanigera* and *Phylloxera vastatrix*. [Will.]  
WILLISTON, Synop. N. A. Syrph., 26.—Pa.  
CHAGNON, Ét. Prélim. les Syrph., 19.—Montreal and Rigaud, Quebec.
- fraudulenta* LOEW, Cent., vi, 41.—Ill.  
WILLISTON, Synop. N. A. Syrph., 26, transl. desc.; may be same as *nigribarba*.
- modesta* LOEW, Cent., iv, 62 (*Triglyphus*).—N. Y.  
WILLISTON, Synop. N. A. Dipt., 24, transl. desc.  
WEBSTER, Canad. Ent., xxx, 19, reared from larvæ feeding on *Schizonocura lanigera*.  
CHAGNON, Ét. Prélim. les Syrph., 20.—St. Jean, P. Q., Canada.  
N. J.—Smith Cat.: Montreal—Chagnon; Beulah, N. M.—Skinner.
- nigribarba* LOEW, Cent., vi, 40.—N. Y.  
WILLISTON, Synop. N. A. Syrph., 25, transl. desc. See *fraudulenta*.
- nigripilosa* WILLISTON, Synop. N. A. Syrph., 28.—Pa.
- occidentalis* TOWNSEND, Annals and Mag. Nat. Hist., xix, 140.—Rio Ruidosa, N. M.
- pistica* WILLISTON, Synop. N. A. Syrph., 29.—Conn.  
CHAGNON, Ét. Prélim. les Syrph., 20.—Sherbrooke, Quebec.  
N. J.—Smith Cat.: N. M.—Snow; Montreal—Chagnon.
- pisticoides* WILLISTON, Synop. N. A. Syrph., 29.—White Mts., N. H.  
COQUILLET, Proc. Wash. Acad. Sci., 11, 426, oc. in Alaska, Me., N. Y., Col.  
Beulah, N. M.—Skinner; Axton, N. Y.—M. and H.
- pubescens* LOEW, Cent., iv, 61 (*Triglyphus*).—Wis.  
WILLISTON, Synop. N. A. Syrph., 23, transl. desc.
- puella* WILLISTON, Synop. N. A. Syrph., 27, pl. II, f. 3.—N. H.
- pulchella* WILLISTON, Synop. N. A. Syrph., 29, pl. II, f. 1.—Conn., Mass.  
N. J.—Smith Cat.; St. Augustine and L. Worth, Fla.—Johnson.
- radicum* RILEY, see *femoralis*.
- salax* LOEW, Cent., vi, 39.—Pa.  
WILLISTON, Synop. N. A. Syrph., 25, transl. desc.

#### NAUSIGASTER.

- WILLISTON, Trans. Amer. Ent. Soc., xi, 33, 1885; Synop. N. A. Syrph., 21, 1886.
- TOWNSEND, Annals and Mag. Nat. Hist., xx, 23, 1897, table of species, etc.
- geminata* TOWNSEND, Annals and Mag. Nat. Hist., xx, 25.—Beeville and Kennedy, Texas.
- meridionalis* TOWNSEND, Annals and Mag. Nat. Hist., xix, 20.—Vera Cruz, Mex.
- punctulata* WILLISTON, Trans. Amer. Ent. Soc., xi, 34, pl. II, f. 15; Synop. N. A. Syrph., 21, pl. I, f. 10; Biologia, Dipt., III, 6, oc. and notes.—N. M., Cal., Mex.  
TOWNSEND, Psyche, 1897, 148, notes.—N. M.

## GLAUROTRICHA.

THOMSON, Eugen. Resa, 493, 1868.

BIGOT, Annales, 1883, 250.

WILLISTON, Synop. N. A. Syrph., 301, note, 1886.

**volucelloides** BIGOT, Annales, 1884, 548.—Mex.

WILLISTON, Synop. N. A. Syrph., 301, note.

## PARAGUS.

LATREILLE, Dict. D'Hist. Nat., XXIV, 1804; Hist. Nat. Crust. et Ins., XIV, 358, 1804.

MEIGEN, Syst. Besch., III, 176, 1822.

SCHINER, Fauna Austr., I, 256, 1862.

WILLISTON, Synop. N. A. Syrph., 17, 1886, def. and table of species.

VERRALL, Brit. Flies, VIII, 149, 1901.

CHAGNON, Ét. Prélim. les Syrph., 21, 1901.

**angustifrons** LOEW, Cent., IV, 64.—Va.

WILLISTON, Synop. N. A. Syrph., 17, transl. desc.

N. J.—Smith Cat.; Montreal—Chagnon; Sea Cliff, N. Y.—Banks.

**bicolor** FABRICIUS, Ent. Syst., IV, 297 (*Syrphus*); Syst. Antl., 186 (*Mulio*).—Europe.

LATREILLE, Dict. d'Hist. Nat., XXIV, 194.

MEIGEN, Syst. Besch., III, 178–180 (*arcuatus*, *bicolor*, *tæniatus*, and *testaceus*).

MACQUART, Hist. Nat. Dipt., I, 565.

ZETTERSTEDT, Dipt. Scand., II, 849–852 (*bicolor*, *punctulatus*, and *ruficauda*).

SCHINER, Fauna Austr., I, 259; Verh. Zool.-Bot. Ges., VII, 301.

OSTEN SACKEN, Catalogue, 120, oc. in N. A.

WILLISTON, Synop. N. A. Syrph., 18, pl. I, f. 7, 9.—U. S. and Europe; common and variable.

TOWNSEND, Psyche, Nov., 1897, oc. in N. M., and notes on varieties.

VERRALL, Brit. Flies, VIII, 152.

CHAGNON, Ét. Prélim. les Syrph., 21.—Quebec.

**dimidiatus** LOEW, Cent., IV, 63.—D. C.

WILLISTON, Synop. N. A. Syrph., 20, transl. desc.; Biologia, Dipt., III, 5, oc. and notes; perhaps not distinct from *tibialis*.—Mexico, several places.

**tibialis** FALLÉN, Syrphidi, 60 (*Pipiza*).—Europe.

MEIGEN, Syst. Besch., III, 182–184 (*hamorrhous*, *æneus*, *obscurus*, *tibialis*, and *femoratus*).

ZETTERSTEDT, Dipt. Scand., II, 852–854 (*tibialis*, *trianguliferus*, and *æneus*).

SCHINER, Fauna Austr., I, 257, desc. and European bibliography.

BIGOT, Annales, 1884, 540 (*auricaudatus*).—Cal.

WILLISTON, Synop. N. A. Syrph., 19, bibl., etc.—Europe and N. A.; common and variable.

TOWNSEND, Psyche, Nov. 1897, 140; Dec. 1897, 147, notes on varieties, etc.—N. M.

VERRALL, Brit. Flies, VIII, 150.

## CHILOSIA.

MEIGEN, Syst. Besch., III, 296, 1822.

SCHINER, Fauna Austr., I, 273, 1862.

WILLISTON, Synop. N. A. Syrph., 38, 1886, table of species; Biologia, III, 8, 1891, table of Central Am. spp.

- BIGOT, Annales, 1883, 230 (*Cartosyrphus*). [Will.]  
 HUNTER, Canad. Ent., XXVIII, 229, 1896, table and catalogue of species;  
 XXIX, 1897, table of new species.  
 VERRALL, British Flies, VIII, 205, 1901.  
 CHAGNON, Ét. Prélim. les Syrph., 21, 1901.  
*Notc.*—The great work on this genus is the monograph by Theodor  
 Becker, Halle, 1894, with 13 plates. This includes only the palæarctic  
 fauna, not that of North America.
- æscytes* WALKER, List, III, 591 (*Syrphus*).—Martin Falls, Canada.  
 OSTEN SACKEN, Cat., 124, gen. ref.
- alaskensis* HUNTER, Canad. Ent., XXIX, 124, fig.—Cook's Inlet, Alaska.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 427, oc. in Yakutat, Alaska.
- aldrichi* HUNTER, Canad. Ent., XXVIII, 229.—Craig's Mt., Idaho.
- auritecta* GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 132, 1892; Ditt. del Mess.,  
 II, 58, pl. II, f. 22.—Orizaba, Mex.
- baroni* WILLISTON, Synop. N. A. Syrph., 40.—Cal., Wash.
- borealis* COQUILLET, Proc. Wash. Acad. Sci., II, 426.—Alaska, several places.
- capillata* LOEW, Cent., IV, 65.—D. C.  
 BIGOT, Annales, 1884, 552 (*Cartosyrphus lamprurus*).—N. A. [Will.]  
 WILLISTON, Synop. N. A. Syrph., 43.—Va.  
 N. J.—Smith Cat.
- chalybescens* WILLISTON, Kans. Univ. Quart., II, 76.—Cal.
- chrysochlamys* WILLISTON, Biologia, Dipt., III, 8, pl. I, f. 4.—Guerrero, Mex.
- ? *cincta* BIGOT, Annales, 1883, 345 (*Lepidomyia*).—Mex.  
 WILLISTON, Synop. N. A. Syrph., 299, doubtfully referred here.
- comosa* LOEW, Cent., IV, 66.—English R., Winnipeg.  
 WILLISTON, Synop. N. A. Syrph., 44.—Col.  
 CHAGNON, Ét. Prélim. les Syrph., 74.—St. Hilaire, Quebec.
- cyanea* HUNTER, Canad. Ent., XXVIII, 228.—Moscow, Idaho.
- cyanescens* LOEW, Cent., IV, 67, male.—Ill.  
 ? LOEW, Cent., IV, 68, female (*plumata*).—Va. [Will., with some doubt.]  
 WILLISTON, Synop. N. A. Syrph., 42, pl. III, f. 3.—Conn., N. H.  
 CHAGNON, Ét. Prélim. les Syrph., 23.—Montreal.
- frontosa* BIGOT, Annales, 1883, 553 (*Cartosyrphus*).—Mex.
- gracilis* HUNTER, Canad. Ent., XXIX, 126, fig.—Cook's Inlet, Alaska.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 427, would make this a syn. of  
*plutonia*.
- hoodiana* BIGOT, Annales, 1884, 552 (*Cartosyrphus*).—Mt. Hood, Ore.  
 WILLISTON, Synop. N. A. Syrph., 292, quotes desc.; changes name to  
*hoodicnsis*.  
 Hudsonian Zone, N. M.—Cockerell.
- infumatus* BIGOT, see *nigripennis*.
- lævis* BIGOT, Annales, 1884, 553 (*Cartosyrphus*).—Wash.  
 WILLISTON, Synop. N. A. Syrph., 292, quotes desc.
- lamprurus* BIGOT, see *capillata*.
- lasiophthalmus* WILLISTON, Proc. Amer. Phil. Soc., XX, 306, 1882; Synop. N. A.  
 Syrph., 40, pl. III, f. 2.—Col.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 427, oc. in Alaska.  
 White Mts., N. H.—Slosson.
- latrans* WALKER, List, III, 575 (*Syrphus*).—Martin Falls, Canada. Gen. ref. by  
 O. S., Cat., 124.
- leucoparea* LOEW, Cent., IV, 69.—Carolina.  
 WILLISTON, Synop. N. A. Syrph., 45, transl. desc.



- lucta** SNOW, Kans. Univ. Quart., III, 228.—Col.
- lugubris** WILLISTON, see *willistonii*.
- nigripennis** WILLISTON, Proc. Amer. Phil. Soc., XX, 307; Synop. N. A. Syrph., 44, pl. II, f. 14.—Mt. Hood, Ore.  
BIGOT, Annales, 1884, 553 (*Cartosyrphus infumatus*).—Mt. Hood, Ore. [Will.]
- occidentalis** WILLISTON, Proc. Amer. Phil. Soc., XX, 305; Synop. N. A. Syrph., 41, pl. III, f. 1.—Cal.  
COQUILLET, Proc. Wash. Acad. Sci., II, 426, oc. in Alaska and Col.  
CHAGNON, Ét. Prélim. les Syrph., 22.—Sherbrooke, Quebec, White Mts., N. H.—Slosson; Hudsonian Zone, N. M.—Cockerell.
- pacifica** HUNTER, Canad. Ent., XXIX, 127, fig.—Cal.
- pallipes** LOEW, Cent., IV, 70.—D. C.  
WILLISTON, Synop. N. A. Syrph., 41, pl. III, f. 5.—Jackson, N. H.; Wash., Ore.  
CHAGNON, Ét. Prélim. les Syrph., 23.—Montreal, N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- parva** WILLISTON, Proc. Amer. Phil. Soc., XX, 307; Synop. N. A. Syrph., 45, pl. II, f. 13.—Ore.  
BIGOT, Annales, 1884, 555 (*Melanogaster? ochripes*).—Mt. Hood, Ore [Will.]
- petulca** WILLISTON, Synop. N. A. Syrph., 39, pl. II, f. 15.—Wash. White Mts., N. H.—Slosson.  
SNOW, Kans. Univ. Quart., III, 228, oc. in Col. and note.
- plumata** LOEW, see *cyaneescens*.
- plutonia** HUNTER, Canad. Ent., XXIX, 125, fig.—Cook's Inlet, Alaska.  
COQUILLET, Proc. Wash. Acad. Sci., II, 427, oc. in Alaska.  
See note about this under *gracilis*.
- prima** HUNTER, Canad. Ent., XXVIII, 92.—Pa.
- pulchriceps** LOEW, Verh. Zool.-Bot. Verein, 1857, 19.—Europe.  
SCHINER, Fauna Austr., I, 281.  
BECKER, Rev. Gatt. Chilosis, 372<sup>f</sup>  
COQUILLET, Proc. Wash. Acad. Sci., II, 428, oc. in Alaska.  
VERRALL, British Flies, VIII, 222.
- punctulata** HUNTER, Canad. Ent., XXIX, 128, fig.—Nebr.
- ? **rufipes** BIGOT, Annales, 1884, 555 (*Melanogaster*).—N. A.  
WILLISTON, Synop. N. A. Syrph., 301, quotes desc.; may be a *Melanosoma*.
- signatiseta** HUNTER, Canad. Ent., XXVIII, 227.—Moscow, Idaho.
- skinneri** JOHNSON, Trans. Amer. Ent. Soc., XXIX, 101.—Beulah, N. M.
- sororcula** WILLISTON, Biologia, Dipt., III, 9.—Guerrero, Mex.  
SNOW, Kans. Univ. Quart., III, 228.—N. M.
- sororia** WILLISTON, Biologia, Dipt., III, 8.—Durango, Mex.
- tarda** SNOW, Kans. Univ. Quart., III, 228.—Col.
- townsendi** HUNTER, Canad. Ent., XXVIII, 94.—Cal.  
TOWNSEND, Proc. Cal. Acad. Sci., ser. 2, IV, 611 (*Chilosia*, n. sp.).
- tristis** LOEW, Cent., IV, 71.—Red R. of the North.  
WILLISTON, Synop. N. A. Syrph., 293, notes.  
COQUILLET, Proc. Wash. Acad. Sci., II, 427, oc. in Alaska.  
Beulah, N. M.—Skimmer; Canadian Zone, N. M.—Cockerell.
- versipellis** WILLISTON, Synop. N. A. Syrph., 44.—Wash.
- willistonii** SNOW, Kans. Univ. Quart., III, 227, change of name.  
WILLISTON, Synop. N. A. Syrph., 45 (*lugubris*, preoc.).—Col.  
HUNTER, Canad. Ent., XXVIII, 233, note.

## CHALCOMYIA.

- WILLISTON, Bull. Brooklyn Ent. Soc., VII, 113, 1885; Synop. N. A. Syrph., 126, 1886.  
**ærea** LOEW, Cent., x, 53 (*Myiolepta*).—Ill.  
 WILLISTON, Synop. N. A. Dipt., 126, pl. iv, f. 14.—Va.

## MYIOLEPTA.

- NEWMAN, Ent. Mag., v, 373, 1838.  
 RONDANI, Dipt. Ital. Prod., II, 96, 1857 (*Xyloteja*).  
 SCHINER, Fauna Austr., I, 324, 1862.  
 WILLISTON, Synop. N. A. Syrph., 127, 1886, def. and table of species.  
 VERRALL, Brit. Flies, VIII, 572, 1901.  
**ærea** LOEW, see *Chalcomyia*.  
**auricaudata** WILLISTON, Biologia, Dipt., III, 40, pl. I, f. 11.—Guerrero and Morales, Mex.  
**aurinota** HINE, Canad. Ent., XXXV, 245.—Phœnix, Ariz.  
**bella** WILLISTON, Proc. Amer. Phil. Soc., XX, 308; Synop. N. A. Syrph., 128, pl. v, f. 2.—Wash., Ore.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 434, oc. at Virgin Bay, Alaska.  
**nigra** LOEW, Cent., x, 52.—Pa.  
 WILLISTON, Synop. N. A. Syrph., 129, pl. iv, f. 15.—N. Y., N. C.  
**strigilata** LOEW, Cent., x, 54.—Texas.  
 WILLISTON, Synop. N. A. Syrph., 127.—N. C.  
**varipes** LOEW, Cent., IX, 79.—Va.  
 WILLISTON, Proc. Amer. Phil. Soc., XX, 308; Synop. N. A. Syrph., 128, pl. v, f. 1.—Wash., Col.  
 BIGOT, Annales, 1884, 537 (*lunulata*).—Mt. Hood, Ore. [Will.]

## BACCHA.

- FABRICIUS, Syst. Antl., 199, 1805.  
 MEIGEN, Syst. Besch., III, 196, 1822.  
 SCHINER, Fauna Austr., I, 323, 1862.  
 WILLISTON, Synop. N. A. Syrph., 116, 1886, def. and table of species;  
 Biologia, Dipt., III, 1891, 31, table of Central American spp.  
 CHAGNON, Ét. Prélim. les Syrph., 41, 1901.  
 VERRALL, Brit. Flies, VIII, 455, 1901.  
**adpersa** FABRICIUS, Syst. Antl., 200.—S. A.  
 WIEDEMANN, Auss. Zweifl., II, 97.—S. A.  
 SCHINER, Novara, 342.—S. A.  
 WILLISTON, Trans. Amer. Ent. Soc., xv, 269; Biologia, Dipt., III, 34, oc.—Brazil; Panama.  
**ænea** WILLISTON, Biologia, Dipt., III, 37, pl. I, f. 10.—Guerrero, Mex.  
**attenuata** WILLISTON, Biologia, Dipt., III, 35.—Guerrero, Mex.  
**aurinota** WALKER, see *fascipennis*.  
**babista** WALKER, see *clavata*.  
**capitata** LOEW, Cent., III, 25.—Cuba.  
 WILLISTON, Synop. N. A. Syrph., 124.—Cuba.  
 Porto Rico—Roeder.  
**clavata** FABRICIUS, Ent. Syst., IV, 298 (*Syrphus*); Syst. Antl., 200.—W. I.  
 WIEDEMANN, Auss. Zweifl., II, 94.—S. A.  
 SCHINER, Novara, 341, note.—S. A.  
 WALKER, List, III, 548 (*varia*); 549 (*babista*); Trans. Linn. Soc. XVII, 342 (*Paragus? scutellaris*).—No. loc.; Ga.; Brazil. [Austen.]

- THOMSON, Eugen. Resa, 504 (*facialis*).—Galapagos Ids. [Will.]  
 BIGOT, Annales, 1883, 326 (*Spazigaster bacchoides*).—Rocky Mts. [Will.]  
 WILLISTON, Trans. Amer. Ent. Soc., xv, 270; Synop. N. A. Syrph., 117.  
 pl. iv, f. 9 (*babista*); Biologia, Dipt., III, 33; Ent. News, III, 145, bibl.;  
 Trans. Ent. Soc. Lond., 1896, 347, full syn.—Ga., Fla., Ariz., Cal., Mex.  
 (several places), St. Vincent, W. I., and Guadeloupe.  
 AUSTEN, Proc. Zool. Soc. Lond., 1893, 159, syn. of Walker's spp., from  
 types.  
 SNOW, Kans. Univ. Quart., III, 239, oc. in N. M., Fla., Col.  
 GIGLIO-TOS, Ditt. del Mess., II, 57, pl. II, f. 20, oc. in Mex.  
 TOWNSEND, Jour. N. Y. Ent. Soc., v, 172, brief desc. of pupa; Trans.  
 Amer. Ent. Soc., XXII, notes.—Brownsville, Texas; Jamaica and N. M.  
 HUNTER, Canad. Ent., XXVIII, 96, oc. and notes; XXIX, 130, oc.—Nebr.  
 Porto Rico—Roeder and Coquillett; Jamaica and Fla.—Johnson; N. J.—  
 Smith Cat.
- cochinillivora** GUÉRIN, Rev. Zool., 1848, 350; Bull. Soc. Ent., 1848.—Guatemala.  
**cœrulea** WILLISTON, Biologia, Dipt., III, 38.—Guerrero, Mex.  
**cognata** LOEW, Cent., III, 27.—N. Y. (Not N. Wis.—O. S.)  
 WILLISTON, Synop. N. A. Syrph., 122, quotes orig. desc.  
 CHAGNON, Ét. Prélim. les Syrph., 42.—Montreal.  
 N. J.—Smith Cat.
- concinna** WILLISTON, Biologia, Dipt., III, 38.—Guerrero and Tabasco, Mex.  
**conjuncta** WIEDEMANN, Auss. Zweifl., II, 116 (*Syrphus*).—S. A.  
 WILLISTON, Trans. Amer. Ent. Soc., xv, 267; Biologia, Dipt., III, 33, oc.—  
 Brazil; Vera Cruz, Mex.
- costata** SAY, Jour. Acad. Sci. Phil., VI, 61; Compl. Works, II, 357.—Ind.  
 WILLISTON, Synop. N. A. Syrph., 122, quotes orig. desc.
- cubensis** MACQUART, Dipt. Exot., Suppl. IV, 161.—Cuba.  
**cylindrica** FABRICIUS, Spec. Ins., II, 249; Ent. Syst., IV, 298 (both *Syrphus*);  
 Syst. Antl., 199.—W. I.  
 WIEDEMANN, Auss. Zweifl., II, 92.—W. I.
- dimidiata** FABRICIUS, see *Ocyrtamus*.
- dolosa** WILLISTON, Biologia, Dipt., III, 37, pl. I, f. 7.—Guerrero, Mex.; Guate-  
 mala.
- fascipennis** WIEDEMANN, Auss. Zweifl., II, 96.—No locality.  
 WALKER, List, III, 548 ("Baccha aurinota HARRIS, Catalogue Ins. of  
 Massachusetts").—U. S. Harris' name had not been published.  
 VAN DER WULP, Tijdschr. v. Ent., XXVI, 9, oc. at Quebec.  
 WILLISTON, Synop. N. A. Syrph., 120, pl. IV, f. 7 ("aurinota (Harris)  
 Walker").—Conn., Mass., Ind.  
 CHAGNON, Ét. Prélim. les Syrph., 42.—Ottawa.  
 Sea Cliff, N. Y.—Banks.
- gracilis** WILLISTON, Biologia, Dipt., III, 34.—Guerrero, Mex.  
**laudabilis** WILLISTON, Biologia, Dipt., III, 36.—Guerrero, Mex.  
**lemur** OSTEN SACKEN, West. Dipt., 331.—Cal., Wyo., N. M.  
 WILLISTON, Synop. N. A. Syrph., 121, quotes orig. desc.  
 TOWNSEND, Psyche, 1897, 148, notes; Annals and Mag. Nat. Hist., XIX,  
 140, oc.; Trans. Amer. Ent. Soc., XXII, 38, notes.—N. M.  
 HUNTER, Canad. Ent., XXIX, 131, note.—Col.
- lepida** MACQUART, Dipt. Exot., II, 2, 109, pl. XIX, f. 1.—No locality.  
 GIGLIO-TOS, Ditt. del Mess., II, 55.—Orizaba, Mex.
- lineata** MACQUART, Dipt. Exot., Suppl. I, 139, pl. XX, f. 5.—Yucatan, or Texas.

- livida** SCHINER, Novara, 343.—S. A.  
WILLISTON, Trans. Amer. Ent. Soc., xv, 268; Biologia, Dipt., III, 33, oc.—Brazil, and Guerrero, Vera Cruz and N. Yucatan, Mex.; may be same as *lineata*.
- luctuosa** BIGOT, Annales, 1883, 334.—Mex.  
? WILLISTON, Biologia, Dipt., III, 39, doubtfully identified and redesc. from Costa Rica.
- lugens** LOEW, Cent., III, 24.—N. Wis.  
WILLISTON, Synop. N. A. Syrph., 118.—S. States.  
N. J.—Smith Cat.; Crescent City, Fla.—Johnson; Sea Cliff, N. Y.—Banks.
- lugubris** WILLISTON, Biologia, Dipt., III, 37.—Guerrero, Vera Cruz, and Tabasco, Mex.
- marmorata** BIGOT, Annales, 1883, 333.—Mex.  
GIGLIO-TOS, Ditt. del Mess., II, 58, pl. II, f. 19.—Orizaba, Mex.
- nasuta** BIGOT, Annales, 1884, 103 (*Sphæriophoria nasuta*; the same name is used for a different species in Annales, 1888, 253—G. T.).—Mex.  
WILLISTON, Biologia, Dipt., III, 35 (*nasuta*, n. sp.).—Mex. [G. T.]  
GIGLIO-TOS, Ditt. del Mess., II, 57, pl. II, f. 8.—Orizaba and Solco, Mex.
- notata** LOEW, Cent., VII, 65.—Cuba.  
HUNTER, Canad. Ent., XXVIII, 97, transl. desc. and notes.—Fla.  
Charlotte Harbor, Fla.—Johnson.
- obscuricornis** LOEW, Cent., III, 26.—Sitka.  
OSTEN SACKEN, West. Dipt., 332 (*angusta*).—Cal. [Will.]  
OSTEN SACKEN, Cat., 127, believes *angusta* is the same as as the European *B. clongata* F.  
WILLISTON, Synop. N. A. Syrph., 123.—Col.  
COQUILLET, Proc. Wash. Acad. Sci., II, 434, oc. in Br. Col. and Alaska.
- parvicornis** LOEW, Wien. Ent. Monatsch., v, 41; Cent., VII, 64.—Cuba.  
Porto Rico—Roeder.
- phæoptera** SCHINER, Novara, 342.—S. A.  
WILLISTON, Trans. Amer. Ent. Soc., xv, 267; Biologia, Dipt., III, 33, oc. and note.—Brazil; Mexico, several places.  
TOWNSEND, Annals and Mag. Nat. Hist., XIX, 20.—Paso de Telaya, Mex.
- punctifrons** WILLISTON, Biologia, Dipt., III, 36.—Guerrero, Mex.
- rubida** WILLISTON, Biologia, Dipt., III, 34, pl. I, f. 8.—Guerrero, Mex.
- sagittifera** AUSTEN, Proc. Zool. Soc. Lond., 1893, 144, pl. IV, f. 14.—Jamaica.
- spatulata** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 132, 1892; Ditt. del Mess., II, 56, pl. II, f. 18.—Orizaba, Mex.
- stenogaster** WILLISTON, Trans. Amer. Ent. Soc., xv, 266; Biologia, Dipt., III, 34, oc. and note.—Brazil; Guerrero, Mex.
- tarchetius** WALKER, List, III, 549.—Ga.  
WILLISTON, Synop. N. A. Syrph., 117.—N. J.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 38, notes.—Va.  
HUNTER, Canad. Ent., XXVIII, 96, oc. and notes.—Penn., Ala.  
N. J.—Smith Cat.; Orlando and Inverness, Fla.—Johnson.
- torva** WILLISTON, see *Ocyptamus trigonus*.
- tricincta** BIGOT, Annales, 1883, 33.—Wash.
- tropicalis** TOWNSEND, Jour. N. Y. Ent. Soc., v, 172; VI, 50, notes.—Brownsville, Texas.

#### OCYPTAMUS.

MACQUART, Hist. Nat. Dipt., I, 554, 1834.

WILLISTON, Synop. N. A. Syrph., 116, 1886, combines with *Baccha*; Manual, 86, 1896, reinstates.

- antiphates** WALKER, List, III, 589 (*Syrphus*).—Jamaica.  
AUSTEN, Proc. Zool. Soc. Lond., 1893, 134, gen. ref., from type.
- conformis** LOEW, Cent., VII, 67.—Cuba.  
WILLISTON, Synop. N. A. Syrph., 119, may be same as *fuscipennis* (*Baccha*).  
Porto Rico—Roeder.
- dimidiatus** FABRICIUS, Spec. Ins., II, 434; Ent. Syst., IV, 310 (both *Syrphus*); Syst. Antl., 254 (*Scæva*).—W. I.  
WIEDEMANN, Auss. Zweifl., II, 140 (*Syrphus*).—W. I.  
WALKER, Trans. Ent. Soc., n. ser., IV, 156 (*Pipiza dolosa* and *divisa*).—Amazon; Vera Cruz. [Austen.]  
MACQUART, Dipt. Exot., II, 2, 105 (*Chilosia*), gen. ref.  
SCHINER, Novara, 346, oc. in Brazil.  
VAN DER WULP, Tijdschr. v. Ent., XXVI, 10.—Guadeloupe.  
WILLISTON, Trans. Amer. Ent. Soc., XV, 265; Synop. N. A. Syrph., 125, pl. v, f. 10 (*Baccha*); Biologia, Dipt., III, 30, oc. and notes; Trans. Ent. Soc. Lond., 1896, 348, full syn.—Brazil; San Domingo; Mexico, several places; St. Vincent, W. I.  
GIGLIO-TOS, Ditt. del Mess., II, 53.—Mexico, common.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 39, oc. in Jamaica.
- fasciatus** ROEDER, Stett. Ent. Zeit., 1885, 342.—Porto Rico.
- funeris** MACQUART, Hist. Nat. Dipt., I, 554; Dipt. Exot., II, 2, 105, pl. XIX, f. 2.—Brazil; Isle Teneriffe.  
BIGOT, in Sagra's Cuba, Ins., 338, oc. in Cuba.  
SCHINER, Novara, 346, notes.—Brazil.  
VAN DER WULP, Tijdschr. v. Ent., XXVI, 9, note.—Bahia.  
WILLISTON, Trans. Amer. Ent. Soc., XV, 265; Biologia, Dipt., III, 30.—Brazil; Mexico, several places.  
F. LYNCH ARRIBALZAGA, Dipt. Argentina, 253.—Argentina.  
GIGLIO-TOS, Ditt. del Mess., II, 54, oc. in Mex., common.
- fuscipennis** SAY, Jour. Acad. Sci. Phil., III, 100; Compl. Works, II, 86 (*Baccha*).—Pa.  
MACQUART, Hist. Nat. Dipt., I, 554, pl. XII, f. 13 (*fuscipennis*, n. sp.).—Philadelphia.  
WALKER, List, III, 589, 590 (*Syrphus amissas*, *radaca*, and *pcas*).—Ga.; Fla.; no locality. [Austen, from Walker's types.]  
LOEW, Cent., VII, 66 (*longicentris*).—D. C. [Will.]  
OSTEN SACKEN, Cat., note 216, on Walker's types.  
VAN DER WULP, Tijdschr. v. Ent., XXVI, 9, note (*fuscipennis*).—Guadeloupe.  
WILLISTON, Synop. N. A. Syrph., 119, pl. IV, f. 8 (*Baccha*).—Conn., Fla., Kans.  
TOWNSEND, Annals and Mag. Nat. Hist., XIX, 21, note; Trans. Amer. Ent. Soc., XXII, note.—Vera Cruz, Mex.; Jamaica.  
Sea Cliff, N. Y.—Banks; N. J.—Smith Cat.; Fla.—Johnson.
- infuscatus** BIGOT, Annales, 1883, 324 (*infuscatus* and *fraternus*); 1884, 251 (*fenestratus*).—Mexico. [Will.]  
GIGLIO-TOS, Ditt. del Mess., II, 55, oc. and note (*fenestratus*).—Orizaba, Mex.  
WILLISTON, Biologia, Dipt., III, 30, may not be distinct from *funeris*.
- iris** AUSTEN, Proc. Zool. Soc. Lond., 1893, 133, pl. IV, f. 1.—Jamaica.
- latiusculus** LOEW, Cent., VII, 68.—Cuba.  
WILLISTON, Synop. N. A. Syrph., 122 (*Baccha*).—San Domingo.  
Porto Rico—Roeder and Coquillett; Jamaica—Johnson.

- notatus** COQUILLET, *Canad. Ent.*, 1902, 195.—Frontera in Tabasco, Mex.  
**rufiventris** BIGOT, *Annales*, 1883, 325.—Cuba.  
**scutellatus** LOEW, *Cent.*, vii, 69.—Cuba.  
**trigonus** WIEDEMANN, *Auss. Zweifl.*, ii, 126 (*Syrphus*).—Brazil.  
 WALKER, *Trans. Ent. Soc.*, n. ser., iv, 156 (*Pipiza pica*).—Amazon River.  
 [Austen.]  
 SCHINER, *Novara*, 346.—Columbia, S. A.  
 WILLISTON, *Trans. Amer. Ent. Soc.*, xv, 264, 265 (*trigonus* and *gastrostac-*  
*tus* WIED.); *Synop. N. A. Syrph.*, 124 (*Baccha torva*); *Biologia, Dipt.*,  
 iii, 18 and 30 (*Syrphus* sp.? and *O. trigonus*); *Ent. News*, iii, 146, note  
 and bibl.—Brazil; Texas; Guerrero and N. Yucatan, Mex.  
 SNOW, *Suppl. List, Kans. Univ. Quart.*, iii, 255, syn.  
 F. LYNCH ARRIBALZAGA, *Dipt. Argentina*, 254.—Argentina.  
 GIGLIO-TOS, *Ditt. del Mess.*, ii, 54, oc. in Mexico, several places.

#### SALPINGOGASTER.

- SCHINER, *Novara*, 344, 1868.  
 WILLISTON, *Synop. N. A. Syrph.*, 298, 1886; *Biologia, Dipt.*, iii, 28, 1891,  
 table of species.  
**cothurnata** BIGOT, *Annales*, 1883, 329.—Mex.  
**limbipennis** WILLISTON, *Biologia, Dipt.*, iii, 29.—Guerrero, Mex.  
**nigra** SCHINER, *Novara*, 345.—S. A.  
 WILLISTON, *Trans. Amer. Ent. Soc.*, xv, 270; *Biologia, Dipt.*, iii, 29, oc.  
 and syn.—Brazil; Guatemala and Panama.  
 BIGOT, *Annales*, 1883, 328 (*anchoratus*).—Mexico.  
 GIGLIO-TOS, *Ditt. del Mess.*, ii, 22, notes, etc.—Orizaba, Mex.  
**nova** GIGLIO-TOS, *Boll. R. Univ. Torino*, vii, No. 123, 1892; *Ditt. del Mess.*, ii,  
 23, pl. ii, f. 3.—Mex.  
**pygophora** SCHINER, *Novara*, 344.—No locality.  
 WILLISTON, *Trans. Amer. Ent. Soc.*, xv, 270.—Mexico.

#### PYROPHÆNA.

- SCHINER, *Wien. Ent. Monatsch.*, iv, 213, 1860; *Fauna Austriaca*, i, 297,  
 1864.  
 WILLISTON, *Synop. N. A. Syrph.*, 54, def. and table of species, 1886.  
 VERRALL, *Brit. Flies*, viii, 299, 1901.  
 CHAGNON, *Ét. Prélim. les Syrph.*, 29, 1901.  
**granditarsa** FORSTER, *N. Sp. Ins.*, *Cent.*, i, 99 (*Musca granditarsa*).—Europe.  
*Notc.*—Hagen gives 1781 as the date of the preceding; Verrall gives  
 1771.  
 FABRICIUS, *Mantissa Ins.*, ii, 341 (*Syrphus ocymi*); *Ent. Syst.*, iv, 307  
 (id.); *Syst. Antl.*, 252 (*Scæva ocymi*).  
 HARRIS, *Expl. Engl. Ins.*, 110, pl. xxxiii, f. 51 (*Musca confusus*).  
 PANZER, *Fauna Germ.*, lxxxii, 18 (*Syrphus ocymi*).  
 FALLÉN, *Syrphidi*, 48 (*Scæva ocymi*).  
 MEIGEN, *Syst. Besch.*, iii, 337 (*Syrphus ocymi*).  
 MACQUART, *Hist. Nat. Dipt.*, i, 546 (id.).  
 ZETTERSTEDT, *Dipt. Scand.*, ii, 754 and viii, 3152 (*Scæva ocymi*).  
 STÆGER, *Kröyer's Tidsskr.*, iv, 326 (*Platycheirus ocymi*).  
 WALKER, *Ins. Brit.*, *Dipt.*, i, 295, restores Forster's name.  
 SCHINER, *Verh. Zool.-Bot. Ges.*, vii, 362 (*ocymi*); *Fauna Austr.*, i, 297  
 (id.).  
 OSTEN SACKEN, *Cat.*, 122 (id.), oc. in N. A.—Mass., White Mts., N. H.,  
 Quebec, Athabasca, L., etc.



- WILLISTON, Synop. N. A. Syrph., 55, pl. III, f. 13 (id.).—Wash., Labrador.  
 VERRALL, Brit. Flies, VIII, 300, figs.  
 Montreal—Chagnon; White Mts., N. H.—Slosson (both *ocymi*).  
*ocymi* FABRICIUS, see *granditarsus*.  
*rosarum* FABRICIUS, Mantissa Ins., II, 341 (*Syrphus*); Ent. Syst., IV, 307 (id.);  
 Syst. Antl., 251 (*Scæva*).—Europe.  
 FALLÉN, Syrphidi, 47 (*Scæva*).  
 MEIGEN, Syst. Besch., III, 338 (*Syrphus*).  
 ZETTERSTEDT, Dipt. Scand., II, 755 and VIII, 3152 (*Scæva*).  
 SCHINER, Verh. Zool.-Bot. Ges., VII, 357; Fauna Austr., I, 298.  
 OSTEN SACKEN, Cat., 122, oc. in N. A.—Mass. and White Mts., N. H.  
 WILLISTON, Synop. N. A. Syrph., 55, desc. quoted.  
 VERRALL, Brit. Flies, VIII, 392, figs.

## PLATYCHIRUS.

- ST. FARGEAU et SERVILLE, Encycl. Méth., X, 513, 1825 (*Platycheirus*).  
 SCHINER, Fauna Austr., I, 292, 1862.  
 WILLISTON, Synop. N. A. Syrph., 56, def. and table of species, 1886.  
 VERRALL, Brit. Flies, VIII, 262, 1901.  
 CHAGNON, Ét. Prélim. les Syrph., 28, 1901.  
*æratus* COQUILLET, Proc. Wash. Acad. Sci., II, 430.—Muir Inlet, Alaska.  
*albimanus* FABRICIUS, Spec. Ins., II, 434 (*Syrphus*); Syst. Antl., 253 (*Scæva*).—  
 Europe.  
 MEIGEN, Syst. Besch., III, 333 (*Syrphus*).  
 WALKER, Ins. Brit., I, 294.  
 SCHINER, Fauna Austr., I, 294.  
 BIGOT, Annales, 1884, 75 (*ciliatus*).—Cal.  
 WILLISTON, Synop. N. A. Syrph., 59 (*ciliatus*).—Col.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 430, oc. in Alaska.  
 VERRALL, Brit. Flies, VIII, 280, 675, figs., desc. and syn. of Bigot, from his  
 type.—England.  
 White Mts., N. H.—Slosson (*ciliatus*).  
*chætopodus* WILLISTON, Synop. N. A. Syrph., 59.—Wash.  
 SNOW, Kans. Univ. Quart., III, 231, note.—Col.  
*ciliatus* BIGOT, see *albimanus*.  
*hyperboreus* STÆGER, Grœnl. Antl., 362 (*Syrphus*).—Greenland.  
 HOLMGREN, Ins. Nordgrœnl., 100 (*Scæva*).—Greenland.  
 WILLISTON, Synop. N. A. Syrph., 57, pl. III, f. 12.—N. Y., Col., Pa., White  
 Mts., N. H.  
 SNOW, Kans. Univ. Quart., III, 231, notes.—Col.  
 CHAGNON, Ét. Prélim. les Syrph., 29.—Montreal.  
 N. J.—Smith Cat.; Axton, N. Y.—M. and H.; Sea Cliff, N. Y.—Banks.  
*naso* WALKER, List, III, 587 (*Syrphus*).—Martin Falls, Canada.  
 OSTEN SACKEN, Cat., 244, note on type and gen. ref.  
*pacilus* WALKER, Dipt. Saund., 240 (*Syrphus*).—N. A.  
 OSTEN SACKEN, Cat., 244, note on type and gen. ref.  
*palmulosus* SNOW, Kans. Univ. Quart., III, 231.—Col.  
*peltatus* MEIGEN, Syst. Besch., III, 334 (*Syrphus*).—Europe.  
 FALLÉN, Syrphidi, 46 (*Scæva albimana*).  
 ZETTERSTEDT, Dipt. Scand., II, 747; VIII, 4145 (both *Scæva*).  
 STÆGER, Krøyer's Tidsskr., IV, 320.  
 SCHINER, Fauna Austr., I, 295.  
 OSTEN SACKEN, Cat., 122, oc. in N. A.—Alaska and West. N. Y.

- WILLISTON, Synop. N. A. Syrph., 58, pl. III, f. 11.—White Mts., N. H., Pa.  
 VERRALL, Brit. Flies, VIII, 274, figs.  
 Alaska—Coquillett and Johnson.
- quadratus** SAY, Jour. Acad. Sci. Phil., III, 90; Compl. Works, II, 79 (*Scæva*).—  
 U. S.
- WIEDEMANN, Auss. Zweifl., II, 135 (*Syrphus*).—Pa.  
 MACQUART, Dipt. Exot., Suppl. v, 95 (*Syrphus fuscaipennis*).—Baltimore.  
 [Osten Sacken, Cat., 122.]
- WILLISTON, Synop. N. A. Dipt., 57, pl. III, f. 10.—U. S. generally.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 428, oc.—Alaska, several places.  
 CHAGNON, Ét. Prélim. les Syrph., 28.—St. Jean and Montreal, Quebec.
- tenebrosus** COQUILLET, Proc. Wash. Acad. Sci., II, 428.—Alaska, several places.

### MELANOSTOMA.

- SCHINER, Wien. Ent. Monatsch., IV, 213, 1860; Fauna Austr., I, 289, 1862.  
 WILLISTON, Synop. N. A. Syrph., 46, def. and table of species; Biologia,  
 Dipt., III, 9, table of Central American spp., 1891.
- VERRALL, Brit. Flies, VIII, 303, 1901.  
 CHAGNON, Ét. Prélim. les Syrph., 25, 1901.
- ambiguum** FALLÉN, Syrphici, 47 (*Syrphus*).—Europe.  
 SCHINER, Fauna Austr., I, 291.  
 ? STÆGER, Grœnl. Antl., 361, doubtfully ident. from Greenland.  
 LUNDBECK, Dipt. Grœnl., I, 300, oc. in Greenland.  
 VERRALL, Brit. Flies, VIII, 304, 675; has seen specimens from N. A.
- angustatum** WILLISTON, Synop. N. A. Syrph., 50, pl. III, f. 7.—Wash.  
 White Mts., N. H.—Slosson.
- ? **annuliferum** BIGOT, Annales, 1884, 84 (*M. ? annulifera*).—Mex.  
 WILLISTON, Biologia, Dipt., III, 14, note; cannot be a *Melanostoma*.
- ? **anthracoides** BIGOT, Annales, 1884, 82.—Panama. Query by Bigot.  
 WILLISTON, Biologia, Dipt., III, 14, note; more likely *Ocyptamus*.
- ? **bicruciatum** BIGOT, Annales, 1884, 79.—Cal. Query by Bigot.  
 WILLISTON, Synop. N. A. Syrph., 53, quotes desc.
- bucephalus** WIEDEMANN, Auss. Zweifl., II, 126 (*Syrphus*).—Brazil.  
 WILLISTON, Trans. Amer. Ent. Soc., XV, 264; Biologia, Dipt., III, 11.—  
 Brazil; Guerrero, Mex.  
 GIGLIO-TOS, Ditt. del Mess., II, 34.—Orizaba, Mex.
- catabomba** WILLISTON, Biologia, Dipt., III, 12.—Guerrero, Mex.  
 GIGLIO-TOS, Ditt. del Mess., II, 38.—Meztillan and Orizaba, Mex.
- cœrulescens** WILLISTON, Synop. N. A. Syrph., 49.—Col.  
 CHAGNON, Ét. Prélim. les Syrph., Sherbrooke, Quebec.
- concinnum** SNOW, Kans. Univ. Quart., III, 229.—N. M. and Col., up to 10,000 ft.  
 SNOW, Kans. Univ. Quart., I, 35 (*M.*, n. sp.?).
- crenulatum** WILLISTON, Biologia, Dipt., III, 12, pl. I, f. 5.—Guerrero, Mex.  
 ? GIGLIO-TOS, Ditt. del Mess., II, 40, doubtfully ident. from Mex.
- cruciatum** BIGOT, see *mellinum*.
- cyaneocinctum** BIGOT, Annales, 1885, 251.—Mex.
- elegans** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 132, 1892; Ditt. del Mess., II,  
 39, pl. II, f. 21.—Orizaba, Mex.
- fenestratum** MACQUART, Dipt. Exot., II, 2, 103, pl. XVII, f. 6 (*Syrphus*).—Chili.  
 BLANCHARD, in Gray's Hist., etc., Chile, VII, 413 (id.).  
 PHILIPPI, Aufzählung d. Chilen' schen Dipt., 746 (id.).  
 SCHINER, Novara, 351.—S. A.  
 WILLISTON, Biologia, Dipt., III, 10.—Guerrero and Durango, Mex.

**glaciale** JOHNSON, see *Syrphus*.

**kelloggi** SNOW, Kans. Univ. Quart., III, 230.—Col.

**melanocera** WILLISTON, Biologia, Dipt., III, 13.—Costa Rica.

**mellinum** LINNÉ, Syst. Nat., 10th ed., 594 (*Musca*); Fauna Suec., 2d ed., 449 (id.).—Europe.

SCOPOLI, Ent. Carn., 346 (id.).

FABRICIUS, Syst. Ent., 771; Ent. Syst., IV, 308 (*Syrphus*); Syst. Antl., 257 (*Scæva*).

FALLÉN, Syrphici, 46 (*Scæva*).

MEIGEN, Syst. Besch., III, 328, 329, 331 (*Syrphus mellarius, melliturgus,* and *mellinus*).

ZETTERSTEDT, Dipt. Scand., II, 759 (*Scæva*).

SCHINER, Verh. Zool.-Bot. Ges., VII, 355; Fauna Austr., I, 292.

KOWARZ, Wien. Ent. Zeit., IV, 201.

BIGOT, Annales, 1884, 76, 79 (*M.? annulata* and *M.? pruinosa*).—Sierra Leone and Cal. [Verrall.]

BIGOT, Annales, 1884, 81 (*M.? cruciatum*).—Mex. [Williston; there may be some doubt as to this, for Verrall, who has Bigot's types, does not mention this synonym.]

WILLISTON, Synop. N. A. Syrph., 49, pl. III, f. 9, desc. and syn.; Biologia, Dipt., III, II, oc. and notes.—U. S. and Mexico, common.

GIGLIO-TOS, Ditt. del Mess., II, 37, bibliog., etc.—Mexico.

HUNTER, Canad. Ent., XXIX, 129, oc. in Alaska.

CHAGNON, Ét. Prélim. les Syrph., 27.—Quebec.

VERRALL, Brit. Flies, VIII, 309, 51, exhaustive bibliography.

N. A., in nearly all local lists.

**obscurum** SAY, Amer. Entom., I, pl. XI; Compl. Works, I, 23 (*Syrphus*).—Pa., Va.

WIEDEMANN, Auss. Zweifl., II, 131, transl. from Say.

WILLISTON, Synop. N. A. Syrph., 48.—White Mts., N. H., Conn., Pa.

CHAGNON, Ét. Prélim. les Syrph., 26.—Montreal and Rigaud, Quebec.

N. J.—Smith Cat.; Sea Cliff, N. Y.—Banks.

? **pachytarsis** BIGOT, Annales, 1884, 80.—Cal. Query by Bigot.

WILLISTON, Synop. N. A. Syrph., 54, quotes orig. desc.

? **pictipes** BIGOT, Annales, 1884, 78.—Cal. Query by Bigot.

WILLISTON, Synop. N. A. Dipt., 53, quotes orig. desc.

? **quadrinotatum** BIGOT, Annales, 1884, 77.—Mex. Query by Bigot.

WILLISTON, Biologia, Dipt., III, 14, note, not seen.

? **rufipes** WILLISTON, Proc. Amer. Phil. Soc., XX, 306 (*Chilosia*); Synop. N. A. Syrph., 47.—Wash. Doubt by Williston.

HUNTER, Ent. News, VII, 216, male, etc.

**rugonasmus** WILLISTON, Biologia, Dipt., III, 13.—Guerrero, Mex.

**stegnum** SAY, Jour. Acad. Sci. Phil., VI, 163; Compl. Works, II, 358 (*Syrphus*).—Mex.

MACQUART, Dipt. Exot., II, 2, 103, pl. XVI, f. 6 (*Syrphus fenestratus*).—Chili.

SCHINER, Novara, 351 (id.).—S. A.

THOMSON, Eugen. Resa, 502 (*Syrphus trichopus*).—Cal.

PHILIPPI, Aufzähl. d. Chil. Dipt., 746 (id.).—Chili.

OSTEN SACKEN, West. Dipt., 323 (*tigrina*).—Cal.

BIGOT, Annales, 1884, 80 (*M.? rostratum*).—Cal.

WILLISTON, Trans. Amer. Ent. Soc., XV, 10 (*stegnum* and *fenestratum*);

- Synop. N. A. Syrph., 47, pl. III, f. 8 (*tigrinum*); Biologia, Dipt., III, 10; Ent. News, III, 145, bibl.—Brazil; Wash., Cal., Col., Ariz.; Mex.  
 VAN DER WULP, Tijdschr. v. Ent., XXXI, 375 (*punctulata*).—Argentina.  
 GIGLIO-TOS, Ditt. del Mess., II, 36, bibl., etc.—Mex.  
 SNOW, Kans. Univ. Quart., I, 35, notes; III, 229, oc.—Col.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 428, recognizes *trichopus* as a distinct species, from Alaska.

**trichopus** THOMSON, see *stegnum*.

#### LEUCOZONA.

- SCHINER, Wien. Ent. Monatsch., IV, 214, 1860; Fauna Austr., I, 298, 1862.  
 WILLISTON, Synop. N. A. Syrph., 61, 1886.  
 MIK, Wien. Ent. Zeit., XVI, 62, notes, 1897.  
 VERRALL, Brit. Flies, VIII, 319, 1901.  
**lucorum** LINNÉ, Syst. Nat., 10th ed., 591 (*Musca*); Fauna Suec., 2d ed., 445 (id.).—Europe.  
 FABRICIUS, Spec. Ins., II, 426 (*Syrphus*); Ent. Syst., IV, 291 (id.); Syst. Antl., 241 (*Eristalis*); also described as *asiliformis* in the same works.  
 FALLÉN, Syrphici, 50 (*Eristalis*).  
 MEIGEN, Syst. Besch., III, 313 (*Syrphus lucorum* and *asiliformis*).  
 SCOPOLI, Ent. Carniol., No. 908 (*Conops praeinctus*).  
 ZETTERSTEDT, Dipt. Scand., II, 778 (*Eristalis*).  
 SCHINER, Fauna Austr., I, 299.  
 WILLISTON, Synop. N. A. Syrph., 62, pl. III, f. 6.—Wash., Col.  
 OSTEN SACKEN, Cat., 122, oc. in N. A.—Brit. Poss., Quebec.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 430, oc. in Alaska.  
 VERRALL, Brit. Flies, VIII, 319, 53, fuller bibliog., etc.

#### EUPEODES.

- OSTEN SACKEN, West. Dipt., 328, 1877.  
 WILLISTON, Synop. N. A. Syrph., 64, 1886.  
**volucris** OSTEN SACKEN, West. Dipt., 329.—Cal., Utah, Col.  
 BIGOT, Annales, 1884, 90 (*Syrphus perpallidus*).—N. A. [Will.]  
 WILLISTON, Synop. N. A. Syrph., 66, pl. III, f. 14.—Kans. westward to the coast, common.  
 WILLISTON, Biologia, Dipt., III, 14, oc. in Mexico.  
 SNOW, Kans. Univ. Quart., III, 232, note on dist.  
 GIGLIO-TOS, Ditt. del Mess., II, 27, notes.—Mex.  
 TOWNSEND, Psyche, 1897, 127 and 148, notes; Jour. N. Y. Ent. Soc., VI, 50, notes.—N. M.; Texas.  
 Reared from larvæ feeding on grain Aphis. *Siphonophora avena*, at Moscow, Ida.—J. M. A.

#### DIDEA.

- MACQUART, Hist. Nat. Dipt., I, 508, 1834.  
 MEIGEN, Syst. Besch., VII, 140, 1838 (*Enica*).  
 SCHINER, Fauna Austr., I, 313, 1862.  
 WILLISTON, Synop. N. A. Syrph., 89, 1886.  
 VERRALL, Brit. Flies, VIII, 325, 1901.  
**coquilletti** WILLISTON, Biologia, Dipt., III, 19, pl. I, f. 9.—Guerrero, Mex.  
 GIGLIO-TOS, Ditt. del Mess., II, 21.—Solco, Mex.  
**fasciata** MACQUART, Hist. Nat. Dipt., I, 508, pl. II, f. 15.—Europe.  
 MEIGEN, Syst. Besch., VII, 140 (*Enica farsteri*).

- LOEW, Cent., iv, 82 (*fuscipes*).—Pa.  
 OSTEN SACKEN, Cat., 245, note 212, makes *fuscipes* a var.  
 WILLISTON, Synop. N. A. Syrph., 89 (*fasciata*, var. *fuscipes*).—Conn., N. M., S. D.  
 VERRALL, Brit. Flies, viii, 328.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson; Quebec—Wulp.  
 laxa OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., iii, 56; Cat., 245, redesc.—L. Superior, Maine, Mt. Washington.  
 WILLISTON, 90, pl. iv, f. 4; Biologia, Dipt., iii, 18, oc. and note.—White Mts., N. H., Ore., Wash., Cal.; Mexico.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 433, oc. in Alaska.

## LASIOPHTHICUS.

- RONDANI, Dipt. Ital. Prod., i, 51, 1856; ii, 137, 1857.  
 OSTEN SACKEN, West. Dipt., 325, 1877; Cat., 1878, 244 (both *Catabomba*).  
 BIGOT, Bull. Soc. Ent. France, 1882, No. 2, p. 20, syn.  
 WILLISTON, Synop. N. A. Syrph., 62, 1886 (*Catabomba*).  
 VERRALL, Brit. Flies, viii, 333, 1901 (id.).  
*Note*.—I dissent from the conclusions of Osten Sacken and Verrall in adopting Rondani's name here. In the first reference above, Rondani says, "Spec: typ: *Musca pyrastris* LIN." and mentions no other species. Hence the proper procedure, in case the genus is illy conceived, is to revise its definition, rather than to make its type *the type* of another genus. I here use *Lasiophthicus* as if this had been done, exactly in the sense of *Catabomba*.  
 pyrastris LINNÉ, Syst. Nat., 10th ed., 594 (*Musca*); Fauna Suec., 2d ed., 448 (id.).—Europe.  
 FABRICIUS, Spec. Ins., ii, 432 (*Syrphus*); Ent. Syst., iv, 305, 306 (*Syrphus pyrastris* and *transfuga*); Syst. Antl., 249, 250 (*Scæva pyrastris* and *transfuga*).—Europe.  
 FALLÉN, Syrphici, 39 (*Scæva*).  
 MEIGEN, Syst. Besch., iii, 303 (*Syrphus*).  
 SAY, Jour. Acad. Sci. Phil., iii, 99 (*Syrphus affinis*); Compl. Works, ii, 81 (id.).—Arkansas.  
 WIEDEMANN, Abss. Zweifl., ii, 117 (*S. affinis*).  
 MACQUART, Hist. Nat. Dipt., i, 536 (*Syrphus*).  
 ZETTERSTEDT, Dipt. Scand., ii, 703 and viii, 3132 (both *Scæva*).  
 CURTIS, Brit. Ent., 509, var. *unicolor*, which occurs also in Idaho.  
 SCHINER, Verh. Zool.-Bot. Ges., vii, 338; Fauna Austr., i, 301 (both *Syrphus*).  
 OSTEN SACKEN, West. Dipt., 325 (*Catabomba*).—Cal., Utah, Col.  
 WILLISTON, Synop. N. A. Syrph., 63, pl. iv, f. 1 (*Catabomba*).—Kans. to Ariz. and Wash.  
 SNOW, Kans. Univ. Quart., iii, 232, note on dist. (*Catabomba*).  
 VERRALL, Brit. Flies, viii, 334 (*Catabomba*); on p. 619 is a reference (Ent. Mo. Mag., xxxiv, 244) to an alleged rearing of this fly from pupæ of a species of *Plusia*, which is probably an error, as I have reared it from larvæ feeding on the grain *Aphis*, *Siphonophora ævencæ*.  
 Very common in the U. S., west of the hundredth meridian—J. M. A.

## SYRPHUS.

- FABRICIUS, Syst. Ent., 762, 1775; Syst. Antl., 248, 1805 (*Scæva*).  
 MEIGEN, Syst. Besch., iii, 274, 1822.

- SCHINER, Fauna Austr., 1, 300, 1862.  
 OSTEN SACKEN, Boston Soc. Nat. Hist., XVIII, 1875, 135-153.  
 BIGOT, Bull. Soc. Ent. France, 1882, No. 6 (*Ischyrosyrphus* and *Ancyclosyrphus*); Annales, 1883, 251, 256 (id.).  
 WILLISTON, Synop. N. A. Syrph., 66, def. and table of species; Biologia, Dipt., III, 15, table of Central American species, 1891.  
 GIRSCHNER, Ill. Wochenschr. f. Ent., II, 569.  
 VERRALL, Brit. Flies, VIII, 321 and 338, 1901 (*Ischyrosyrphus* and *Syrphus*).  
 CHAGNON, Ét. Prélim. les Syrph., 30, 1901, with table of Quebec spec.
- abbreviatus** ZETTERSTEDT, Dipt. Scand., VIII, 3136 (*Scæva*).—Europe.  
 SCHINER, Fauna Austr., 1, 311 (*cercisus*, in part).—Europe.  
 OSTEN SACKEN, Bost. Soc. Nat. Hist., XVIII, 144.—Mass.  
 WILLISTON, Synop. N. A. Syrph., 81.—Conn., Mass.  
 CHAGNON, Ét. Prélim. les Syrph., 33.—Montreal.
- adolescens** WALKER, List, III, 584.—Martin Falls and Nova Scotia, Canada.
- æscytes** WALKER, see *Chilosia*.
- agilis** BIGOT, Annales, 1884, 92.—Mex.
- agnon** WALKER, see *arcuatus*.
- amalopsis** OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., XVIII, 148, 175.—White Mts., N. H.  
 WILLISTON, Synop. N. A. Syrph., 69.—Conn., N. M.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 431, oc. in Alaska.  
 AXTON, N. Y.—M. and H.
- americanus** WIEDEMANN, Auss. Zweifl., II, 129.—N. A.  
 OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., XVIII, 145.—Mass., Mich., Texas.  
 WILLISTON, Synop. N. A. Syrph., 82.—New Eng., Mont.  
 CHAGNON, Ét. Prélim. les Syrph., 34.—Montreal and St. Jean, Quebec.  
 RILEY, Rept. Dept. Agr., 1889, 351, mentions the larva feeding on grain  
*Aphis*, *Siphonophora avenæ*.  
 SNOW, Kans. Univ. Quart., III, 236, notes.—Col., N. M.  
 WILLISTON, Biologia, Dipt., III, 15, oc.—Guerrero, Mex.  
 N. J.—Smith Cat.: Fla.—Johnson; Sea Cliff, N. Y.—Banks; Chatham, Mich.—Pettit.
- antiphates** WALKER, see *Ocyptamus*.
- arcuatus** FALLÉN, Syrphici, 42 (*Scæva*).—Europe.  
 MEIGEN, Syst. Besch., III, 302.  
 MACQUART, Hist. Nat. Dipt., I, 536.  
 ZETTERSTEDT, Ins. Lapp., 598 (*Scæva lapponica*); Dipt. Scand., II, 719 and VIII, 3138 (*Scæva*).  
 WALKER, List, III, 579, 580 (*agnon*, *alcidicc*, and *arcuinctus*).—Martin Falls and Nova Scotia.  
 SCHINER, Verh. Zool.-Bot. Ges., VII, 344 (*arcuatus* and *lapponicus*); Fauna Austr., I, 305.  
 OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., XVIII, 149; West. Dipt., 326 (*lapponicus*).—White Mts., N. H.; Cal.  
 GIRSCHNER, Wien. Ent. Zeit., III, 187, pl. III, f. I (var. *bipunctatus*, which is Walker's *alcidicc*). [Will.]  
 WILLISTON, Synop. N. A. Syrph., 68, syn., etc.—New Eng. to Cal.  
 SNOW, Kans. Univ. Quart., I, 36, notes.—Col.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 431, oc. in Alaska.  
 VERRALL, Brit. Flies, VIII, 380.



CHAGNON, Ét. Prélim. les Syrph., 32.—St. Jean, Quebec.

N. A., in nearly all local lists.

**arcuinctus** WALKER, see *arcuatus*.

**bisinuatus** WILLISTON, Biologia, Dipt., III, 17.—Guerrero, Mex., and Costa Rica.

GIGLIO-TOS, Ditt. del Mess., II, 28.—Oaxaca, Orizaba and Tehuacan, Mex.

**boscii** MACQUART, see *Mesogramma*.

**bryantii** JOHNSON, see *contumax*.

**coalescens** WALKER, see *Mesogramma*.

**colludens** WALKER, Trans. Ent. Soc., n. ser., v, 292.—Mex.

**concauus** SAY, Jour. Acad. Sci. Phil., III, 89 (*Scæva*); Compl. Works, II, 78.—Pa.

Perhaps same as *torvus*—O. S., Cat., 123.

**contumax** OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., XVIII, 148.—White Mts., N. H.

WALKER, List, III, 584 (*adolescens*).—Martin Falls and Nova Scotia.

WILLISTON, Synop. N. A. Syrph., 71.—White Mts., N. H.

COQUILLET, Proc. Wash. Acad. Sci., II, 431, oc. in Alaska.

JOHNSON, Ent. News, IX, 17 (*bryantii*).—Mt. St. Elias, Alaska. [Johnson, *in litt.*]

*Note*.—Walker's types, as quoted by Osten Sacken, Cat., 245, note, belong to three species; hence his name is not entitled to priority.

**corbis** WALKER, see *Mesogramma*.

**creper** SNOW, Kans. Univ. Quart., III, 234.—Col. and N. M.

SNOW, *ibid.*, I, 37 (*pauvillus* WILL.).

N. M.—Coquillett.

**decipiens** WILLISTON, Biologia, Dipt., III, 18.—Guerrero, Mex.

**delineatus** MACQUART, Dipt. Exot., Suppl. I, 139, pl. XI, f. 13.—Mex.

**dimensus** WALKER, see *Allograpta obliqua*.

**dimidiatus** MACQUART, Hist. Nat. Dipt., I, 537.—Ga.

WILLISTON, Synop. N. A. Syrph., 294, cannot be identified.

**disgregus** SNOW, Kans. Univ. Quart., III, 233.—N. M., 7,500-8,500 ft.

**disjunctus** WILLISTON, Proc. Amer. Phil. Soc., XX, 314 (*disjunctus* MACQ.);

Synop. N. A. Syrph., 72.—Wash.

SNOW, Kans. Univ. Quart., I, 36, note on female.—Col.

White Mts., N. H.—Slosson.

**diversipes** MACQUART, Dipt. Exot., Suppl. IV, 155.—Newfoundland.

OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., XVIII, 149.—L. Superior.

WILLISTON, Synop. N. A. Syrph., 76.—White Mts., N. H.; N. Y., Wash.

COQUILLET, Proc. Wash. Acad. Sci., II, 431, oc. in Alaska.

VERRALL, Brit. Flies, VIII, 676.

CHAGNON, Ét. Prélim. les Syrph., 34.—Rigaud, Quebec.

**diversus** WILLISTON, Biologia, Dipt., III, 16, pl. I, f. 6.—Guerrero, Mex.

**dryadis** HOLMGREN, see *tarsatus*.

**eupeltatus** BIGOT, Annales, 1884, 91.—Mex.

WILLISTON, Biologia, Dipt., III, 16, notes.—Guerrero, Mex.

GIGLIO-TOS, Ditt. del Mess., II, 29.—Angang, Mex.

**fumipennis** THOMSON, Eugen. Resa, 499.—Cal.

WILLISTON, Synop. N. A. Syrph., 293, notes; quotes desc.

**geniculatus** MACQUART, Dipt. Exot., II, 2, 101, pl. XVII, f. 5.—Newfoundland.

OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., XVIII, 150; Cat., 245, note on type.—White Mts., N. H.

WILLISTON, Synop. N. A. Syrph., 84, pl. IV, f. 3.—White Mts., N. H.

Alaska—Coquillett and Johnson.

- genualis** WILLISTON, Synop. N. A. Syrph., 86.—N. H.  
Beulah, N. M.—Skinner.
- glacialis** JOHNSON, Ent. News, 1898, 18 (*Melanostoma*).—Alaska.  
COQUILLET, Proc. Wash. Acad. Sci., II, 433, oc. in Alaska, and gen. ref.  
[**gracilis** MEIGEN, of Walker, was wrongly identified; see Osten Sacken, Cat., 122.]
- gracilis** COQUILLET, Proc. Wash. Acad. Sci., II, 432.—Juneau, Alaska.
- grossulariæ** MEIGEN, Syst. Besch., III, 306.—Europe.  
MACQUART, Hist. Nat. Dipt., I, 542; Dipt. Exot., II, 2, 92, pl. xvi, f. 3 (*lesucurii*).—Europe; Philadelphia.  
ZETTERSTEDT, Dipt. Scand., II, 705 and XIII, 5091 (both *Scæva*).  
WALKER, Dipt. Saund., 242, pl. vi, f. 5 (*Epistrophe conjungens*).—U. S.  
SCHINER, Fauna Austr., I, 310.
- OSTEN SACKEN**, Proc. Bost. Soc. Nat. Hist., XVIII, 143 (*lesucurii*).—N. and Mid. States.
- WILLISTON**, Synop. N. A. Syrph., 80, pl. iv, f. 2 (*lesucurii*).—White Mts., N. H.; Wash.
- CHAGNON**, Ét. Prél. les Syrph., 36 (id.).—St. Hilaire, Quebec.
- VERRALL**, Brit. Flies, VIII, 675, syn.
- N. J.**—Smith Cat.; White Mts., N. H.—Slosson.
- gurgis** WALKER, see *Mesogramma boscii*.
- hecticus** JËNNICKE, see *Mesogramma polita*.
- interrogans** WALKER, see *Mesogramma geminata*.
- intrudens** OSTEN SACKEN, West. Dipt., 326.—Cal.  
**WILLISTON**, Synop. N. A. Syrph., 70, quotes desc.  
**SNOW**, Kans. Univ. Quart., III, 232, note.—Col.  
**HUNTER**, Canad. Ent., XXIX, 129, notes.—Cook's Inlet, Alaska.  
Hudsonian Zone, N. M.—Cockerell.
- jactator** LOEW, Wien. Ent. Monatsch., v, 40; Cent., vi, 46.—Cuba.
- latrans** WALKER, see *Chilosia*.
- lautus** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 132, 1892; Ditt. del Mess., II, 29, pl. II, f. 4.—Tuxpango, Mex.
- lesueurii** MACQUART, see *grossulariæ*.
- limbatus** FABRICIUS, Syst. Antl., 251 (*Scæva*).—W. I.  
WIEDEMANN, Auss. Zweifl., II, 133.
- lotus** WILLISTON, Synop. N. A. Syrph., 75; Biologia, Dipt., III, 16, oc.—Ariz.; Guerrero, Mex.
- lunulatus** MEIGEN, Syst. Besch., III, 299.—Europe.  
**SCHINER**, Fauna Austr., I, 303.  
**LUNDBECK**, Dipt. Grœnl., I, 302, oc. in Greenland.  
**VERRALL**, Brit. Flies, VIII, 351.
- macularis** ZETTERSTEDT, Dipt. Scand., II, 730 (*Scæva*).—Europe.  
**SCHINER**, Fauna Austr., I, 302.  
**COQUILLET**, Proc. Wash. Acad. Sci., II, 433, oc. in N. A.—Yakutat, Alaska.
- maculifrons** BIGOT, Annales, 1884, 89.—Ore.  
**WILLISTON**, Synop. N. A. Dipt., 88, quotes desc.
- [**maculosus** MEIGEN, of Walker, was wrongly identified; see Osten Sacken, Cat., 122.]
- mentalis** WILLISTON, Synop. N. A. Syrph., 72.—Wash.  
**HUNTER**, Canad. Ent., XXIX, 130, note.—Cook's Inlet, Alaska.  
**COQUILLET**, Proc. Wash. Acad. Sci., II, 431, oc. in Alaska.
- montivagus** SNOW, Kans. Univ. Quart., III, 236.—Col., 11,000–12,000 ft.

- mutuus** SAY, Jour. Acad. Sci., vi, 164; Compl. Works, II, 358.—Mex.
- nigripes** LOEW, Cent., vi, 44.—Cuba.
- ochrostoma** ZETTERSTEDT, Dipt. Scand., VIII, 3133 (*Scæva*).—Europe.  
SCHINER, Fauna Austr., I, 310.  
VAN DER WULP, Tijdschr. v. Ent., xxv, 134, oc. in N. A.—Canada.  
WILLISTON, Synop. N. A. Syrph., 293, note; not seen.
- œstriformis** WALKER, see *Eristalis*.
- opinator** OSTEN SACKEN, West. Dipt., 327.—Marin Co., Cal.  
WILLISTON, Synop. N. A. Syrph., 83.—Wash., Ore., Cal.  
TOWNSEND, Proc. Cal. Acad. Sci., IV, 612, notes.  
SNOW, Kans. Univ. Quart., III, 236.—Col., N. M.
- pauvillus** WILLISTON, Synop. N. A. Syrph., 74.—N. M.  
See *creper*.
- perpusillus** BIGOT, see *Eupcodes volueris*.
- philadelphicus** MACQUART, Dipt. Exot., II, 2, 93, pl. XVI, f. 2.—Philadelphia.  
OSTEN SACKEN, Cat., 123, and note 209, perhaps same as *ribesii*.
- præustus** LOEW, Cent., vi, 45.—Cuba.
- profusus** WALKER, see *Milisia*.
- protritus** OSTEN SACKEN, West. Dipt., 328.—Saucelito, Cal.  
WILLISTON, Synop. N. A. Syrph., 77, quotes desc.  
HUNTER, Canad. Ent., XXIX, 130, oc. at Cook's Inlet, Alaska.  
JOHNSON, Ent. News, XI, 17, oc. in Alaska.
- pullulus** SNOW, Kans. Univ. Quart., III, 237.—N. M., 8,000 ft.  
Beulah, N. M.—Skimmer.
- quadrifasciatus** BIGOT, in Sagra's Cuba, 804, pl. XX, f. 5.—Cuba.
- quinqvelimbatus** BIGOT, Annales, 1884, 91.—Cal.  
WILLISTON, Synop. N. A. Syrph., 87, quotes orig. desc.
- quintius** WALKER, see *Mcsogramma marginata*.
- radiatus** BIGOT, in Sagra's Cuba, 804.—Cuba.
- ribesii** LINNÉ, Syst. Nat., 10th ed., 593 (*Musca*); Fauna Suec., 2d ed., 447 (id.).  
—Europe.  
FABRICIUS, Syst. Ent., 770; Spec. Ins., II, 432; Ent. Syst., IV, 304; Syst. Antl., 248 (*Scæva*).  
LATREILLE, Gen. Crust., IV, 325.  
FALLÉN, Syrphici, 40 (*Scæva*).  
MEIGEN, Syst. Besch., III, 306.  
KIRBY, Fauna Bor. Amer. (*Scæva*); repub. in Canad. Ent., XIII, 167.—Canada.  
ZETTERSTEDT, Dipt. Scand., II, 707 (*Scæva*); VIII, 3132 (id.).  
SCHINER, Verh. Zool.-Bot. Ges., VII, 340; Fauna Austr., I, 310.  
OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., XVIII, 140 (*rectus*); Cat., 123, syn.  
WILLISTON, Synop. N. A. Syrph., 77.—Atlantic, Middle and Pacific States.  
WILLISTON, Biologia, Dipt., III, 17, notes.—Guerrero, Mex.  
GIGLIO-TOS, Ditt. del Mess., II, 27, bibl., etc.—Tehuacan, Mex.  
CHAGNON, Ét. Prélim. les Syrph., 36.—Montreal.  
VERRALL, Brit. Flies, VIII, 366.  
Alaska—Coquillett; also in almost all local lists of the United States.
- ruficauda** SNOW, Kans. Univ. Quart., I, 36, pl. VII, f. 3; III, 234.—Col.; N. M.
- saussurii** GIGLIO-TOS, Ditt. del Mess., II, 30.—Orizaba, Mex.
- sexmaculata** PALISOT DE BEAUVOIS, Ins., 224, pl. III, f. 8.—S. States and San Domingo.  
OSTEN SACKEN, Cat., 124, note.

- simplex** LOEW, Wien. Ent. Monatsch., v, 40; Cent., vi, 43.—Cuba.  
 WILLISTON, Synop. N. A. Syrph., 87.—San Domingo.
- sodalis** WILLISTON, Synop. N. A. Syrph., 74.—Col.
- tarsatus** ZETTERSTEDT, Ins. Lapp., 601; Dipt. Scand., 730 (both *Scæva*).—N. Europe.  
 STÆGER, Grœnl. Antl., 360, oc. in Greenland.  
 SCHINER, Fauna Austr., i, 302.  
 HOLMGREN, Ins. Spetsb., 26 (*Scæva dryadis*); Ins. Nordgrœnl., 100 (id.).—Spitzbergen; Greenland.  
 WILLISTON, Synop. N. A. Dipt., 294.  
 LUNDBECK, Dipt. Grœnl., i, 302, syn. of Holmgren.—Greenland. Ibid., ii, 310, the *Folucella lappona* of O. FABRICIUS, Fauna Grœnl., 208, 169, may be this species.
- torvus** OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., xviii, 139.—White Mts., N. H.; Mass., R. I., Canada, Col.  
 ZETTERSTEDT, Ins. Lapp., 509 (*Scæva topiarius* MEIG.); Dipt. Scand., ii, 723 and viii, 3139 (id.).—N. Europe.  
 WALKER, List, iii, 582 (*Syrphus topiarius* MEIG.), oc. in Europe, and at Martin Falls, Canada.  
 SCHINER, Verh. Zool.-Bot. Ges., vii, 347; Fauna Austr., i, 304 (id.).  
 WILLISTON, Synop. N. A. Syrph., 79.—Atlantic States and Wash.  
 VERRALL, Brit. Flies, viii, 356.  
 CHAGNON, Ét. Prélim. les Syrph., 35.—Rigaud, Quebec.  
 N. J.—Smith Cat.
- tricolor** BIGOT, see *velutinus*.
- umbellatarum** FABRICIUS, Ent. Syst., iv, 307; Syst. Antl., 250 (*Scæva*).—Europe.  
 SCHINER, Fauna Austr., i, 307.  
 WALKER, List, iii, 586 (*guttatus* MEIG. and *sexquadratus*).—Martin Falls and Nova Scotia. [O. S. Cat., the former doubtful.]  
 OSTEN SACKEN, Proc. Bost. Soc. Nat. Hist., xviii, 151.—White Mts., N. H.  
 WILLISTON, Synop. N. A. Syrph., 85.—Ariz.  
 CHAGNON, Ét. Prélim. les Syrph., 32.—Sherbrooke, Quebec.  
 VERRALL, Brit. Flies, viii, 409, 676; important.  
 Alaska—Johnson, Hunter; N. J.—Smith Cat.  
*Note*.—Osten Sacken, Williston and Verrall all indicate doubt whether our American form be the same as the European *umbellatarum*.
- velutinus** WILLISTON, Proc. Amer. Phil. Soc., xx, 314; Synop. N. A. Dipt., 73.—Mt. Hood, Ore.  
 BIGOT, Annales, 1884, 73 (*Ischyrosyrphus tricolor*).—Cal. [Will.]  
 COQUILLETT, Proc. Wash. Acad. Sci., ii, 431, oc. in Alaska.  
 VERRALL, Brit. Flies, viii, 321, would make *Ischyrosyrphus* a separate genus, and suspects *tricolor* to be a synonym of *laternarius* MÜLLER.
- xanthostoma** WILLISTON, Synop. N. A. Syrph., 86.—Pa. Province of Quebec—Fyles.

## ALLOGRAPTA.

- OSTEN SACKEN, Bull. Buffalo Soc. Nat. Hist., iii, 49, 1876; Cat., 246, 1878.  
 WILLISTON, Synop. N. A. Syrph., 96, 1886.  
 CHAGNON, Ét. Prélim. les Syrph., 37, 1901.
- exotica** WIEDEMANN, of Van der Wulp, see *fracta*.
- fracta** OSTEN SACKEN, West. Dipt., 331.—Santa Monica, Cal.  
 VAN DER WULP, Tijdschr. v. Ent., xxvi, 2, pl. 1, f. 2 (*exotica* WIED.).—Guadeloupe.

- WILLISTON, Synop. N. A. Syrph., 97, quotes orig. desc.; *Biologia*, Dipt., III, 20, syn. of Wulp's *exotica*, etc.—Cal.; Guerrero and Durango, Mex.
- GIGLIO-TOS, Ditt. del Mess., II, 41.—Mexico, several places.
- HUNTER, Canad. Ent., XXVIII, 95, female.—Cal.
- obliqua* SAY, Jour. Acad. Sci. Phil., III, 89 (*Scæva*); Compl. Works, II, 78 (id.).—U. S.
- WIEDEMANN, Auss. Zweifl., II, 136 (*Syrphus exoticus*).—Brazil. [G. T.]
- WILLISTON, Synop. N. A. Syrph., 96.—Conn. to Cal., etc.
- MACQUART, Dipt. Exot., II, 2, 100, pl. XVI, f. 1 (*Syrphus securiferus*); Suppl. I, 139, note on female (id.).—N. A.; Savannah.
- WALKER, List, III, 594 (*Spharophoria bacchides*); Dipt. Saund., 235 (*Syrphus dimensus*).—Fla.; U. S.
- SCHINER, Novara, 353, oc. in S. A.
- VAN DER WULP, Tijdschr. v. Ent., X, 44, pl. IV, f. 12 (*Syrphus signatus*).—N. A.
- OSTEN SACKEN, Cat., 126, syn.
- WILLISTON, Synop. N. A. Syrph., 96; *Biologia*, Dipt., III, 19, bibl., etc.—U. S. common; Mexico, various places (Argentina—Wulp).
- RILEY, Rept. Dept. Agr., 1889, 351, mentions the larvæ as preying on the grain Aphis, *Siphonophora avenæ*.
- GIGLIO-TOS, Ditt. del Mess., II, 40, extended bibl., etc.—Mexico.
- CHAGNON, Ét. Prélim. les Syrph., 37.—St. Jean and Montreal, Quebec.
- Fla.—Johnson; N. J.—Smith Cat.; Sea Cliff, N. Y.—Banks.

## XANTHOGRAMMA.

- SCHINER, Wien. Ent. Monatsch., IV, 215, 1860; Fauna Austr., I, 318, 1862.
- WILLISTON, Synop. N. A. Syrph., 91, def. and table of species, 1886.
- MIK, Wien. Ent. Zeit., 1897, 65.
- HUNTER, Canad. Ent., XXIX, 130, 1897.
- VERRALL, Brit. Flies, VIII, 447, 1901.
- CHAGNON, Ét. Prélim. les Syrph., 74, 1901.
- æqualis* LOEW, Cent., IV, 84 (*Doros*).—Pa.
- WILLISTON, Synop. N. A. Syrph., 95, pl. IV, f. 6.—D. C.
- N. J.—Smith Cat.
- divisa* WILLISTON, Proc. Amer. Phil. Soc., XX, 311; Synop. N. A. Syrph., 92.—Wash., White Mts., N. H.
- emarginata* SAY, Jour. Acad. Sci. Phil., III, 91 (*Scæva*); Compl. Works, II, 79 (id.).—E. Fla.
- WIEDEMANN, Auss. Zweifl., II, 119 (*Syrphus*).—E. Fla.
- WILLISTON, Synop. N. A. Syrph., 93.—Fla., Pa., N. H.
- N. J.—Smith Cat.
- felix* OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., III, 67; Cat., 247.—West Point, N. Y.; Pa., III.
- WILLISTON, Proc. Amer. Phil. Soc., XX, 311; Synop. N. A. Syrph., 91.—Conn.
- flavipes* LOEW, Cent., IV, 83 (*Doros*).—Pa.
- WILLISTON, Synop. N. A. Syrph., 94.—Conn.
- CHAGNON, Ét. Prélim. les Syrph., 74.—Montreal.
- N. Y.—O. S. Cat.; N. J.—Smith Cat.; Sea Cliff, N. Y.—Banks.
- nabilis* SNOW, Kans. Univ. Quart., III, 238.—N. M.
- insularis* BIGOT, Annales, 1883, 330 (*Doros*).—Cuba.
- WILLISTON, Synop. N. A. Syrph., 299, note; may be a true *Doros*.

## MESOGRAMMA.

- LOEW, Cent., VI, 47, 1865; in Centuries, vol. II, p. 290, Loew proposes to change this name to *Mesograptia*, on account of *Mesogramma* having been used in botany; this would not now be a valid change.
- MACQUART, Dipt. Exot., Suppl., v, 93, 1855 (*Toxomerus*).
- WILLISTON, Synop. N. A. Syrph., 98, 1886 (*Mesograptia*); Biologia, Dipt., III, 24, 1891, def. and table of Central American species.
- CHAGNON, Ét. Prélim. les Syrph., 38, 1901.
- anchorata** MACQUART, Dipt. Exot., II, 2, 97, pl. XVI, f. 8 (*Syrphus*).—N. A.
- arcifer** LOEW, Cent., VI, 52 (*Mesograptia*).—Cuba.  
Porto Rico—Coquillett; Jamaica—Johnson.
- aurulenta** WILLISTON, Synop. N. A. Syrph., 102 (*Mesograptia*).—San Domingo.
- basilaris** WIEDEMANN, Auss. Zweifl., II, 43 (*Syrphus*).—Brazil.  
SCHINER, Novara, 350 (*soror*).—America (doubtless S. A.). [Giglio-Tos.]  
VAN DER WULP, Tijdschr. v. Ent., XXVI, 6, pl. I, f. 8 (*Mesograptia*).—Guadeloupe.  
GIGLIO-TOS, Ditt. del Mess., II, 45.—Vera Cruz, Tabasco, etc.  
? WILLISTON, Trans. Ent. Soc. Lond., 1896, 349, doubtful oc. in St. Vincent, W. I.
- ? **bicincta** BIGOT, Annales, 1884, 112 (*"Mesograptia?"*).—Mex.
- bidentata** GIGLIO-TOS, Ditt. del Mess., II, 49, pl. II, f. 12.—Orizaba and Tampico, Mex.  
WILLISTON, Biologia, Dipt., III, 25 (*"Mesogramma-?"*).—Mexico, several places.
- ? **bistrigata** BIGOT, Annales, 1884, 110 (*"Mesograptia?"*).—Mex.
- boscii** MACQUART, Dipt. Exot., II, 2, 100, pl. XVI, f. 2 (*Syrphus*).—Cardina.  
WALKER, Dipt. Saund., 236 (*Syrphus gurgis*).—U. S. [O. S.]  
LOEW, Cent., VI, 47 (*parvula*).—Fla. [Hunter.]  
WILLISTON, Synop. N. A. Syrph., 99 and 103 (*parvula* and *boscii*).—Ga.  
HUNTER, Canad. Ent., XXVIII, 95.—Mex.  
St. Vincent—Will.; N. J.—Smith Cat.; Porto Rico—Roeder; Montreal—Chagnon; Fla.—Johnson.
- ciliata** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 132, 1892; Ditt. del Mess., II, 50, pl. II, f. 16.—Tuxpango, Mex.
- ? **circumdacta** BIGOT, Annales, 1884, 107 (*"Mesograptia?"*).—Mex.
- coalescens** WALKER, Dipt. Saund., 237 (*Syrphus*).—N. A.  
OSTEN SACKEN, Cat., 125, note; gen. ref.
- comma** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 132, 1892; Ditt. del Mess., II, 53.—Mex.
- confusa** SCHINER, Novara, 349.—S. A.  
BIGOT, Annales, 1884, 113 (*Mesograptia? maculipes*).—Brazil.  
GIGLIO-TOS, Ditt. del Mess., II, 51, pl. II, f. 11, syn., etc.—Mex.
- corbis** WALKER, Dipt. Saund., 237 (*Syrphus*).—N. A.  
OSTEN SACKEN, Cat., 125, note; gen. ref.
- ? **cuprina** BIGOT, Annales, 1884, 114 (*"Mesograptia?"*).—Cuba.
- diversa** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 132, 1892; Ditt. del Mess., II, 48, pl. II, f. 13.—Mex.
- duplicata** WIEDEMANN, Auss. Zweifl., II, 142 (*Syrphus*).—S. A.  
MACQUART, Dipt. Exot., II, 2, 91, pl. XV, f. 9 (*Syrphus*).—Uruguay.  
RONDANI, Nuovo Ann. Sc. Nat. Bologna, 1850, 5; Ann. del Soc. Nat. Modena, 1868, III, 3 (both *Syrphus*).—S. A.  
SCHINER, Novara, 350.—Brazil and Colombia—Wiedemann's types.  
THOMSON, Eugen. Resa, 494 (*Syrphus ochrogaster*).—Buenos Ayres.



VAN DER WULP, Tijdschr. v. Ent., xxvi, 4, pl. 1, f. 3.—Argentina.

GIGLIO-TOS, Ditt. del Mess., II, 44, pl. II, f. 9.—Mex.

*ectypus* SAY, Jour. Acad. Sci. Phil., VI, 165 (*Syrphus*); Compl. Works, II, 359.

—Mex. (Osten Sacken gives it Cuba, which is probably an oversight.)

*geminata* SAY, Jour. Acad. Sci. Phil., III, 92 (*Scæva*); Compl. Works, II, 80 (id.).—U. S.

WIEDEMANN, Auss. Zweifl., II, 145 (*Syrphus*).—Pa.

MACQUART, Dipt. Exot., Suppl. v, 93, pl. v, f. 4 (*Toxomerus notatus*).—Baltimore.

WALKER, Dipt. Saund., 225, 238 (*Eumerus privervus* and *Syrphus interrogans*).—U. S.; N. A.

SCHINER, Novara, 347, note.

WILLISTON, Proc. Amer. Phil. Soc., XX, 310 (*Toxomerus*); Synop. N. A.

Syrph., 102, pl. IV, f. 5.—Conn., Cal., Wash.

CHAGNON, Ét. Prélim. les Syrph., 39.—Montreal.

N. J.—Smith Cat.

? *heraldica* BIGOT, Annales, 1884, 109 (*"Mesograptus?"*).—Mex.

? *lachrymosa* BIGOT, Annales, 1884, 108 (*"Mesograptus?"*).—Mex., Brazil.

*laciniosa* LOEW, Cent., VI, 50.—Cuba.

Porto Rico—Roeder, Coquillett; St. Vincent—Will.

*linearis* VAN DER WULP, Tijdschr. v. Ent., xxvi, 5 (*Mesograptus*).—Mex.

? *maculata* BIGOT, Annales, 1884, 111 (*"Mesograptus?"*).—Cuba, Mex., Brazil.

*marginata* SAY, Jour. Acad. Sci. Phil., II, 92 (*Scæva*); Compl. Works, II, 80 (id.).—U. S.

WIEDEMANN, Auss. Zweifl., II, 146 (*Syrphus*).—Pa.

WALKER, Dipt. Saund., 239 (*Syrphus quintus*).—N. A.

THOMSON, Eugen. Resa, 495 (*Syrphus limbiventris*).—Cal.

LOEW, Cent., VI, 49 (*planiventris*).—Fla.

WILLISTON, Synop. N. A. Syrph., 100, 294 (*Mesograptus*); Biologia, Dipt., III, 25, notes.—U. S., common; Mex.

SNOW, Kans. Univ. Quart., III, 239, note.—Col., N. M.

GIGLIO-TOS, Ditt. del Mess., II, 52.—Mex.

CHAGNON, Ét. Prélim. les Syrph., 40.—Montreal.

N. A., in most local lists; Johnson makes *planiventris* distinct.

*minuta* WIEDEMANN, Auss. Zweifl., II, 146 (*Syrphus*).—Brazil.

BIGOT, in Sagra's Cuba, 806, oc. in Cuba (id.).

? *mu* BIGOT, Annales, 1884, 105 (*"Mesograptus?"*).—Mex.

*multipunctata* VAN DER WULP, Tijdschr. v. Ent., xxvi, 6, pl. 1, f. 7.—Guadeloupe.

*mutua* SAY, Jour. Acad. Sci. Phil., VI, 164 (*Syrphus*); Compl. Works, II, 358 (id.).—Mex.

? WILLISTON, Biologia, Dipt., III, 27, doubtfully ident. from Mex.

GIGLIO-TOS, Ditt. del Mess., II, 43, pl. II, f. 10.—Cuernavaca, Orizaba and Patzcuaro, Mex.

*pallipes* BIGOT, see *tridentata*.

*parvula* LOEW, see *boscii*.

*picta* MACQUART, Dipt. Exot., II, 2, 99 (*Syrphus*).—Guiana.

LOEW, Cent., VI, 51 (*pæcilogaster*).—Cuba.

GIGLIO-TOS, Ditt. del Mess., II, 52.—Mex.

Jamaica—Johnson (*pæcilogaster*).

*planiventris* LOEW, see *marginata*.

*pæcilogaster* LOEW, see *picta*.

*polita* SAY, Jour. Acad. Sci. Phil., III, 68 (*Scæva*) and American Ent., I, pl. XI, f. 3 (*Syrphus*); Compl. Works, II, 77 and I, 24.—U. S.

- WIEDEMANN, Auss. Zweifl., II, 132 (*Syrphus*).
- MACQUART, Dipt. Exot., Suppl. IV, 155 (*Syrphus cingulatus*).—Pensacola, Fla.
- JÄNNICKE, Neue Exot. Dipt., 90 (*Syrphus hecticus*).—III.
- OSTEN SACKEN, Cat., 125, syn. of Macquart and Jännicke.
- WILLISTON, Synop. N. A. Dipt., 98 (*Mesograpta*); Biologia, Dipt., III, 25, bibl., etc.—N. C., Kans., Conn., Ga.; Guerrero and Tabasco, Mex.
- RILEY and HOWARD, Ins. Life, I, 5-8, figs., habits: larvæ feed on pollen and tissues of corn; II, 115, note on damage.—Mo.
- SNOW, Kans. Univ. Quart., III, 239, note.—N. M.
- GIGLIO-TOS, Ditt. del Mess., II, 42, bibl., etc.—Mex.
- CHAGNON, Ét. Prélim. les Syrph., 38.—St. Jean, Quebec.
- St. Augustine, Fla.—Johnson; N. J.—Smith Cat.; Montreal—Chagnon.
- pulchella** MACQUART, Dipt. Exot., Suppl. I, 138, pl. XI, f. 12 (*Syrphus*).—San Domingo.
- VAN DER WULP, Tijdschr. v. Ent., XXVI, 4, pl. I, f. 4 (*Mesograpta*).—Guadeloupe.
- quinquecincta** BIGOT, Annales, 1888, 254 (*Mesograpta*).—Mex.
- quinquemaculata** BIGOT, Annales, 1888, 254 (*Mesograpta*).—Mex.
- rhombica** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 132, 1892; Ditt. del Mess., II, 46, pl. II, f. 13.—Orizaba, Mex.
- sapphiridiceps** BIGOT, Annales, 1884, 105 (“*Mesograpta?*”).—Mex.
- WILLISTON, Biologia, Dipt., III, 24.—Guerrero, Mex.
- subannulata** LÖEW, Cent., VI, 48.—Cuba.
- GIGLIO-TOS, Ditt. del Mess., II, 47, pl. II, f. 14.—Mex.
- COQUILLET, Proc. U. S. N. M., XXII, 253, oc. in Porto Rico.
- Jamaica—Johnson.
- tridentata** RONDANI, Ann. Soc. Nat. Modena, III, 1868, I (*Syrphus*).—Patagonia.
- BIGOT, Annales, 1884, 106 (*Mesograpta? pallipes*).—Mex. [G. T.]
- WILLISTON, Biologia, Dipt., III, 27 (*pallipes*).—Guerrero, Tabasco, Mex.
- GIGLIO-TOS, Ditt. del Mess., II, 48, pl. II, f. 17.—Tuxpango, Mex.
- ? **trilobata** BIGOT, Annales, 1884, 109 (“*Mesograpta?*”).—Mex.
- variabilis** VAN DER WULP, Tijdschr. v. Ent., XXVI, 6, pl. I, f. 9 (*Mesograpta*).—Guadeloupe.

#### SPHÆROPHORIA.

- ST. FARGEAU et SERVILLE, Encycl. Méth., X, 513, 1825.
- MACQUART, Dipt. du Nord de la France, 1827, 216; Hist. Nat. Dipt., 551, 1834.
- LOEW, Oken's Isis, 1840, 573 (*Melithreptus*).
- WALKER, Ins. Brit. Dipt., III, XXI (*Melitrophus*), 1856.
- SCHINER, Fauna Austr., I, 315 (*Melithreptus*), 1862.
- WILLISTON, Synop. N. A. Syrph., 104, def. and table of species, 1886; Biologia, Dipt., III, 20, notes and table of species, 1891.
- VERRALL, Brit. Flies, VIII, 426, 1901.
- CHAGNON, Ét. Prélim. les Syrph., 40, 1901.
- bacchides** WALKER, see *Allograpta obliqua*.
- [**calceolatus** MACQUART. For the possible occurrence of this in Mexico, see GIGLIO-TOS, Ditt. del Mess., II, 33.]
- cylindrica** SAY, Amer. Entomology, I, pl. XI; Compl. Works, I, 22 (both *Syrphus*).—Pa.
- WIEDEMANN, Auss. Zweifl., II, 138 (id.).
- MACQUART, Dipt. Exot., Suppl. II, 62 (*contigua*).—Philadelphia. [O. S.]

- WILLISTON, Synop. N. A. Syrph., 105, pl. iv, f. 16.—New Eng., Wash., Col., N. M.
- RILEY, Rept. Dept. Agr., 1889, 351, mentions the larvæ feeding on grain Aphid. *Siphonophora avenæ*.
- CHAGNON, Ét. Prélim. les Syrph., 41.—Quebec, common.
- N. A., in nearly all local lists.
- dubia** BIGOT, Annales, 1884, 101.—Cal.
- WILLISTON, Synop. N. A. Syrph., 108, quotes orig. desc.
- forreri** GIGLIO-TOS, Ditt. del Mess., II, 32.—Solco and Cuernavaca, Mex.
- WILLISTON, Biologia, Dipt., III, 23 ("*Spharophoria*—?").—Durango, Mex.
- fulvicauda** BIGOT, Annales, 1884, 104.—Mex.
- hieroglyphica** MEIGEN, Syst. Besch., III, 327 (*Syrphus*).—Europe.
- WALKER, List, III, 593, oc. in Nova Scotia.
- infumata** THOMSON, Eugen. Resa, 501.—Cal.
- WILLISTON, Synop. N. A. Syrph., 109, quotes orig. desc.
- melanosa** WILLISTON, Synop. N. A. Syrph., 106.—Cal.
- Hudsonian Zone, N. M.—Cockerell.
- menthastri** LINNÉ, Fauna Suec., 2d ed., no. 1819 (*Musca*).—Europe.
- WALKER, List, III, 593, oc. in Canada and New York.
- micrura** OSTEN SACKEN, West. Dipt., 330.—Sonoma Co., etc., Cal.
- WILLISTON, Synop. N. A. Syrph., 107; Biologia, Dipt., III, 21, notes.—Cal.; Guerrero, Mex.
- GIGLIO-TOS, Ditt. del Mess., II, 33.—Orizaba.
- nasuta** BIGOT, Annales, 1884, 103, see *Baccha*.
- nasuta** BIGOT, Annales, 1888, 253.—Mex.
- pachyipyga** BIGOT, Annales, 1884, 104.—Mex.
- picta** MEIGEN, of Holmgren, Ins. Nordgrœnl., 100, see *scripta*.
- picticauda** BIGOT, Annales, 1884, 102.—Mex.
- WILLISTON, Biologia, Dipt., III, 21.—Guerrero and Tabasco, Mex.
- GIGLIO-TOS, Ditt. del Mess., II, 34, notes.—Mexico, several places.
- pyrrhina** BIGOT, Annales, 1884, 101.—Cal.
- WILLISTON, Synop. N. A. Syrph., 108, quotes orig. desc.
- rostrata** BIGOT, Annales, 1884, 102.—Mex.
- scripta** LINNÉ, Syst. Nat., 10th ed., 594 (*Musca*); Fauna Suec., 2d ed., 449 (id.).—Europe.
- SCOPOLI, Ent. Carn., 965 (*Conops gemmatus*).
- FABRICIUS, Syst. Ent., 772 (*Syrphus*); Spec. Ins., II, 434 (id.); Ent. Syst., IV, 308 (id.); Syst. Antl., 252 (*Scæva*).
- FALLÉN, Syrphici, 48 (*Scæva*).
- MEIGEN, Syst. Besch., III, 324 (*Syrphus*).
- MACQUART, Dipt. du Nord de la France, 1827, 218; Hist. Nat. Dipt., I, 571.
- ZETTERSTEDT, Ins. Lapp., 605; Dipt. Scand., II, 766 and VIII, 3157 (all *Scæva*).
- WALKER, List, III, 592, oc. in Nova Scotia.
- SCHINER, Verh. Zool.-Bot. Ges., VII, 369 (*Melithreptus*); Fauna Austr., I, 316 (id.).
- RONDANI, Dipt. Ital. Prod., II, 112.
- VAN DER WULP, Tijdschr. v. Ent., XXVI, 8, oc. at Quebec (*Melithreptus*).
- KOWARZ, Wien. Ent. Zeit., IV, 133, varieties, etc.
- WILLISTON, Synop. N. A. Syrph., 107, transl. Schiner; not seen.
- VERRALL, Brit. Flies, VIII, 432.
- var. **strigata** STÆGER, Grœnl. Antl., 362.—Greenland.

- HOLMGREN, Ins. Nordgrœnl., 100 (*strigata* and *picta* MEIG.).—Greenland.  
[Lundbeck.]
- LUNDBECK, Dipt. Grœnl., I, 304, oc. in Greenland.
- sulphuripes** THOMSON, Eugen. Resa, 501 (*Syrphus*).—Cal.
- OSTEN SACKEN, West. Dipt., 330.—San Rafael and Yosemite, Cal.
- WILLISTON, Synop. N. A. Syrph., 106.—Cal.  
Alaska—Coquillett; Hudsonian Zone, N. M.—Cockerell.
- trilimbata** BIGOT, Annales, 1888, 254.—Mex.
- willistonii** GIGLIO-TOS, Ditt. del Mess., II, 31, pl. III, f. 6.—Orizaba, Mex.  
WILLISTON, Biologia, Dipt., III, 22 (“*Sphærophoria*—?”).—Mex.

## PELECOCERA.

- MEIGEN, Syst. Besch., III, 340, 1822.
- SCHINER, Fauna Austr., I, 314, 1862.
- WILLISTON, Wien. Ent. Zeit., III, 185, 1884 (*Eucratomyia* BIGOT); Synop.  
N. A. Syrph., 110, 1886.
- MIK, Wien. Ent. Zeit., XIV, 133, 1895.
- KERTÉSZ, Wien. Ent. Zeit., XVI, 149, 1897.
- SNOW, Kans. Univ. Quart., III, 187, notes, 1895.
- VERRALL, Brit. Flies, VIII, 459, 1901.
- pergandei** WILLISTON, Wien. Ent. Zeit., III, 186, fig. (*Eucratomyia*); Bull.  
Brooklyn Ent. Soc., VII, 139; Synop. N. A. Syrph., 110, pl. IV, f. 13.—  
D. C.
- BIGOT, Wien. Ent. Zeit., III, 217, refers to *Merapioides*.
- willistonii** SNOW, see *Chamæsyrrhus*.

## CHAMÆSYRPHUS.

- MIK, Wien. Ent. Zeit., XIV, 133, 1895.
- willistonii** SNOW, Kans. Univ. Quart., III, 187 (*Pelcoccera*).—N. M.
- MIK, loc. cit., gen. ref.
- Beulah, N. M.—Skinner.

## SPHEGINA.

- MEIGEN, Syst. Besch., III, 193, 1822.
- SCHINER, Fauna Austr., I, 322, 1862.
- WILLISTON, Synop. N. A. Syrph., 113, def. and table of species, 1886.
- VERRALL, Brit. Flies, VIII, 463, 1901.
- CHAGNON, Ét. Prélim. les Syrph., 43, 1901.
- campanulata** ROBERTSON, Canad. Ent., XXXIII, 284.—Carlinville, Ill.
- infuscata** LOEW, Cent., III, 23.—Sitka.
- WILLISTON, Synop. N. A. Syrph., 114, pl. IV, f. 12.—Ore.
- COQUILLET, Proc. Wash. Acad. Sci., II, 434, note on male, and dist.—  
Alaska, Col. and N. H.
- keeniana** WILLISTON, Synop. N. A. Syrph., 113, pl. IV, f. 11.—Philadelphia.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- lobata** LOEW, Cent., III, 21.—Middle States.
- WILLISTON, Synop. N. A. Syrph., 115.—White Mts., N. H.; Ore.  
N. J.—Smith Cat.; Sea Cliff, L. I.—Banks; White Mts., N. H.—Slosson.
- rufiventris** LOEW, Cent., III, 22.—N. Y.
- WILLISTON, Synop. N. A. Syrph., 114.—Wash.
- CHAGNON, Ét. Prélim. les Syrph., 43.—Montreal.  
N. J.—Smith Cat.; Quebec—Wulp and Fyles.

## NEOASCIA.

WILLISTON, Synop. N. A. Syrph., III, def. and change of name, 1886.

MEIGEN, Syst. Besch., III, 185, 1822 (*Ascia*, preoc.).

SCHINER, Fauna Austr., I, 320 (id.), 1862.

VERRALL, Brit. Flies, VIII, 467, 1901, does not admit preoc. of *Ascia*, and retains it.

CHAGNON, Ét. Prélim. les Syrph., 44, 1901.

**distincta** WILLISTON, Synop. N. A. Syrph., 112.—Mass.

**globosa** WALKER, List, III, 546 (*Ascia*).—Trenton Falls, N. Y.

WILLISTON, Proc. Amer. Phil. Soc., XX, 315 (*metallica*); Synop. N. A. Syrph., III, pl. IV, f. 10.—New Eng., Ore.

BIGOT, Annales, 1883, 327, 328 (*Ascia nasuta*, *quadrinotata*, and *albipes*).—Mt. Hood, Ore.; Mt. Hood, Ore.; N. A. [Will.]

COQUILLET, Proc. Wash. Acad. Sci., II, 433, oc. in Alaska.

CHAGNON, Ét. Prélim. les Syrph., 44.—Sherbrooke, Quebec.

N. J.—Smith Cat.; Montreal—Chagnon; Sea Cliff, N. Y.—Banks.

Williston recognizes *albipes* and *metallica* as varieties.

## RHINGIA.

SCOPOLI, Ent. Carniol., 358, 1763.

MEIGEN, Syst. Besch., III, 257, 1822.

SCHINER, Fauna Austr., III, 325, 1862.

WILLISTON, Synop. N. A. Syrph., 129, 1886.

VERRALL, Brit. Flies, VIII, 477, 1901.

CHAGNON, Ét. Prélim. les Syrph., 45, 1901.

**nasica** SAY, Jour. Acad. Sci. Phil., III, 94; Compl. Works, II, 81.—U. S.

WIEDEMANN, Auss. Zweifl., II, 115.

WILLISTON, Synop. N. A. Syrph., 130, pl. V, f. 3.—New Eng., Ind., Ky.

CHAGNON, Ét. Prélim. les Syrph., 45.—Montreal.

N. J.—Smith Cat.; White Mts., N. H.—Slosson; Sea Cliff, N. Y.—Banks; Province of Quebec—Fyles.

**nigra** MACQUART, Dipt. Exot., Suppl. I, 133, pl. XI, f. 10.—Colombia.

WILLISTON, Biologia, Dipt., III, 40, oc.—Tabasco, Mex.

## HAMMERSCHMIDTIA.

SCHUMMEL, in Oken's Isis, 1834, 740; reprinted by Roeder, 1888.

RONDANI, Dipt. Ital. Prod., II, 170 (*Exochcila*), 1857.

WILLISTON, Canad. Ent., XIV, 80, 1882 (*Eugeniomyia*); Proc. Amer. Phil. Soc., XX, 309, 1882 (id.); Synop. N. A. Syrph., 130, 1886 (id.).

VERRALL, Brit. Flies, VIII, 475, 1901, notes; scarcely distinct from *Brachyopa*.

**ferruginea** FALLÉN, Syrphici, 34 (*Rhingia*).—Europe.

MEIGEN, Syst. Besch., III, 263 (*Brachyopa*).

ZETTERSTEDT, Ins. Lapp., 596; Dipt. Scand., II, 686 and VIII, 3125 (all *Brachyopa*).

SCHINER, Verh. Zool.-Bot. Ges., VII, 376; Fauna Austr., I, 326 (id.).

LOEW, in Osten Sacken's Cat., 128, oc. in N. A.—Saskatchewan R.

WILLISTON, Canad. Ent., XIV, 80 (*Eugeniomyia rufa*); Synop. N. A. Syrph., 131 (*Eugeniomyia*).—Wash.

## BRACHYOPA.

MEIGEN, Syst. Besch., III, 260, 1822.

SCHINER, Fauna Austr., I, 326, 1862.

- WILLISTON, Synop. N. A. Syrph., 131, def. and table of species, 1886.  
 VERRALL, Brit. Flies, VIII, 474, 1901.  
 CHAGNON, Ét. Prélim. les Syrph., 45, 1901.
- cynops** SNOW, Kans. Univ. Quart., I, 37, pl. VII, f. 2.—Col.  
**ferruginea** FALLÉN, see *Hammerschmidia*.
- media** WILLISTON, Proc. Amer. Phil. Soc., XX, 308; Synop. N. A. Syrph., 132, pl. v, f. 7.—Cal.  
 CHAGNON, Ét. Prélim. les Syrph., 46.—St. Hilaire, Quebec.
- notata** OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., III, 68; Cat., 248, reprinted.—White Mts., N. H.  
 WILLISTON, Synop. N. A. Syrph., 132, pl. v, f. 5, 6.—Ore., Wash.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 434, oc. in Alaska.  
 CHAGNON, Ét. Prélim. les Syrph., 46.—Rigaud, Quebec.  
 White Mts., N. H.—Slosson; Montreal—Chagnon.
- vacua** OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., III, 68 (*racua*, a typographical error); Cat., 247, reprinted.—Quebec, Canada.  
 BIGOT, Annales, 1884, 537 (*cinereovitta*).—Cal. [Will.]  
 WILLISTON, Synop. N. A. Syrph., 133.—Kern Co., Cal.  
 CHAGNON, Ét. Prélim. les Syrph., 46.  
 JOHNSON, Ent. News, Sept., 1899, 220. oc. at Darby, Pa.

## COPESTYLUM.

- MACQUART, Dipt. Exot., Suppl. I, 124, 1846.  
 WILLISTON, Synop. N. A. Dipt., 161, 1886.
- limbipennis** WILLISTON, Synop. N. A. Syrph., 152; Biologia, Dipt., III, 56 (*limbipenne*), female desc.—Mex.; Acapulco and Tehuantepec, Mex.
- marginatum** SAY, Jour. Acad. Sci. Phil., VI, 167; Compl. Works, II, 360 (*Volucella*).—Mex.  
 MACQUART, Dipt. Exot., Suppl. I, 125, pl. x, f. 16 (*flaviventris*).—Venezuela.  
 WILLISTON, Synop. N. A. Syrph., 151, pl. VII, f. 1; Biologia, Dipt., III, 56, oc. and notes; Ent. News, II, 162, larval habits.—Tex., Ariz., Mont., Cal.; Guerrero and N. Sonora, Mex.; the larvae feed in the tissues of the common cactus of the plains, *Opuntia missouriensis*.  
 TOWNSEND, Psyche, 1898, 267, note.—N. M.  
 GIGLIO-TOS, Ditt. del Mess., II, 40, pl. I, f. 14, 15 (*marginatum* and *distinctum*).—Mexico.  
*Note.*—Giglio-Tos believes that both Say and Macquart confused two species as males and females of the same species.
- var. **lentum** WILLISTON, Synop. N. A. Syrph., 152.
- parvum** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., I, 42.—Tehuacan, Mex.
- simile** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., I, 42.—Tehuacan and Mezquillan, Mex.

## VOLUCELLA.

- GEOFFROY, Hist. Ins. Env. de Paris, II, 540, 1764.  
 ST. FARGEAU et SERVILLE, Encycl. Méth., X, 786, 1825 (*Temnocera* and *Ornidia*).  
 MACQUART, Dipt. Exot., II, 2, 26 (*Temnocera*), 1842.  
 SCHINER, Fauna Austr., I, 328, 1862.  
 BIGOT, Bull. Soc. Ent. France, 1882, No. 12 (*Atemnocera*); Annales, 1883, 64, table of species.



- WILLISTON, Synop. N. A. Syrph., 134, def. and table of species, 1886: *Biologia*, Dipt., III, 43, table of Cent. Amer. species, 1891.
- GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 117, 1892 (*Camerania*); Ditt. del Mess., I, 45, 1892 (id.).
- TOWNSEND, Annals and Mag. Nat. Hist., XX, 26, table of species of *amethystina* group.
- VERRALL, Brit. Flies, VIII, 482, 1901.
- CHAGNON, Ét. Prélim. les Syrph., 47, 1901.
- abdominalis** WIEDEMANN, Auss. Zweifl., II, 196.—Cuba.  
MACQUART, Dipt. Exot., II, 2, 25.—Cuba.  
COCKERELL, Jour. Inst. Jamaica, I, 259 ("*spiniger*, Brit. Mus."). [Twins.]  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 39.—Jamaica.
- amethystina** BIGOT, Annales, 1875, 479.—Mex.  
WILLISTON, *Biologia*, Dipt., III, 52, brief desc.—Presidio, Mex.
- anna** WILLISTON, Synop. N. A. Syrph., 138, pl. VI, f. 8.—Ariz., N. M.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 40, female; Annals and Mag. Nat. Hist., XIX, 141, oc.—N. M.; Rio Ruidosa, N. M.
- aperta** WALKER, Trans. Ent. Soc., n. ser., V, 292.—Mex.
- apicalis** LOEW, Cent., VI, 36.—Cuba.  
WILLISTON, Synop. N. A. Syrph., 149, transl. orig. desc.
- apicifera** TOWNSEND, pub. by SNOW, in Kans. Univ. Quart., III, 241; Townsend. Trans. Amer. Ent. Soc., XXII, 40.—Las Cruces, N. M.  
HUNTER, Canad. Ent., XXIX, 131, oc. and note.—N. M.
- ardua** WIEDEMANN, Auss. Zweifl., II, 204.—Surinam.  
RONDANI, Es. Ins. Ditt. Brasil., 1848.—Brazil.  
GIGLIO-TOS, Ditt. del Mess., I, 56.—Orizaba, Mex.
- avida** OSTEN SACKEN, West. Dipt., 333.—Cal.  
WILLISTON, Synop. N. A. Syrph., 139, pl. VI, f. 12; *Biologia*, Dipt., III, 47.—Cal.; Guanajuato, Mex.  
HUBBARD, Psyche, May, 1899, suppl. I, I, larvæ in giant cactus, *Cereus giganteus*, in Ariz.
- bombylans** LINNÉ, see *cæcta*.
- brevis** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., I, 63.—Meztillan, Mex.
- cæsariata** WILLISTON, *Biologia*, Dipt., III, 49.—Orizaba, Mex.  
GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892 (*hirsuta*); Ditt. del Mess., I, 60.—Meztillan, Mex.
- castanea** BIGOT, Annales, 1875, 476.—Mex.  
WILLISTON, *Biologia*, Dipt., III, 45, oc.—Jalisco, Mex.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 41.—Guanajuato, Mex.  
See also under *postica*.
- chætophora** WILLISTON, Synop. N. A. Syrph., 149; *Biologia*, Dipt., III, 52, pl. I, f. 15.—Mex.; Guerrero, Isthmus of Tehuantepec, and N. Yucatan, Mex.  
? TOWNSEND, Annals and Mag. Nat. Hist., XX, 26, notes; identity seems doubtful.—Vera Cruz.
- chalybescens** WIEDEMANN, Auss. Zweifl., II, 204.—Brazil.  
JÄNNICKE, Neue Exot. Dipt., 4.—Cuba.  
GIGLIO-TOS, Ditt. del Mess., I, 52.—Orizaba, Mex.
- comastes** WILLISTON, *Biologia*, Dipt., III, 52.—Orizaba, Mex.  
See note to *variegata*.
- comstocki** WILLISTON, Synop. N. A. Syrph., 138, pl. VI, f. 9; *Biologia*, Dipt., III, 51, oc.—Ariz., N. M.; N. Sonora, Mex.

- TOWNSEND, Trans. Amer. Ent. Soc., XXII, 41; Psyche, 1897, 148, notes; Annals and Mag. Nat. Hist., XIX, 141, notes.—N. M.
- cordia** TOWNSEND, Annals and Mag. Nat. Hist., XX, 27.—Vera Cruz, Mex.
- crauerii** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., I, 49.—Mex.
- dichroica** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., I, 55.—Huastec, Mex.
- estebana** TOWNSEND, Proc. Cal. Acad. Sci., IV, 612.—Lower Cal.
- esuriens** FABRICIUS, Syst. Ent., IV, 281 (*Syrphus*); Syst. Antl., 226 (id.).—W. I. SAY, Jour. Acad. Sci. Phil., VI, 166 (*violacca*); Compl. Works, II, 360 (id.).—Mex.
- WIEDEMANN, Auss. Zweifl., II, 197.
- MACQUART, Dipt. Exot., II, 2, 25, pl. v, f. 3 (*mexicana*); Suppl. I, 123, pl. XI, f. 2 (*dispar*).—Mex.; New Grenada.
- WALKER, List, III, 636 (*metallifera*).—Venezuela and Mex. [Will.]
- JÄNNICKE, Neue Exot. Dipt., 87 (*maximiliani*).—Mex.
- SCHINER, Novara, 356 (*esuriens* and *mexicana*), syn., etc.—S. A.
- OSTEN SACKEN, West. Dipt., III (*mexicana*); Cat., 128, syn.—S. Cal.
- RONDANI, Archiv. per Zool., III, 4, 1865 (*transatlantica*).—S. A.
- WILLISTON, Synop. N. A. Syrph., 137, pl. VI, f. 5; Biologia, Dipt., III, 50, bibl., etc.—Cal., Ariz., Tex., Fla.; Mexico, several places.
- GIGLIO-TOS, Ditt. del Mess., I, 47, full bibl.—Mexico, common.
- TOWNSEND, Trans. Amer. Ent. Soc., XXII, 41, notes; Proc. Cal. Acad. Sci., IV, 613, notes; Jour. N. Y. Ent. Soc., V, 174, notes.—N. M.; Lower Cal.; Tex.
- Porto Rico—Roeder.
- eugenia** WILLISTON, Synop. N. A. Syrph., 139, pl. VI, f. 10.—Bahamas, Fla., Jamaica.
- evecta** WALKER, Dipt. Saund., 251.—U. S.
- MACQUART, Dipt. Exot., Suppl. IV, 131 (*plumata* FABR.), note.—Newfoundland.
- WILLISTON, Proc. Amer. Phil. Soc., XX, 316 (*facialis*); Synop. N. A. Syrph., 136, 137, pl. VI, f. 6 (*evecta*, *facialis*, and var. *sanguinea*).—New England, Middle States, Brit. Possessions, Cal.
- COQUILLET, Proc. Wash. Acad. Sci., II, 434, oc. in Alaska (*facialis*).
- TOWNSEND, Trans. Amer. Ent. Soc., XXII, 42, notes on varieties, recognizing *facialis* and *sanguinea* as such.
- CHAGNON, Ét. Prélim. les Syrph., 47.—Montreal and St. Jean, Quebec.
- AXTON, N. Y.—M. and H.; N. J.—Smith Cat.; Sea Cliff, N. Y.—Banks; White Mts., N. H.—Slosson.
- fasciata** MACQUART, Dipt. Exot., II, 2, 22, pl. v, f. 2.—Carolina.
- OSTEN SACKEN, West. Dipt., 334, oc.—Texas and Manitou, Col.
- WILLISTON, Synop. N. A. Syrph., 145, pl. VI, f. 4; Biologia, Dipt., III, 48, note; Ent. News, II, 162, larvæ.—Kans., Col., Tex., Mexico, Carolina; Mex.; larvæ feed in the tissues of the common cactus of the plains, *Opuntia missouriensis*.
- SMITH, Canad. Ent., XXIII, 242, larvæ in prickly pear cactus.
- Inverness, Fla.—Johnson; N. J.—Smith Cat.
- fax** TOWNSEND, Trans. Amer. Ent. Soc., XXII, 42.—Col.
- flavissima** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., I, 50.—Orizaba, Mex.
- fornax** TOWNSEND, Proc. Cal. Acad. Sci., IV, 613.—Lower Cal.

- fraudulenta** WILLISTON, *Biologia*, Dipt., III, 48, pl. 1, f. 13.—Guerrero and N. Yucatan, Mex.  
GIGLIO-TOS, *Ditt. del Mess.*, 1, 59.—Meztillan, Mex.
- fulvicornis** BIGOT, *Annales*, 1883, 84.—Panama.
- furens** GIGLIO-TOS, *Boll. R. Univ. Torino*, VII, No. 123, 1892; *Ditt. del Mess.*, 1, 48.—Mex.
- fuscipennis** MACQUART, *Dipt. Exot.*, II, 2, 24, pl. IV, f. 2.—Brazil.  
WILLISTON, *Trans. Amer. Ent. Soc.*, XV, 276; *Biologia*, Dipt., III, 54.—Brazil; Tabasco and N. Yucatan, Mex.
- haagi** JÄNNICKE, *Neue Exot. Dipt.*, 397.—Mex.  
OSTEN SACKEN, *West. Dipt.*, 334 (*Temnocera scitigera*).—Vermejo R., N. M. [Will.]
- VAN DER WULP**, *Tijdschr. v. Ent.*, XXV, 126, pl. X, f. 10 (id.).—Ariz.  
WILLISTON, *Synop. N. A. Syrph.*, 147, pl. V, f. 8; *Biologia*, Dipt., III, 51, oc.—Ariz.; Guerrero, N. Sonora and Guanajuato, Mex.  
TOWNSEND, *Proc. Cal. Acad. Sci.*, IV, 614; *Trans. Amer. Ent. Soc.*, XXII, 43, oc.: XXXVIII, 161, notes.—Lower Cal.; Jamaica; N. M.  
GIGLIO-TOS, *Ditt. del Mess.*, 1, 50, notes.—Mex.
- hirsuta** GIGLIO-TOS, see *casariata*.
- hispida** GIGLIO-TOS, see *ornata*.
- hyaloptera** GIGLIO-TOS, *Boll. R. Univ. Torino*, VII, No. 123, 1892; *Ditt. del Mess.*, 1, 57.—Tampico, Mex.
- hystrix** GIGLIO-TOS, *Boll. R. Univ. Torino*, VII, No. 123, 1892; *Ditt. del Mess.*, 1, 62.—Tuxpango, Mex.
- inops** TOWNSEND, *Trans. Amer. Ent. Soc.*, XXII, 43.—Ft. Collins, Col.
- isabellina** WILLISTON, *Synop. N. A. Syrph.*, 140; *Biologia*, Dipt., III, 46, oc.—Ariz., N. M.; Mex., N. Sonora.  
TOWNSEND, *Proc. Cal. Acad. Sci.*, IV, 614, male.—Ariz.
- kincaidii** COQUILLET, see *Pyritis*.
- lata** WIEDEMANN, *Auss. Zweifl.*, II, 195.—Mex.  
GIGLIO-TOS, *Ditt. del Mess.*, 1, 46.—Oaxaca and Meztillan, Mex.  
For Williston's *lata* WIED., see *macrocephala*.
- lucasana** TOWNSEND, *Proc. Cal. Acad. Sci.*, IV, 615.—Lower Cal.
- lugens** WIEDEMANN, *Auss. Zweifl.*, II, 206.—Brazil.  
WILLISTON, *Biologia*, Dipt., III, 54, doubtfully identified from Guatemala.
- macrocephala** GIGLIO-TOS, *Ditt. del Mess.*, 1, 45 (*Camcrania*).—Yucatan and Vera Cruz, Mex.  
WILLISTON, *Synop. N. A. Dipt.*, 146 (*megacephala* LOEW); *Biologia*, Dipt., III, 45 (*lata* WIED.).—Ariz., Mex.; N. Yucatan and Vera Cruz, Mex. [G. T.]
- macula** WIEDEMANN, *Auss. Zweifl.*, II, 200.—Brazil.  
MACQUART, *Dipt. Exot.*, II, 2, 24, pl. IV, f. 1.—Brazil.  
WILLISTON, *Trans. Amer. Ent. Soc.*, XV, 272; *Biologia*, Dipt., III, 51, oc.—Brazil; Mex.
- megacephala** LOEW, *Cent.*, IV, 57 (*Temnocera*).—Cal.  
TOWNSEND, *Proc. Cal. Acad. Sci.*, IV, 615.—Lower Cal.  
For Williston's *megacephala* LOEW, see *macrocephala*.
- mellea** JÄNNICKE, *Neue Exot. Dipt.*, 396.—Guanajuato, Mex.  
WILLISTON, *Biologia*, Dipt., III, 49, oc.—Mexico City.  
TOWNSEND, *Trans. Amer. Ent. Soc.*, XXII, 44, notes.—Mex.  
GIGLIO-TOS, *Ditt. del Mess.*, 1, 58.—Angang. Mess.
- minima** GIGLIO-TOS, *Boll. R. Univ. Torino*, VII, No. 123, 1892; *Ditt. del Mess.*, 1, 53.—Orizaba, Mex.

- nautilana* TOWNSEND, Annals and Mag. Nat. Hist., xx, 28.—Vera Cruz.
- nigrifacies* BIGOT, Annales, 1875, 479.—Mex.
- obesa* FABRICIUS, Syst. Ent., 763 (*Syrphus*); Ent. Syst., iv, 282 (id.); Syst. Antl., 227 (id.).—W. I.  
 ST. FARGEAU et SERVILLE, Encycl. Méth., x, 786 (*Ornidia*).—S. A.  
 WIEDEMANN, Auss. Zweifl., II, 199.  
 MACQUART, Hist. Nat. Dipt., I, 494.—Asia and S. A.  
 SCHINER, Novara, 356, note.—S. A.  
 WILLISTON, Synop. N. A. Syrph., 143, pl. v, f. 9; Trans. Amer. Ent. Soc., xv, 272; Biologia, Dipt., III, 50, notes.—San Domingo, Mex., N. M.; Brazil; Mex.  
 TOWNSEND, Trans. Amer. Ent. Soc., xxii, 43, notes.—Jamaica.  
 GIGLIO-TOS, Ditt. del Mess., I, 64, full bibliog., etc.; Annales Soc. Ent. de France, 1895, 360, note.—Mexico, Madagascar, E. Indies, etc.; Isle de Séchelles.  
 St. Vincent—Williston; Porto Rico—Roeder; Jamaica—Johnson.
- obesoides* GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., I, 65.—Mex.
- omochroma* GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., I, 47.—Mex.
- opalescens* TOWNSEND, Trans. Amer. Ent. Soc., xxvii, 160.—Organ Mts., N. M.
- opalina* TOWNSEND, Annals and Mag. Nat. Hist., xx, 29.—Vera Cruz.  
 var. *splendens* TOWNSEND, loc. cit.
- opinator* WILLISTON, Biologia, Dipt., III, 51, pl. I, f. 14.—Vera Cruz, Mex.
- ornata* WILLISTON, Biologia, Dipt., III, 49.—Jalapa, Mex.  
 GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892 (*hispidata*); Ditt. del Mess., I, 61.—Jalapa and Orizaba, Mex.
- pallens* WIEDEMANN, Auss. Zweifl., II, 204.—Brazil.  
 LOEW, Wien. Ent. Monatsch., v, 38 (*sexpunctata*); Cent., VI, 37 (id.).—Cuba.  
 WILLISTON, Trans. Amer. Ent. Soc., xv, 275; Synop. N. A. Syrph., 141, pl. VI, f. 2 (*sexpunctata* Lw.); Biologia, Dipt., III, 53, syn. and oc.: Ent. News, III, 146, syn.—Brazil; Fla.; Guatemala.  
 GIGLIO-TOS, Ditt. del Mess., I, 57.—Playa Vicente and Meztilan, Mex.  
 TOWNSEND, Trans. Amer. Ent. Soc., xxii, 45, oc. in Jamaica.  
 Fla. and Jamaica—Johnson; Porto Rico—Roeder.
- picta* WIEDEMANN, Auss. Zweifl., II, 201.—Brazil.  
 BIGOT, in Sagra's Cuba, 802, oc. in Cuba.  
 SCHINER, Novara, 358.—Brazil.  
 RONDANI, Studi Ent., 65.—Brazil.  
 BIGOT, Annales, 1875, 480 (*pulchripes*).—Mex.  
 WILLISTON, Trans. Amer. Ent. Soc., xv, 275; Biologia, Dipt., III, 47, syn., etc.—Brazil; Mexico, several places.
- postica* SAY, Jour. Acad. Sci. Phil., VI, 166; Compl. Works, II, 360.—Mex.  
 GIGLIO-TOS, Ditt. del Mess., I, 49, desc.; would make *castanea* BIG., a synonym.—Tehuacan, Mex.
- pubescens* LOEW, Wien. Ent. Monatsch., v, 38 (*Temnocera*); Cent., VI, 35 (id.).—Cuba.  
 WILLISTON, Synop. N. A. Syrph., 148, transl. orig. desc.
- pulchripes* BIGOT, see *picta*.
- purpurascens* LOEW, Cent., VIII, 52.—Hayti.  
 WILLISTON, Synop. N. A. Syrph., 148, transl. orig. desc.  
 Jamaica—Johnson.

- purpurifera** BIGOT, Annales, 1875, 477, 481 (*tricincta*, *purpurifera*, and *varians*); 1883, 63, syn. of *varians*.—Oaxaca, Mex.  
WILLISTON, Biologia, Dipt., III, 54, redesc.; syn.—Oaxaca, Mex.
- pusilla** MACQUART, Dipt. Exot., II, 2, 21, pl. v, f. 3.—Cuba.  
WILLISTON, Synop. N. A. Syrph., 144, pl. VI, f. 3.—Fla.  
St. Augustine and Georgiana, Fla.—Johnson; Porto Rico—Roeder.
- quadrata** WILLISTON, Biologia, Dipt., III, 46, pl. I, f. 12.—Guerrero, Mex.
- rafaelana** TOWNSEND, Annals and Mag. Nat. Hist., XX, 28.—Vera Cruz.
- satur** OSTEN SACKEN, West. Dipt., 333.—Utah, Col.  
WILLISTON, Synop. N. A. Syrph., 142, pl. VI, f. 11.—W. Kans., Col. N. M.—Snow.
- setigera** OSTEN SACKEN, see *haagi*.
- sexpunctata** LOEW, see *pallens*.
- sodomis** TOWNSEND, Proc. Cal. Acad. Sci., IV, 66.—Lower Cal.
- tamaulipana** TOWNSEND, Jour. N. Y. Ent. Soc., VI, 51.—Brownsville, Tex.
- tau** BIGOT, Annales, 1883, 84.—Mex.  
WILLISTON, Synop. N. A. Syrph., pl. VI, f. 13.—Cal. Col., N. M.—Snow.
- testacea** VAN DER WULP, Tijdschr. v. Ent., XXXIV, 203.—Curacao.
- tibialis** MACQUART, Dipt. Exot., Suppl. I, 123.—Yucatan.
- tolteca** TOWNSEND, Trans. Amer. Ent. Soc., XXII, 45; Proc. Cal. Acad. Sci., IV, 616, notes.—Guanajuato, Mex.; Lower Cal.
- tricincta** BIGOT, see *purpurifera*.
- tristis** BIGOT, Annales, 1875, 482; 1883, 70 (*tristis*); 1883, 81, 86 (*Phalacromyia mclanorhina*).—Mexico. [G. T.]  
GIGLIO-TOS, Ditt. del Mess., I, 54, syn., etc.; may be same as *Phalac. subrostrata* ROND., from Brazil.—Orizaba, Tuxpango, Tehuacan, Mex.
- tyimpanitis** FABRICIUS, Syst. Antl., 226 (*Syrphus*).—S. A.  
WIEDEMANN, Auss. Zweifl., II, 200.  
WILLISTON, Trans. Amer. Ent. Soc., XV, 275; Biologia, Dipt., III, 52, oc.—Brazil; Mexico and Panama.
- unilecta** WALKER, Trans. Ent. Soc., n. ser., V, 292 (*Temnocera*).—Mex.
- vacua** FABRICIUS, Syst. Ent., 763 (*Syrphus*); Ent. Syst., IV, 281 (id.); Syst. Antl., 227 (id.).—W. I.  
WIEDEMANN, Auss. Zweifl., II, 202.—S. A.  
WALKER, List, III, 637, oc. in Ga. and Fla.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 46, redesc.—Jamaica.
- varians** BIGOT, Annales, see *purpurifera*.
- variegata** BIGOT, Annales, 1875, 478.—Mex.  
GIGLIO-TOS, Ditt. del Mess., I, 51.—Orizaba; *comastes* WILL. may be the same.
- vesiculosa** FABRICIUS, Syst. Antl., 226 (*Syrphus*).—S. A.  
WIEDEMANN, Auss. Zweifl., II, 201.—S. A.  
MACQUART, Dipt. Exot., Suppl. III, 39, pl. IV, f. 3.—N. A.  
WILLISTON, Synop. N. A. Syrph., 141, pl. VI, f. 1.—Pa., Conn., Md., Ky., Fla.  
N. J.—Smith Cat.; Inverness, Fla.—Johnson.
- victoria** WILLISTON, Synop. N. A. Syrph., 145.—N. M.  
TOWNSEND, Psyche, 1898, 267, oc.; Annals and Mag. Nat. Hist., XIX, 141, notes.—Both N. M.
- violacea** SAY, see *esuriens*.
- viridana** TOWNSEND, Annals and Mag. Nat. Hist., XX, 30.—Vera Cruz.
- viridula** WALKER, Trans. Ent. Soc., n. ser., V, 292 (*Temnocera*).—Mex.

*viridula* BIGOT, see *Phalacromyia vaga*.

*volucris* GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., 1, 61.—Orizaba, Mex.

#### MEGAMETOPON.

GIGLIO-TOS, Boll. R. Univ. Torino, VI, No. 108, 5, fig., Sept., 1891; Ditt. del Mess., 1, 43, 1892.

WILLISTON, Biologia, Dipt., III, 55, pl. II, f. 1 (Dec., 1891) (*Ophromyia*).

*nasicum* WILLISTON, Biologia, Dipt., III, 55 and 79, pl. II, f. 1 (*Ophromyia*).—Guerrero, Mex.

GIGLIO-TOS, Ditt. del Mess., 1, 44, pl. 1, f. 12.—Guerrero, Mex.

#### PHALACROMYIA.

RONDANI, Esame . . . Ins. Ditt. Brasil, Torino, 1848.

THOMSON, Eugen. Resa, 593, 1868 (*Glaurotricha*). [Will.]

BIGOT, Annales, 1883, 64 and 81, table of species.

WILLISTON, Synop. N. A. Syrph., 297, 1886, note; Biologia, Dipt., III, 40, 1891, table of Cent. Amer. species.

*bellula* WILLISTON, Biologia, Dipt., III, 42.—N. Yucatan, Mex.

*melanorhina* BIGOT, see *Volucella tristis*.

*pica* SCHINER, Novara, 355, pl. IV, f. 6.—Colombia.

? WILLISTON, Biologia, Dipt., III, 41, doubtfully ident. from Misantla, Mex.

*pulchra* WILLISTON, Biologia, Dipt., III, 41.—Costa Rica.

*vaga* WIEDEMANN, Auss. Zweifl., II, 205 (*Volucella*).—Brazil.

SCHINER, Novara, 355, note.

BIGOT, Annales, 1875, 481 (*Volucella viridula*); 1883, 62, syn.—Mex.

WILLISTON, Biologia, Dipt., III, 42, oc. in Mex.

GIGLIO-TOS, Ditt. del Mess., 1, 56 (*Volucella*).—Guerrero and Orizaba, Mex.

*vicina* BIGOT, Annales, 1883, 86.—Mex.

*virescens* WILLISTON, Biologia, Dipt., III, 42.—Guatemala.

*volucelloides* BIGOT, Annales, 1884, 548 (*Glaurotricha*), from Mexico, should perhaps be placed here, as Williston, Biologia, Dipt., III, 43, says that *Glaurotricha* is hardly distinct from *Phalacromyia*.

#### SERICOMYIA.

MEIGEN, Illig. Mag., II, 274, 1803; Syst. Besch., III, 342, 1822.

SCHINER, Fauna Austr., I, 330, 1862.

WILLISTON, Synop. N. A. Syrph., 153, 1886, def. and table of species.

VERRALL, Brit. Flies, VIII, 634, 1901.

CHAGNON, Ét. Prélim. les Syrph., 48, 1901.

*bifasciata* WILLISTON, Synop. N. A. Syrph., 154.—N. H.

Pa.—Johnson; Axton, N. Y.—M. and H.

*chalcopyga* LOEW, Cent., III, 20.—Sitka.

WILLISTON, Synop. N. A. Syrph., 156, pl. VII, f. 2.—Wash., Ore.

COQUILLET, Proc. Wash. Acad. Sci., II, 435, oc. in Alaska and White Mts., N. H.

Axton, N. Y.—M. and H.; N. Idaho—J. M. A.

*chrysotoxoides* MACQUART, Dipt. Exot., II, 2, 19, pl. III, f. 3 bis; Suppl. II, 58, female (*limbipennis*).—Philadelphia; Nova Scotia. [O. S.]

WALKER, List, III, 596 (*filia*).—Martin Falls and Nova Scotia. [O. S.]

OSTEN SACKEN, Cat., 130, syn.

WILLISTON, Synop. N. A. Syrph., 157, pl. VII, f. 4.—Atlantic States and Canada.



CHAGNON, Ét. Prélim. les Syrph., 49.—Montreal.

N. J.—Smith Cat.; White Mts., N. H.—Slosson; Sea Cliff, N. Y.—Banks.

**lappona** LINNÉ, Syst. Nat., 10th ed., 591 (*Musca*); Fauna Succ., 2d ed., 443 (id.).—Europe.

FABRICIUS, Spec. Ins., 422; Ent. Syst., iv, 280; Syst. Antl., 226 (all *Syrphus lapponum*).

LATREILLE, Hist. Nat. Crust. et Ins., xiv, 265 (*Volucella*); Consid. Génér., 443.

FALLÉN, Syrphici, 20 (*lapponum*).

MEIGEN, Syst. Besch., iii, 344.

MACQUART, Hist. Nat. Dipt., i, 496.

ZETTERSTEDT, Ins. Lapp., 590; Dipt. Scand., ii, 646.

SCHINER, Verh. Zool.-Bot. Ges., vii, 437; Fauna Austr., i, 331.

VAN DER WULP, Tijdschr. v. Ent., xxv, 126, oc. at Quebec.

WILLISTON, Synop. N. A. Syrph., 154.—Quebec (v. d. W.).

VERRALL, Brit. Flies, viii, 637, fig.

*Note*.—The *Volucella lappona* of O. Fabricius is mentioned under *Syrphus tarsatus*.

**militaris** WALKER, List, iii, 595.—Martin Falls and Nova Scotia.

WILLISTON, Synop. N. A. Syrph., 155, pl. vii, f. 3.—White Mts., N. H.; Canada, New York, New Mexico.

SNOW, Kans. Univ. Quart., i, 37, notes.—Minn., Col.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 46, notes.—Col.

CHAGNON, Ét. Prélim. les Syrph., 48.—Montreal.

Axton, N. Y.—M. and H.; Beulah, N. M.—Skinner; White Mts., N. H.—Slosson; Col. and Red R. of the North—O. S. Cat.

**sexfasciata** WALKER, List, iii, 596.—Martin Falls, Canada.

WILLISTON, Synop. N. A. Syrph., 155.—Huds. B. Terr.

#### ARCTOPHILA.

SCHINER, Wien. Ent. Monatsch., iv, 215, 1860; Fauna Austr., i, 331, 1862.

WILLISTON, Synop. N. A. Syrph., 157, 1886.

VERRALL, Brit. Flies, viii, 631, 1901.

**flagrans** OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., iii, 69; West. Dipt., 335.—Mts. of Col.

WILLISTON, Synop. N. A. Dipt., 158, pl. vii, f. 5.—N. M.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 47, notes.—Col.

COQUILLET, Proc. Wash. Acad. Sci., ii, 434, oc. in Popof Id., Alaska.

N. M.—Coquillett; N. M., up to 10,000 ft.—Snow; Black Hills, S. D.—J. M. A.

#### PYRITIS.

HUNTER, Canad. Ent., xxix, 131, 1897.

**kincaidii** COQUILLET, Ent. News, vi, 132 (*Volucella*).—Wash. Gen. ref. by Melander in litt.

**montigena** HUNTER, loc. cit.—Moscow, Idaho.

#### DOLIOSYRPHUS.

BIGOT, Bull. Soc. Ent. France, 1882, No. 13; Annales, 1883, 237.

WILLISTON, Synop. N. A. Syrph., 178, 1886.

**hirtipes** BIGOT, Bull. Soc. Ent. France, 1882, No. 13; Annales, 1883, 343.—Panama.

**rileyi** WILLISTON, Synop. N. A. Syrph., 178, pl. viii, f. 8.—N. M.

**scutellatus** BIGOT, Bull. Soc. Ent. France, 1882, No. 13; Annales, 1883, 342.—Panama.

## ERISTALIS.

- LATREILLE, Dict. d'Hist. Nat., 1804; Hist. Nat. Crust. et Ins., xiv, 363, 1804.
- MEIGEN, Syst. Besch., iii, 381, 1822.
- RONDANI, Dipt. Ital. Prod., ii, 40, 1857 (*Eristalinus* and *Eristalomyia*).
- SCHINER, Fauna Austr., i, 332, 1862.
- WILLISTON, Synop. N. A. Syrph., 158, def. and table of species, 1886; Biologia, Dipt., iii, 56, 1891, table of Central American spp.
- MIK, Wien. Ent. Zeit., xvi, 113, 1897, divides into five genera.
- VERRALL, Brit. Flies, viii, 493, 1901, adopts five subgenera.
- CHAGNON, Ét. Prélim. les Syrph., 50, 1901.
- æmulus** WILLISTON, Biologia, Dipt., iii, 64, pl. II, f. 5.—Guerrero, Mex.; Guatemala and Panama.
- GIGLIO-TOS, Ditt. del Mess., ii, 13, oc. in Mex., several places.
- æneus** SCOPOLI, Ent. Carniol., 356 (*Conops*).—Europe.
- FABRICIUS, Ent. Syst., iv, 302 (*Syrphus*); Syst. Antl., 244.
- FALLÉN, Syrphici, 28 (*Syrphus*).
- MEIGEN, Syst. Besch., iii, 384.
- WIEDEMANN, Auss. Zweifl., ii, 190 (*cuprovittatus*).—N. A. [Verrall, from types.]
- HARRIS, Ins. Inj. to Veg., 3d ed., 609 (*sincerus*).—Mass.
- ZETTERSTEDT, Dipt. Scand., ii, 668 (*Syrphus*).
- WALKER, List, iii, 611 (*sincerus*).—U. S.
- SCHINER, Fauna Austr., i, 333.
- LOEW, in Silliman's Jour., syn. and oc. in N. A.
- WILLISTON, Synop. N. A. Syrph., 161.—Europe and N. A.
- MIK, Wien. Ent. Zeit., xvi, 113, refers to *Lathyrophthalmus*, n. g.
- VERRALL, Brit. Flies, viii, 501 (subg. *Lathyrophthalmus*).
- Sea Cliff, N. Y.—Banks; N. J.—Smith Cat.; N. Africa and Asia Minor—Schiner.
- agrorum** FABRICIUS, Ent. Syst., iv, 285 (*Syrphus*); Syst. Antl., 235.—W. I.
- WIEDEMANN, Auss. Zweifl., ii, 172.—S. A.
- VAN DER WULP, Tijdschr. v. Ent., xxv, 130, oc. in Guadeloupe and Argentina.
- albiceps** MACQUART, see *albifrons*.
- albifrons** WIEDEMANN, Auss. Zweifl., ii, 189.—Brazil.
- MACQUART, Dipt. Exot., ii, 2, 56 (*albiceps*).—Carolina.
- LOEW, Cent., vi, 63 (*seniculus*).—Cuba.
- OSTEN SACKEN, Cat., 249, note 221.
- ROEDER, Stett. Ent. Zeit., 1885, 341.—Porto Rico.
- WILLISTON, Trans. Amer. Ent. Soc., xv, 283; Synop. N. A. Syrph., 172 (*albiceps*); Biologia, Dipt., iii, 62, syn., etc.; Ent. News, iii, 146, bibl.—Brazil; Ga.; Fla., San Domingo; Tabasco, Mex.
- Jamaica and Fla.—Johnson.
- androclous** WALKER, see *Helophilus*; the species determined as this by Osten Sacken is placed by Hunter as *mcignii*.
- atrimanus** LOEW, Cent., vi, 62.—Cuba.
- WILLISTON, Synop. N. A. Syrph., 173.—San Domingo.
- Jamaica—Johnson.
- atriceps** LOEW, see *compactus*.
- atropis** GIGLIO-TOS, Boll. R. Univ. Torino, vii, No. 123, 1892; Ditt. del Mess., ii, 14, pl. II, f. 23.—Mex.

- basilaris** MACQUART, Hist. Nat. Dipt., 1, 502.—N. A.  
OSTEN SACKEN, Cat., 133, note.
- bastardii** MACQUART, Dipt. Exot., II, 2, 35, pl. IX, f. 1; Suppl. IV, 140 (*scimimetallicus*).—N. A.; Nova Scotia.  
WALKER, List, III, 616 (*nebulosus*).—N. Y., Martin Falls, and Nova Scotia.  
OSTEN SACKEN, Cat., 131, and note, syn.  
VAN DER WULP, Tijdschr. v. Ent., XXV, 128, oc. at Quebec.  
WILLISTON, Synop. N. A. Syrph., 168, New Eng., Canada, Labrador.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 48, notes.—D. C.  
CHAGNON, Ét. Prélim. les Syrph., 55.—St. Jean and Montreal, Quebec.  
N. J.—Smith Cat.
- bellardii** JÄNNICKE, see *bogotensis*.
- bogotensis** MACQUART, Dipt. Exot., II, 2, 52.—Bogota.  
JÄNNICKE, Neue Exot. Dipt., 400 (*bellardii*).—Mex.  
BIGOT, Annales, 1880, 221 (*Eristalomyia rufoscutata*).—Mex.  
VAN DER WULP, Tijdschr. v. Ent., XXV, 129; Notes from the Leyden Mus., v, 79.—Argentina.  
F. LYNCH ARRIBALZAGA, Dipt. Argentina, Syrph., 253.—Argentina.  
WILLISTON, Biologia, Dipt., III, 60 (*bellardii*).—Durango, Mex.  
GIGLIO-TOS, Ditt. del Mess., II, 4, syn., etc.—Oaxaca, Angang, Mex.
- bombusoides** (!) GIGLIO-TOS, see *circe*.
- brousi** WILLISTON, see *mcigenii*.
- circe** WILLISTON, Biologia, Dipt., III, 59, pl. II, f. 7.—Guerrero and Jalapa, Mex.  
GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892 (*bombusoides*);  
Ditt. del Mess., II, 3.—Oaxaca.
- clarissimus** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., II, 11.—Tuxpango, Mex.
- compactus** WALKER, List, III, 619.—Martin Falls, Canada.  
LOEW, Cent., VI, 64 (*atriceps*).—White Mts., N. H. [Will.]  
WILLISTON, Synop. N. A. Syrph., 169, pl. VII, f. 9.—Conn.  
COQUILLETT, Proc. Wash. Acad. Sci., II, 435, oc. in Alaska.  
Canada—O. S. Cat.; White Mts., N. H.—Slosson.
- cosmius** SCHINER, Novara, 362.—S. A.  
? WILLISTON, Biologia, Dipt., III, 61, doubtfully recognized from Jalapa, Mex.
- cubensis** MACQUART, Dipt. Exot., II, 2, 42.—Cuba; may be the female of *albifrons* or a var. of *annulipes*—Meq., loc. cit.
- dimidiatus** WIEDEMANN, Auss. Zweifl., II, 180.—N. A.  
MACQUART, Hist. Nat. Dipt., I, 505 (*niger*); Dipt. Exot., II, 2, 55 (*therminierii* and *chalybeus*, male and female); Suppl. IV, 139 (*incisuralis*).—N. A.; Carolina; Carolina; N. A. [All by O. S., Cat., 131.]  
WALKER, List, III, 617 (*inflexus*).—Martin Falls and Nova Scotia. [O. S.]  
WILLISTON, Synop. N. A. Syrph., 162.—Conn., D. C., N. H., Kans.  
RILEY and HOWARD, Ins. Life, II, 261, ref. to an alleged case of the larva of this species passing from the bowels of a human being.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 48, notes.—D. C.  
CHAGNON, Ét. Prélim. les Syrph., 52.—St. Hilaire, St. Jean and Montreal, Quebec.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson; Fla.—Johnson; Sea Cliff, N. Y.—Banks.
- diminutus** WALKER, List, III, 622.—Mex.

- everes** WALKER, Dipt. Saund., 246.—N. A.  
**expictus** WALKER, Trans. Ent. Soc., n. ser., v, 291.—Mex.  
**familiaris** WALKER, Trans. Ent. Soc., n. ser., v, 290.—Mex.  
**fasciatus** WIEDEMANN, Zool. Mag. Kiel, i, 51; Auss. Zweifl., ii, 173.—Brazil.  
 MACQUART, Dipt. Exot., ii, 2, 38 and 57 (*podagra* and *fasciatus*); Suppl. v, 87 (*bifasciatus*).—Brazil; S. A.; Brazil. [Will.]  
 RONDANI, Studi Ent., 68.—Brazil.  
 WILLISTON, Trans. Amer. Ent. Soc., xv, 281 (*podagra*); Biologia, Dipt., iii, 62, oc. and syn.—Brazil; Tabasco, Mex.  
**flavipes** WALKER, List, iii, 633.—Martin Falls, Canada.  
 SAY, Jour. Acad. Sci. Phil., vi, 163; Compl. Works, ii, 357 (*Milesia barda*; the male is *Mallota posticata*).—Ind. [O. S.]  
 LOEW, Cent., vi, 69 (*melanostomus*).—Minn., Ore. [Will.]  
 WILLISTON, Synop. N. A. Syrph., 168.—Canada, New Eng., Wash.  
 HUNTER, Canad. Ent., xxviii, 99, oc. and predaceous habit of adult.—Nebr.  
 TOWNSEND, Trans. Amer. Ent. Soc., xxii, 48, notes.—Col.  
 COQUILLETT, Proc. Wash. Acad. Sci., ii, 435, oc. in Alaska.  
 CHAGNON, Ét. Prélim. les Syrph., 53.—Montreal.  
 N. J.—Smith Cat.; Sea Cliff, N. Y.; Col.—Snow.  
**fulvipes** BIGOT, Annales, 1880, 225 (*Eristalomyia*).—Mex.  
**furcatus** WIEDEMANN, Zool. Mag. Kiel, i, 51; Auss. Zweifl., ii, 176.—Bahia and Montevideo.  
 MACQUART, Dipt. Exot., ii, 2, 40, pl. ix, f. 6 (*femoratus*).—Rio Janeiro.  
 SCHINER, Novara, 362, syn. and note.—Brazil and Colombia.  
 VAN DER WULP, Tijdschr. v. Ent., xxv, 131, oc. and note.—Argentina.  
 WILLISTON, Trans. Amer. Ent. Soc., xv, 279; Biologia, Dipt., iii, 61, oc.—Brazil; Mexico, common.  
 TOWNSEND, Jour. N. Y. Ent. Soc., v, 174, oc. and notes.—Brownsville, Tex.  
 GIGLIO-TOS, Ditt. del Mess., ii, 15.—Mexico, common.  
**guadelupensis** MACQUART, Dipt. Exot., ii, 2, 32.—Guadeloupe.  
**gundlachi** LOEW, Cent., vi, 61.—Cuba.  
**hirtus** LOEW, see *temporalis*.  
**hortorum** FABRICIUS, Syst. Ent., 764 (*Syrphus*); Ent. Syst., iv, 286 (id.); Syst. Antl., 236.—W. I.  
 DEGEER, Mém. Hist. Ins., vi, 145, pl. xxix, f. i (*Musca surinamensis*).—Surinam. [Fabr.]  
 WIEDEMANN, Auss. Zweifl., ii, 169.—St. Thomas, W. I.  
 WILLISTON, Synop. N. A. Syrph., 173, pl. vii, f. 10.—San Domingo.  
**impositus** WALKER, Trans. Ent. Soc., n. ser., v, 289.—Hayti.  
**inflatus** MACQUART, Hist. Nat. Dipt., i, 507.—N. A.  
 OSTEN SACKEN, Cat., 133, note; not seen.  
**inornatus** LOEW, Cent., vi, 68.—Red R. of the North.  
 WILLISTON, Synop. N. A. Syrph., 175, transl. of orig. desc. Craig's Mt., Ida.—J. M. A.  
**lateralis** WALKER, Linn. Trans., xvii, 347; List, iii, 622.—Brazil, Chili, Guiana, Mexico, Jamaica.  
**latifrons** LOEW, Cent., vi, 65.—Matamoros, Mex.  
 OSTEN SACKEN, West. Dipt., 336 (*stipator*).—Col., N. M., Cal.  
 WILLISTON, Proc. Amer. Phil. Soc., xx, 319 (*stipator*); Synop. N. A. Syrph., 164; Biologia, Dipt., iii, 60, oc.—Col.; Cal., Arizona, N. M., Tex., Kans.; N. Sonora and Guerrero, Mex.

- SNOW, Kans. Univ. Quart., i, 38, notes.—Col.  
 GIGLIO-TOS, Ditt. del Mess., II, 5.—Tehuacan, Mex.  
 TOWNSEND, Proc. Cal. Acad. Sci., IV, 617, oc.; Psyche, 1897, 40, 93, notes;  
 Trans. Amer. Ent. Soc., XXII, 49, notes.—Cal.; N. M.; Ariz., Cal., N.  
 M.  
 HUNTER, Canad. Ent., XXVIII, 97, oc. and notes.—Nebr., S. D., Cal., Mex.  
 Beulah, N. M.—Skinner.  
 var. **maculipennis** TOWNSEND, Psyche, 1897, 93.—N. M.  
**meigenii** WIEDEMANN, Auss. Zweifl., II, 177.—S. A.  
 THOMSON, Eugen. Resa, 419 (*fovcifrons*).—S. A.  
 OSTEN SACKEN, West. Dipt., 337 (*androclous* WALK.): Cat., 131, 249, note  
 (*androclous* O. S., Walker's species proving to be a *Hclopophilus*).—N. H.  
 to Utah and Alaska.  
 WILLISTON, Proc. Amer. Phil. Soc., XX, 323, female (*brousi*); 319, male  
 (*meigenii*); Synop. N. A. Syrph., 165, 166 (*meigenii* and *brousi*).—  
 New Eng. to Alaska.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 48, notes.—N. H., Col.  
 HUNTER, Canad. Ent., XXVIII, 98 (*brousi*); XXIX, 133, full syn.—S. D.,  
 Ida., Wyo.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 435, oc. in Alaska.  
 CHAGNON, Ét. Prélim. les Syrph., 51.—Montreal.  
 N. J.—Smith Cat.  
**melanostoma** LOEW, see *flavipes*.  
**mexicanus** MACQUART, Dipt. Exot., Suppl. II, 59.—Mex.  
 GIGLIO-TOS, Ditt. del Mess., II, 5.—Mexico City.  
**minutalis** WILLISTON, Biologia, Dipt., III, 64, pl. II, f. 6.—Tabasco, Mex.  
**montanus** WILLISTON, Proc. Amer. Phil. Soc., XX, 322; Synop. N. A. Syrph.,  
 166.—Wyo.  
 HUNTER, Canad. Ent., XXVIII, 98; XXIX, 134, oc. and notes.—Ida.; Nebr.  
**nemorum** LINNÉ, Syst. Nat., 10th ed., 591 (*Musca*); Fauna Suec., 2d ed., 444  
 (id.).—Europe.  
 MEIGEN, Syst. Besch., III, 394 and VII, 144 (*nemorum* and *sylvarum*).  
 SCHINER, Fauna Austr., I, 336, 337 (id.).  
 ? VAN DER WULP, Tijdschr. v. Ent., XXV, 128, doubtful oc. at Quebec.  
 VERRALL, Brit. Flies, VIII, 514, fig.  
**obscurus** LOEW, Cent., VI, 67.—Red R. of the North.  
 WILLISTON, Synop. N. A. Syrph., 175, trans. orig. desc.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 436, oc. at Fox Point, Alaska.  
 Hudsonian Zone, N. M.—Cockerell.  
**obsoletus** WIEDEMANN, Auss. Zweifl., II, 175.—Brazil.  
 MACQUART, Dipt. Exot., Suppl. IV, 138 (*testaceicornis*).—Mex. [Will.]  
 SCHINER, Novara, 361, redesc.—S. A.  
 BIGOT, Annales, 1880, 224 (*Eristalomyia pachypoda*).—Mex.  
 WILLISTON, Trans. Amer. Ent. Soc., XV, 279; Biologia, Dipt., III, 59, 60  
 (*obsoletus* and *pachypoda*).—Brazil; Mexico, several places, and Costa  
 Rica.  
 GIGLIO-TOS, Ditt. del Mess., II, 7, syn. and oc.—Orizaba and Cuernavaca,  
 Mex.  
 TOWNSEND, Proc. Cal. Acad. Sci., IV, 617, note.—Lower Cal.  
**occidentalis** WILLISTON, Proc. Amer. Phil. Soc., XX, 322; Synop. N. A. Syrph.,  
 167.—Wash.  
 HUNTER, Canad. Ent., XXIX, 133, oc. at Cook's Inlet, Alaska.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 435, oc. in Alaska, sev. places.

- ochraceus** WILLISTON, Trans. Amer. Ent. Soc., xv, 279; *Biologia*, Dipt., III, 60, female.—Brazil; Tabasco, Mex.
- œstriformis** WALKER, List, III, 573.—Martin Falls, Canada.  
OSTEN SACKEN, Cat., 249, note 227, on type.  
WILLISTON, Synop. N. A. Syrph., 176, quotes Walker and Osten Sacken.
- opulentus** BIGOT, see *Mcromacrus*.
- ornatus** TOWNSEND, Annals and Mag. Nat. Hist., XIX, 21.—Vera Cruz, Mex.
- pachypoda** BIGOT, see *obsoletus*.
- parens** BIGOT, Annales, 1880, 216.—N. A.  
WILLISTON, Synop. N. A. Syrph., 177, quotes orig. desc.
- persa** WILLISTON, *Biologia*, Dipt., III, 58.—Guerrero, Mex.
- pilosus** LOEW, Cent., VI, 70.—Greenland.  
WILLISTON, Synop. N. A. Syrph., 174, transl. of orig. desc.
- præclarus** GIGLIO-TOS, see *rufiventris*.
- pusillus** MACQUART, Dipt. Exot., II, 2, 54.—Yucatan.  
JENNICKE, Neue Exot. Dipt., 400 (*tricolor*).—Mex. [G. T.]  
WILLISTON, *Biologia*, Dipt., III, 62 (*tricolor*).—Mexico, several places.  
TOWNSEND, Jour. N. Y. Ent. Soc., v, 175, oc. (*tricolor*); Proc. Cal. Acad. Sci., IV, 617 (id.).—Brownsville, Tex.; Lower Cal.  
GIGLIO-TOS, Ditt. del Mess., II, 10, syn., etc.—Mexico, many places.
- pusio** WIEDEMANN, Auss. Zweifl., II, 192.—Brazil.  
ROEDER, Stett. Ent. Zeit., 1885, 341.—Porto Rico.
- ruficeps** MACQUART, Dipt. Exot., II, 2, 51.—Bogota.  
JENNICKE, Neue Exot. Dipt., 91 (*thoracica*).—Mex. [G. T.]  
WILLISTON, Ent. News, III, 146, would make *thoracica* a syn. of *obsoletus*.  
GIGLIO-TOS, Ditt. del Mess., II, 6.—Tehuacan, Mex.
- rufiventris** MACQUART, Dipt. Exot., Suppl. I, 129.—Colombia.  
WILLISTON, Trans. Amer. Ent. Soc., xv, 282; *Biologia*, Dipt., III, 65, oc. and note.—Brazil; Tabasco, Mex.  
GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123 1892 (*præclarus*); Ditt. del Mess., II, 11.—Tabasco and Tuxpango, Mex.
- rufoscutatus** BIGOT, see *bogotensis*.
- sackeni** BIGOT, Annales, 1880 (*Eristalomyia sackenis*).—Mex.
- sallæi** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., II, 12.—Mexico City.
- saxorum** WIEDEMANN, Auss. Zweifl., II, 158.—Savannah, Ga.  
MACQUART, Dipt. Exot., II, 2, 33.—Philadelphia.  
WALKER, List, III, 618 (*pervagus* HARRIS, Cat. Ins. Mass.).—U. S. [O. S.]  
WILLISTON, Synop. N. A. Syrph., 163.—Mass., Conn., N. C., Pa. N. J.—Smith Cat.
- scutellaris** FABRICIUS, Syst. Antl., 190 (*Milesia*).—S. A.  
WIEDEMANN, Auss. Zweifl., II, 159.—Brazil.  
MACQUART, Hist. Nat. Dipt., I, 513 (*Palpada scutellata*); Dipt. Exot., II, 2, 38 and 41 (*scutellatus* and *scutellaris*); Suppl., IV, 139 (*fascithorar*).—Brazil; Brazil and Cayenne; America.  
SCHINER, Novara, 364, notes; syn. of *scutellata*, and probably of *fascithorar*.—S. A.  
BIGOT, Annales, 1883, 222, note on Macquart's types of *scutellata* (*Priomcrus*); 342 (*Doliosyrphus scutellatus* n. sp.).—Panama. [G. T.]  
WILLISTON, Trans. Amer. Ent. Soc., xv, 279; Synop. N. A. Syrph., 178, pl. VIII, f. 8 (*Doliosyrphus rileyi*); *Biologia*, Dipt., III, 63, oc. and syn.; Ent. News, III, 146, syn.—Brazil; New Mexico; Panama and Mexico, several places.



- GIGLIO-TOS, Ditt. del Mess., II, 12.—Mexico City.
- semicirculus** WALKER, Dipt. Saund., 249.—Honduras.
- seniculus** LOEW, see *albifrons*.
- soulouquensis** BIGOT, Annales, 1880, 228 (*Eristalomyia*).—Hayti.
- stipator** OSTEN SACKEN, see *latifrons*.
- sumichrasti** GIGLIO-TOS, Boll. R. Univ. Torino, VII, no. 123, 1892; Ditt. del Mess., II, 6.—Tehuacan, Mex.
- temporalis** THOMSON, Eugen. Resa, 490.—Cal.  
 LOEW, Cent., VI, 66 (*hirtus*).—Cal. [O. S.]  
 OSTEN SACKEN, West. Dipt., 335 (*hirtus*), desc. and correction of Loew.—Cal. and Col., common.  
 WILLISTON, Synop. N. A. Syrph., 162 (*hirtus*).—Wash., Ore., Cal., W. Kans.
- TOWNSEND, Trans. Amer. Ent. Soc., XXII, 49, notes (*hirtus*).—Ariz., Col.  
 BAKER, Ent. News, VI, 174, reared at Ft. Collins, Col.; larvæ in ooze at mouth of drain (*hirtus*).
- tenax** LINNÉ, Syst. Nat., 10th ed., 591 (*Musca*); Fauna Suec., 2d ed., 444 (id.).—Europe.  
 SCOPOLI, Ent. Carniol., No. 960, 961 (*Conops vulgaris* and *fuscus*).  
 FABRICIUS, Syst. Ent., 765 (*Syrphus*); Ent. Syst., IV, 288 (id.); Syst. Antl., 238.  
 FALLÉN, Syrphici, 26.  
 LATREILLE, Consid. Génér., 443 (*Elophilus*).  
 MEIGEN, Syst. Besch., III, 385–388 (*tenax*, *campestris*, *hortorum*, *sylvaticus*, *vulpinus*).  
 ZETTERSTEDT, Dipt. Scand., II, 661; VIII, 3113; XI, 4301; XII, 4651.  
 WALKER, Ins. Brit., Dipt., I, 243, pl. IX, f. 5.  
 SCHINER, Verh. Zool.-Bot. Ges., VII, 390; Fauna Austr., I, 334.  
 BRAUER, Zweifl. des Kaiserl. Mus., III, 69, 1883, bibliog. of larval stages, from Réaumur down.  
 OSTEN SACKEN, Ent. Mo. Mag., XXIII, 1883, 97, spread in North America, etc.; Bull. Soc. Ent. Ital., 1893, 186–217 (also reprinted in English at Heidelberg, 1894), "On the So-called Bugonia of the Ancients" (translation in Smithsonian Report, 1893); Berl. Ent. Zeitsch., XL, 1895, 142–147, early Chinese and Japanese literature of the larva.  
 WILLISTON, Synop. N. A. Syrph., 160, pl. VII, f. 7.—New Eng., Central and Pacific States.  
 RILEY and HOWARD, Ins. Life, II, 262, alleged case of the larvæ occurring in the human intestine; III, 22, larvæ in well, not positively identified.  
 MIALl, Nat. Hist. of Aquatic Insects, London, 1895, pp. 198–215, larva, etc.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 49, notes.—D. C., Cal.; Guanajuato, Mex.  
 VERRALL, Brit. Flies, VIII, 505, figs.  
 CHAGNON, Ét. Prélim. les Syrph., 51.—Montreal.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson; Sea Cliff, N. Y.—Banks; Beulah, N. M.—Skinner; Axton, N. Y.—M. and H.  
*Note*.—Linné, in Fauna Suec.—"Habitat in aquis stagnantibus, cloacis, Bibliopagorum pappo, vix preli pressione destruenda larva."
- testaceicornis** MACQUART, see *obsoletus*.
- thoracicus** JENNICKE, see *obsoletus*.
- transversus** WIEDEMANN, Auss. Zweifl., II, 188.—N. A.  
 MACQUART, Hist. Nat. Dipt., I, 307 (*vittatus*): Dipt. Exot., II, 2, 34, pl.

- viii, f. 4 (*philadelphicus*); 57 (*pumilus*).—N. A.; Philadelphia; N. A. [O. S.]
- OSTEN SACKEN, Cat., 132 and note on Macq.; syn.
- BIGOT, Annales, 1880, 217 (*zonatus*).—N. A. [Will.]
- WILLISTON, Synop. N. A. Syrph., 170, pl. vii, f. 8.—Canada to Fla., Col., Ill., Kans.
- TOWNSEND, Trans. Amer. Ent. Soc., xxii, 49, oc.—Mich., Va., D. C.
- CHAGNON, Ét. Prélim. les Syrph., 52.—Montreal and St. Jean, Quebec.
- N. J.—Smith Cat.; Fla.—Johnson; Sea Cliff, N. Y.—Banks; Axton, N. Y.—M. and H.
- triangularis** GIGLIO-TOS, Boll. R. Univ. Torino, vii, No. 123, 1892; Ditt. del Mess., ii, 9.—Mexico, several places.
- WILLISTON, Trans. Amer. Ent. Soc., xv, 281; Biologia, Dipt., iii, 63 (both referred to as "*Eristalis*—?", not named).—Brazil; Mexico, several places. [G. T.]
- tricolor** JÄNNICKE, see *pusillus*.
- trigonus** WILLISTON, Biologia, Dipt., iii, 61, pl. ii, f. 4.—Guerrero, Mex.
- trilimbatus** GIGLIO-TOS, Boll. R. Univ. Torino, vii, No. 123, 1892; Ditt. del Mess., ii, 8.—Tuxpango, Mex.
- unicolor** VAN DER WULP, Tijdschr. v. Ent., xxv, 131, pl. x, f. 11-13.—Guadeloupe.
- vinetorum** FABRICIUS, Ent. Syst., Suppl. 562 (*Syrphus*); Syst. Antl., 235.—W. I. SAY, Jour. Acad. Sci. Phil., vi, 165; Compl. Works, ii, 359 (*trifasciatus*).—Mex.
- WIEDEMANN, Auss. Zweifl., ii, 163.—Brazil.
- MACQUART, Dipt. Exot., ii, 2, 41.—Guiana, Cuba and Philadelphia.
- WALKER, List, iii, 623 (*uvarum*).—Jamaica.
- F. LYNCH ARRIBALZAGA, Dipt. Argentina, Syrph., 116.—Argentina.
- WILLISTON, Trans. Amer. Ent. Soc., xv, 280; Synop. N. A. Syrph., 171, pl. vii, f. 8; Biologia, Dipt., iii, 63; Trans. Ent. Soc. Lond., 1896, 346, oc. and syn.—Brazil; Cuba, Fla., Ga., Mex.; Mex. and Guatemala; St. Vincent, W. I.
- TOWNSEND, Jour. N. Y. Ent. Soc., v, 175, oc.; Trans. Amer. Ent. Soc., xxii, 50, notes.—Brownsville, Tex.; Jamaica, Trinidad.
- Porto Rico—Roeder; Jamaica and Fla.—Johnson.
- zonatus** BIGOT, see *transversus*.

## LYCASTRIRHYNCHA.

- BIGOT, Rev. et Mag. Zool., 1859, 307.
- WILLISTON, Biologia, Dipt., iii, 66, 1891.
- nitens** BIGOT, Rev. et Mag. Zool., 1859, 307.—Amazons.
- WILLISTON, Biologia, Dipt., iii, 66.—Vera Cruz, Mex.
- GIGLIO-TOS, Ditt. del Mess., ii, 17.—Cordova, Mex.
- willistonii** COQUILLET, Canad. Ent., 1902, 196.—Frontera in Tabasco, Mex.

## MEROMACRUS.

- RONDANI, Esam. di . . . Ins. Brasil., 1848, 10.
- MACQUART, Dipt. Exot., ii, 2, 59, 1842 (*Plagiocera*, preoc.).
- LOEW, Cent., vi, 59, 1865 (*Pteroptila*).
- WILLISTON, Synop. N. A. Syrph., 179, 1886, def. and table of species; Ent. News, iv, 114, note on syn.
- acutus** FABRICIUS, Syst. Antl., 189 (*Milcsia*).—Carolina.
- WIEDEMANN, Auss. Zweifl., ii, 105 (*Milesia cruciger*); 110 (*Milcsia acuta*).—Ga., Carolina.

- MACQUART, Hist. Nat. Dipt., I, 500 (*Mallota milcsiformis*); Dipt. Exot., II, 2, 60, pl. x, f. 7 (*Plagiocera cruciger*).—Cuba.
- WILLISTON, Synop. N. A. Syrph., 180, pl. VIII, f. 1 (*Pteroptila crucigera*); Biologia, Dipt., III, 66 (id.).—Ga., Fla., Tex.; Vera Cruz and Tabasco, Mex.
- cinctus** DRURY, Ins., I, 109, pl. XLV, f. 6 (*Musca*).—Jamaica, San Domingo.
- FABRICIUS, Syst. Ent., 763 (*Syrphus pinguis*); Ent. Syst., IV, 282 (id.); Syst. Antl., 233 (*pinguis*).—America.
- WIEDEMANN, Auss. Zweifl., II, 193 (*pinguis*).—Jamaica.
- WALKER, List, III, 564 (*Milesia ania*).—Jamaica.
- MACQUART, Dipt. Exot., Suppl. v. 94 (*pinguis*).—Jamaica.
- WILLISTON, Synop. N. A. Syrph., 182.—San Domingo.
- TOWNSEND, Trans. Amer. Ent. Soc., XXII, 50.—Jamaica.
- Porto Rico—Roeder; Jamaica—Johnson.
- decorus** LOEW, Cent., VI, 50 (*Pteroptila*).—Cuba.
- WILLISTON, Synop. N. A. Syrph., 181.—Cuba.
- opulentus** BIGOT, Annales, 1883, 336 (*Eristalis*).—Cuba.
- pratorum** FABRICIUS, Syst. Ent., 765 (*Syrphus*); Ent. Syst., IV, 286 (id.); Syst. Antl., 236 (*Eristalis*).—W. I.
- WIEDEMANN, Auss. Zweifl., II, 166 (*Eristalis*).—S. A.
- ROEDER, Stett. Ent. Zeit., 1885, oc. in Porto Rico.
- WILLISTON, Trans. Ent. Soc. Lond., 1896, 346, oc. and bibliog.—St. Vincent, W. I.
- ruficus** WIEDEMANN, Auss. Zweifl., II, 105 (*Milcsia*).—Cuba.
- WILLISTON, Synop. N. A. Syrph., 181 (*Pteroptila*).—Cuba.
- zonatus** LOEW, Cent., VI, 60 (*Pteroptila*).—Mex.
- WILLISTON, Synop. N. A. Syrph., 182, transl. orig. desc. (id.); Biologia, Dipt., III, 67, pt. desc.—Mex.; Guerrero, Mex.

## TROPIDIA.

- MEIGEN, Syst. Besch., III, 346, 1822.
- SCHINER, Fauna Austr., I, 348, 1862.
- WILLISTON, Synop. N. A. Syrph., 206, def. and table of species, 1886.
- HUNTER, Ent. News, VII, 215, 1896, table of species.
- VERRALL, Brit. Flies, VIII, 567, 1901.
- CHAGNON, Ét. Prélim. les Syrph., 60, 1901.
- albistylum** MACQUART, Dipt. Exot., Suppl. II, 60, pl. II, f. 10.—N. A.
- WILLISTON, Synop. N. A. Syrph., 207, probably not distinct from *quadrata*; Ent. News, III, 146, recognizes as distinct.
- N. J.—Smith Cat.; Fla., several places—Johnson.
- calcarata** WILLISTON, Synop. N. A. Syrph., 208.—Mich.
- N. J.—Smith Cat.
- incana** TOWNSEND, Trans. Amer. Ent. Soc., XXII, 52.—Ft. Collins, Col.
- mamillata** LOEW, Cent., I, 68.—Ill.
- WILLISTON, Synop. N. A. Syrph., 208, transl. and note.
- HUNTER, Canad. Ent., XXIX, 144, oc. in Nebr.
- HINE, Ohio Nat., II, 229, oc. in Baldwin, Kans.
- montana** HUNTER, Ent. News, VII, 215 (*nigricornis*; name changed, p. 320).—Moscow, Idaho. See also further notes, Canad. Ent., XXIX, 143.
- quadrata** SAY, Amer. Entomology, I, pl. VIII, Compl. Works, I, 14 (*Xylota*).—Pa.
- WIEDEMANN, Auss. Zweifl., II, 101, transl. of Say.
- MACQUART, Dipt. Exot., II, 2, 72, gen. ref.

WILLISTON, Synop. N. A. Syrph., 207, pl. ix, f. 2.—Conn., Canada, Wash.  
 CHAGNON, Ét. Prélím. les Syrph., 60.—Montreal.  
 N. J.—Smith Cat.; Sea Cliff, N. Y.—Banks.

#### PLATYNOCHÆTUS.

WIEDEMANN, Auss. Zweifl., II, 147, 1830.  
**niger** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., II, 20, pl. II, f. 1.—Orizaba, Mex.

#### HELOPHILUS.

- MEIGEN, Illig. Mag., II, 274, 1803 (*Elophilus*); Syst. Besch., III, 368, 1822.  
 SCHINER, Fauna Austr., I, 337, 1862.  
 BIGOT, Bull. Soc. Ent. France, 1883, No. 2 (*Eurhimyia*); Annales, 1883, 242 (id.).  
 WILLISTON, Synop. N. A. Syrph., 183, 295, def. and table of species, 1886.  
 VERRALL, Brit. Flies, VIII, 523, 1901.  
 CHAGNON, Ét. Prélím. les Syrph., 56, 1901.
- aureopilis** TOWNSEND, see *latus*.  
**androclus** WALKER, List, III, 612 (*Eristalis*).—Martin Falls, Canada.  
 OSTEN SACKEN, Cat., 250, note on type.  
**bilinearis** WILLISTON, Synop. N. A. Syrph., 295.—Col.  
 Montreal—Chagnon.  
**borealis** STÆGER, Kroyer's Tidsk., N. R., I, 359.—Greenland.  
 LOEW, Stett. Ent. Zeit., VI, 123, 1843.  
 WILLISTON, Synop. N. A. Syrph., 185, transl. Loew's desc.  
**chalepus** WALKER, Dipt. Saund., 247 (*Eristalis*).—Canada.  
 OSTEN SACKEN, Cat., 250, note on type.  
**chrysostoma** WIEDEMANN, Auss. Zweifl., II, 174 (*Eristalis*).—Ga.  
 WILLISTON, Synop. N. A. Syrph., 190, pl. VIII, f. 5.—New Eng., N. Y.  
 N. J.—Smith Cat.; Montreal—Chagnon.  
**conostoma** WILLISTON, Synop. N. A. Dipt., 193, pl. VIII, f. 3.—Conn.  
 OSTEN SACKEN, Cat., 134 (*lincatus* FAB.).—Mass., Ill., Canada.  
 ? WALKER, List, III, 603 (*anausis*).—Martin Falls, Canada.  
 CHAGNON, Ét. Prélím. les Syrph., 57.—Rigaud and Levis, Quebec.  
 N. J.—Smith Cat.; Sea Cliff, L. I.—Banks.  
*Note*.—Walker's name is prior, but in this difficult group there is too much uncertainty to justify changing the name at present.  
**distinctus** WILLISTON, Synop. N. A. Syrph., 192.—Conn., Va., Pa.  
 N. J.—Smith Cat.  
**divisus** LOEW, Cent., IV, 78.—D. C.  
 WILLISTON, Synop. N. A. Syrph., 195, transl. orig. desc.  
 HUNTER, Canad. Ent., XXIX, 138, 140, male.—N. J.  
 N. J.—Smith Cat.; Orlando, Fla.—Johnson.  
**dychei** WILLISTON, in Hunter's article, Canad. Ent., XXIX, 136.—Sitka.  
 Alaska—Coquillett; N. M.—Coquillett.  
**flavifacies** BIGOT, Annales, 1883, 344.—Md.  
 WILLISTON, Synop. N. A. Syrph., 197, quotes desc.  
 HUNTER, Canad. Ent., XXIX, 139, quotes part of desc.  
**formalis** WALKER, List, III, 603.—Mex.  
**frater** WALKER, List, III, 613 (*Eristalis*).—Martin Falls, Canada.  
 OSTEN SACKEN, Cat., 250, note on type.  
**glacialis** LOEW, Stett. Ent. Zeit., 1843, 120.—Labrador.  
 WILLISTON, Synop. N. A. Syrph., 184, transl. orig. desc.

- grœnlandicus** O. FABRICIUS, Fauna Grœn., 208 (*Tabanus*).—Greenland.  
ZETTERSTEDT, Ins. Lapp., 595 (*arcticus*); Dipt. Scand., II, 678 (id.).—Europe.
- STÆGER, Kroyer's Tidskr., N. R., I, 359 (*arcticus*), oc. in Greenland.  
LOEW, Stett. Ent. Zeit., VI, 119.  
CURTIS, Ins. of Ross' Exped., LXXVII (*bilincata*). [Schïödt.]  
? WALKER, List, III, 607 (*latro*).—Martin Falls and Nova Scotia. [O. S., with a doubt.]  
WILLISTON, Synop. N. A. Syrph., 185.—Greenland, Lapland.  
LUNDBECK, Ent. Unters. i West-Grœn., Heft VII, pl. VII, f. 17; Dipt. Grœn., I, 304, bibl., etc.—Greenland.
- hamatus** LOEW, Cent., IV, 79.—Huds. B. Terr.  
WILLISTON, Synop. N. A. Syrph., 195, transl. orig. desc.  
N. J.—Smith Cat.
- hybridus** LOEW, Stett. Ent. Zeit., VII, 141.—Europe.  
SCHINER, Fauna Austr., I, 339.  
MACQUART, Dipt. Exot., Suppl. II, 60 (*novæ-scotiæ*).—Nova Scotia. [Verrall, from type.]  
WILLISTON, Synop. N. A. Syrph., 197, quotes Macq.  
VERRALL, Brit. Flies, VIII, 529, full discussion.—England.
- integer** LOEW, Cent., IV, 76.—N. Y.  
WILLISTON, Synop. N. A. Syrph., 195, transl. orig. desc.  
HUNTER, Canad. Ent., XXIX, 139.—N. J.  
N. J.—Smith Cat.
- lætus** LOEW, Cent., IV, 77.—N. Y., Wis.  
WILLISTON, Synop. N. A. Syrph., 189, pl. VIII, f. 6.—Conn., N. Y.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 51 (*aurcopilis*).—Constantine, Mich.  
HUNTER, Canad. Ent., XXIX, 139, syn.
- latifrons** LOEW, Cent., IV, 73.—Nebr.  
OSTEN SACKEN, West. Dipt., 337, notes.—Sonoma Co., Cal.; Red R. of the North.  
WILLISTON, Synop. N. A. Syrph., 188.—Mass. to Cal. and Wash.  
WILLISTON, Biologia, Dipt., III, 68, oc. in Guerrero, Mex.  
LINTNER, 7th N. Y. Rept., 228, 234, life hist., bibl., etc.—N. Y.; this is the *H. similis* of the 2d Rept.  
HUNTER, Canad. Ent., XXIX, 138, oc. at Cook's Inlet, Alaska.  
CHAGNON, Ét. Prélim. les Syrph., 59.—Montreal.  
N. J.—Smith Cat.
- latitarsis** HUNTER, Canad. Ent., XXIX, 134.—Minn.
- lineatus** FABRICIUS; see *conostoma* for the species thus identified by Osten Sacken.
- lunulatus** MEIGEN, Syst. Besch., III, 370.—Europe.  
SCHINER, Fauna Austr., I, 340.  
COQUILLET, Proc. Wash. Acad. Sci., II, 436, oc. in N. A.—Alaska.  
VERRALL, Brit. Flies, VIII, 540, fig.
- mexicanus** MACQUART, see *Asemosyrphus*.
- modestus** WILLISTON, Synop. N. A. Syrph., 192, pl. VIII, f. 4.—Wyo.
- novæ-scotiæ** MACQUART, see *hybridus*.
- obscurus** LOEW, Cent., IV, 74.—Col.  
WILLISTON, Synop. N. A. Syrph., 196, transl. and notes.
- obsoletus** LOEW, Cent., IV, 75.—Fort Resolution, Huds. B. Terr.  
WILLISTON, Synop. N. A. Syrph., 196, transl. orig. desc.

- pilosus** HUNTER, Canad. Ent., XXIX, 137.—Brit. Col.  
**polygrammus** LOEW, see *Asemosyrphus mexicanus*.  
**porcus** WALKER, List, III, 551.—Martin Falls, Canada.  
 OSTEN SACKEN, Cat., 250, note on type.  
 WILLISTON, Synop. N. A. Syrph., 197, quotes both.  
**similis** MACQUART, Dipt. Exot., II, 2, 64.—Ga.  
 WALKER, List, III, 605 and 614 (*fasciatus* and *Eristalis decicus*).—Martin Falls, Canada; Trenton Falls, N. Y.  
 JÄENNICKE, Neue Exot., Dipt., 94 (*susurrans*).—Ill.  
 OSTEN SACKEN, Cat., 134 and 250, note, syn.  
 WILLISTON, Synop. N. A. Syrph., 189, pl. VIII, f. 2.—New England and Canada to Cal.  
 CHAGNON, Ét. Prélim. les Syrph., 58.—Montreal. N. J.—Smith Cat.: Fla.—Johnson.  
**stipatus** WALKER, List, III, 602.—Trenton Falls, N. Y.  
 OSTEN SACKEN, Cat., 250, note; probably same as *conostoma*.  
**trivittatus** FABRICIUS, Syst. Antl., 234 (*Eristalis*).—Europe.  
 MEIGEN, Syst. Besch., III, 373.  
 MACQUART, Hist. Nat. Dipt., I, 510.  
 ZETTERSTEDT, Dipt. Scand., II, 679.  
 LOEW, Stett. Ent. Zeit., VII, 142.  
 SCHINER, Fauna Austr., I, 340.  
 BIGOT, Annales, 1880, 141, oc. in Persia.  
 GIGLIO-TOS, Ditt. del Mess., II, 18, bibl. and oc. in Mexico City.

#### ASEMOSYRPHUS.

- BIGOT, Bull. Soc. Ent. France, 1882, cxxviii; Annales, 1883, 228.  
 GIGLIO-TOS, Ditt. del Mess., II, 18, 1893.  
**bicolor** BIGOT, Bull. Soc. Ent. France, 1882; Annales, 1883, 350.—Mex.  
 GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892 (*impurus* and *olivaccus*); Ditt. del Mess., II, 19.—Mexico, several places.  
**mexicanus** MACQUART, Dipt. Exot., II, 2, 64, pl. XI, f. 2 (*Helophilus*).—Mex.  
 LOEW, Cent., X, 55 (*Helophilus polygrammus*).—Cal. [Will.]  
 OSTEN SACKEN, West. Dipt., 338 (id.), note on male.—Sierra Co., Cal.; Ore.  
 BIGOT, Bull. Soc. Ent. France, 1882 (*oculiferus*, *nigroscutatus*, and *flavo-caudatus*); Annales, 1883, 350, 351 (id.).—Mex. [Will.]  
 WILLISTON, Synop. N. A. Syrph., 186, pl. VIII, f. 7 (*Helophilus*); Biologia, Dipt., III, 68 (id.).—Wash., Cal.; Mexico, several places.  
 HUNTER, Canad. Ent., XXIX, 137 (id.), oc. in S. D.  
 GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892 (*griseus*); Ditt. del Mess., II, 20, syn., etc.—Mexico, various places.

#### MALLOTA.

- MEIGEN, Syst. Besch., III, 337, 1822.  
 MACQUART, Dipt. Exot., II, 2, 67, 1842 (*Imatisma*).  
 SCHINER, Fauna Austr., I, 342, 1862.  
 WILLISTON, Synop. N. A. Syrph., 201, def. and table of species, 1886.  
 VERRALL, Brit. Flies, VIII, 551, 1901.  
 CHAGNON, Ét. Prélim. les Syrph., 55, 1901.  
**albipilis** SNOW, Kans. Univ. Quart., III, 244.—N. M.  
**bipartita** WALKER, List, III, 599 (*Merodon*).—Ga.



OSTEN SACKEN, Cat., 250, note on types.

WILLISTON, Synop. N. A. Syrph., 205, quotes desc.

**cimbiciformis** FALLÉN, Syrphici, 27 (*Syrphus*).—Europe.

MEIGEN, Syst. Besch., III, 385 (*Eristalis*).

MACQUART, Dipt. Exot., II, 2, 68, pl. XII, f. 2 (*Imatisma posticata*, female).—Carolina, Philadelphia.

ZETTERSTEDT, Dipt. Scand., II, 663; XII, 4652.

WALKER, List, III, 600 (*Merodon bautias*).—Ga.

LOEW, Neue Beitr., IV, 17, 43 (*crystaloides*); Silliman's Jour., oc. in N. A.

RONDANI, Dipt. Ital. Prod., II, 34 (*Zetterstedtia*).

SCHINER, Verh. Zool.-Bot. Ges., VII, 402 (*crystaloides*); Fauna Austr., I, 343 (id.).

OSTEN SACKEN, Cat., 250, note on type of *bautias*.

LINTNER, 1st N. Y. Rept., 211 (*dentipes* WILL.).

KARSCH, Berl. Ent. Zeitsch., XXVII, 172, 1883 (*bautias* and *atrox*).

WILLISTON, Berl. Ent. Zeitsch., XXVII, 171, 1883; Synop. N. A. Syrph., 202, pl. VIII, f. 11 and pl. IX, f. 8.—Canada and New Hampshire to Ga.

HUNTER, Canad. Ent., XXVIII, 99.—Nebr.; *sackeni* is quite likely a syn.

VERRALL, Brit. Flies, VIII, 552, fig.

CHAGNON, Ét. Prél. les Syrph., 56.—Montreal.

Inverness, Fla.—Johnson; N. J.—Smith Cat.; Sea Cliff, L. I.—Banks; Axton, N. Y.—M. and H.

? **championi** WILLISTON, Biologia, Dipt., III, 69.—Guerrero, Mex. Query by Will.

**facialis** HUNTER, Canad. Ent., XXVIII, 100.—Nebr.

**illinoisensis** ROBERTSON, Canad. Ent., XXXIII, 284.—Carlinville, Ill.

**margarita** WILLISTON, Biologia, Dipt., III, 70, pl. II, f. 7.—Guerrero, Mex.

**posticata** FABRICIUS, Syst. Antl., 237 (*Eristalis*).—Carolina.

SAY, Jour. Acad. Sci. Phil., VI, 163 (*Milesia bardus*); Compl. Works, II, 357 (id.).—Ind.; the female here referred to belongs in *cimbiciformis*.

WIEDEMANN, Auss. Zweifl., II, 165, 194 (*Eristalis coactus* and *posticatus*).—No. loc.; Carolina.

MACQUART, Dipt. Exot., II, 2, 68 (*Imatisma posticata*; male only—the female is *cimbiciformis*).—Carolina, Philadelphia.

WALKER, List, III, 600 (*Merodon balanus*).—N. Y. [O. S.]

PACKARD, Guide to Study of Ins., 399, f. 319 (*Merodon bardus*); Amer. Nat., II, Jan., 1869, 593 (id.).

GLOVER, MS. Notes, Dipt., 1874, 32, pl. VIII, f. 30 (*Merodon bardus*).

LINTNER, 1st N. Y. Report, 211, life hist., figs., etc.; the rat-tailed larvæ were found in decaying trees.—N. Y.

WILLISTON, Berl. Ent. Zeitsch., XXVII, 170, syn.; Synop. N. A. Syrph., 201, pl. VIII, f. 13.—New Eng., Canada, N. Y., Kans.

BIGOT, Annales, 1883, 227, notes.

VERRALL, Brit. Flies, VIII, 554, notes; does not occur in Europe.

CHAGNON, Ét. Prél. les Syrph., 55.—Montreal.

N. J.—Smith Cat.; White Mts., N. H.—Slosson; Sea Cliff, N. Y.—Banks; Axton, N. Y.—M. and H.

**sackeni** WILLISTON, Proc. Amer. Phil. Soc., XX, 324; Synop. N. A. Syrph., 204, pl. VIII, f. 14; Biologia, Dipt., III, 70, oc.—Wash., Tex.; Guanajuato, Mex.

OSTEN SACKEN, West. Dipt., 338 (*posticata*).—San Rafael, Cal.

This may still be only a synonym of *posticata*—J. M. A.

**smithi** WILLISTON, Biologia, Dipt., III, 70, pl. II, f. 8.—Guerrero, Mex.

## MERODON.

- MEIGEN, Illig. Mag., II, 274, 1803; Syst. Besch., III, 349, 1822.  
 SCHINER, Fauna Austr., I, 343, 1862.  
 VERRALL, Brit. Flies, VIII, 555, 1901.  
**equestris** FABRICIUS, Ent. Syst., IV, 292 (*Syrphus equestris* and *flavicans*); Syst. Antl., 196, 239, 240 (*Merodon equestris*, *Eristalis narcissi* and *ferruginus*).—Europe; larvæ in bulbs of *Narcissus*, etc.  
 MEIGEN, Syst. Besch., III, 352-354 (*equestris*, *transversalis*, *constans*, and *nobilis*).  
 RONDANI, Nuovi ann. di Bologna, II, 4, 254 (*tuberculatus* and *bulborum*).  
 SCHINER, Fauna Austr., I, 344.  
 OSTEN SACKEN, Cat., 135, note on occasional importation of larvæ in bulbs from Europe.  
 VERRALL, Brit. Flies, VIII, 556, figs.  
 Montreal—Johnson in litt.

## TRIODONTA.

- WILLISTON, Bull. Brooklyn Ent. Soc., VII, 136, 1885; Synop. N. A. Syrph., 205, 1886.  
 MACQUART, Dipt. Exot., Suppl. IV, 144, 1850 (*Polydonta*, preoc.).  
**curvipes** WIEDEMANN, Auss. Zweifl., II, 149 (*Merodon*).—N., A.  
 MACQUART, Dipt. Exot., Suppl. I, 132, pl. II, f. 7 (*Helophilus albiceps*), female; Suppl. IV, 144, pl. XIII, f. 6 (*Polydonta bicolor*), male.—Both Nova Scotia.  
 WALKER, List, III, 599 (*Merodon morosus*).—Nova Scotia.  
 OSTEN SACKEN, West. Dipt., 338, notes (*Polydonta*): Cat., 135, syn.  
 WILLISTON, Synop. N. A. Syrph., 206, pl. IX, f. 1.—New Eng., Cal., Col. N. J.—Smith Cat.; Sea Cliff, L. I.—Banks.

## TEUCHOCNEMIS.

- OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., III, 58, 1876; Cat., 250, 1878, desc. quoted.  
 WILLISTON, Synop. N. A. Syrph., 199, 1886.  
 CHAGNON, Ét. Prélim. les Syrph., 54, 1901.  
**bacuntius** WALKER, List, III, 563 (*Milesia*).—Ga.  
 OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., III, 58; Cat., 250, notes on genus.  
 WILLISTON, Synop. N. A. Syrph., 200, pl. VII, f. 6.—Ga., Tex.  
 N. J.—Smith Cat.  
**lituratus** LOEW, Cent., IV, 81 (*Pterallastes*).—Pa.  
 OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., III, 58; Cat., 250, notes.  
 WILLISTON, Synop. N. A. Syrph., 200, pl. VIII, f. 12.—Pa., Conn., Mo.  
 CHAGNON, Ét. Prélim. les Syrph., 54.—Rigaud, Quebec.

## PTERALLASTES.

- LOEW, Cent., IV, 80, 1863.  
 WILLISTON, Synop. N. A. Syrph., 198, 1886.  
**perfidiosus** HUNTER, Canad. Ent., XXIX, 139, fig.—Br. Col.  
**thoracicus** LOEW, Cent., IV, 80.—Pa.  
 WILLISTON, Synop. N. A. Syrph., 198, pl. VIII, f. 9.—Pa.  
 N. J.—Smith Cat.; Sea Cliff, L. I.—Banks.

## SENOGASTER.

MACQUART, Hist. Nat. Dipt., I, 519, 1834; Dipt. Exot., II, 2, 72, 1842.

BIGOT, Bull. Soc. Ent. France, 1878, 131 (*Acrochordonodes*).

WILLISTON, Synop. N. A. Syrph., 238, 1886.

**comstocki** WILLISTON, Proc. Amer. Phil. Soc., XX, 326; Synop. N. A. Syrph., 239, pl. XI, f. 1.—N. Y.

## SYRITTA.

ST. FARGEAU et SERVILLE, Encycl. Méth., X, 808, 1825.

MACQUART, Hist. Nat. Dipt., I, 525, 1834.

MEIGEN, Syst. Besch., VII, 113, 1838.

ZETTERSTEDT, Ins. Lapp., 584, 1838 (*Coprina*); Dipt. Scand., II, 881, 1843.

WALKER, Ins. Brit., Dipt., I, 253, 1851.

RONDANI, Arch. Zool., III, 9 (*Planca*).

SCHINER, Fauna Austr., I, 357, 1862.

WILLISTON, Synop. N. A. Syrph., 239, 1886.

VERRALL, Brit. Flies, VIII, 611, 1901.

CHAGNON, Ét. Prélim. les Syrph., 61, 1901.

**pipiens** LINNÉ, Syst. Nat., 10th ed., 594 (*Musca*); Fauna Suec., 2d ed., 450 (id.).—Europe.

DEGEER, Ins., VI, 120, pl. VII, f. 8, 9 (id.).

SCOPOLI, Ent. Carniol., No. 969 (*Conops*).

FABRICIUS, Spec. Ins., II, 434 (*Syrphus*); Ent. Syst., IV, 310 (id.); Syst. Antl., 194 (*Milcsia*).—Europe.

LATREILLE, Consid. Génér., 443 (id.).

FALLÉN, Syrphici, 12 (id.).

MEIGEN, Syst. Besch., III, 213 (*Xylota*); VII, 113, pl. LXVII, f. 21.

SAY, Amer. Ent., I, 16, pl. VIII, f. 3 (*Xylota proxima*); Compl. Works, I, 16 (id.).—Phil., Va.

WIEDEMANN, Auss. Zweifl., II, 102 (id.).

ZETTERSTEDT, Ins. Lapp., 584 (*Coprina*); Dipt. Scand., II, 881; XII, 4675.

SCHINER, Verh. Zool.-Bot. Ges., VII, 424; Fauna Austr., I, 358.

WILLISTON, Synop. N. A. Syrph., 240.—U. S.; common everywhere.

HOWARD, Proc. Wash. Acad. Sci., II, 597, notes; said to have been reared from horse and cow dung.

VERRALL, Brit. Flies, VIII, 612, figs.

CHAGNON, Ét. Prélim. les Syrph., 61.—Montreal.

"Everywhere and at all times abundant from spring to autumn"—Will.

**vagans** WIEDEMANN, Auss. Zweifl., II, 101.—Brazil.

RONDANI, Archiv. Zool., III, 9 (*Planca*).

SCHINER, Novara, 367 (*americana*).—S. A.

BIGOT, Annales, 1883, 539 (*mericana*).—Mex.

WILLISTON, Trans. Amer. Ent. Soc., XV, 285 (*americana*); Biologia, Dipt., III, 73.—Brazil; Vera Cruz and Costa Rica.

## XYLOTA.

MEIGEN, Syst. Besch., III, 211, 1822.

SCHINER, Fauna Austr., I, 354, 1862.

WILLISTON, Synop. N. A. Syrph., 224, 1886, def. and table of species; Biologia, Dipt., III, 71, 1891, table of Central Amer. species.

VERRALL, Brit. Flies, VIII, 596, 1901.

CHAGNON, Ét. Prélim. les Syrph., 62, 1901.

**æpalius** WALKER, see *Brachypalpus sorosis*.

- analis** WILLISTON, Synop. N. A. Syrph., 226.—Cal., N. M.  
HUNTER, Canad. Ent., xxviii, 100, notes on antennæ, etc.—Nebr.  
N. J.—Smith Cat.
- angustiventris** LOEW, Cent., vi, 58.—Ill.  
WILLISTON, Synop. N. A. Syrph., 231 and 234 (*angustiventris* and *elongata*).—N. H., N. Y., Pa. [Will.]  
HUNTER, Canad. Ent., xxviii, 101, notes.—Nebr.  
CHAGNON, Ét. Prélim. les Syrph., 64.—St. Hilaire, Quebec.  
N. J.—Smith Cat.
- annulifera** BIGOT, see *ejuncida*.
- anthreas** WALKER, List, iii, 556.—Trenton Falls, N. Y.  
WILLISTON, Synop. N. A. Syrph., 235.—N. H.  
N. J.—Smith Cat.; Montreal—Chagnon.
- arcuata** SAY, Jour. Acad. Sci. Phil., vi, 162; Compl. Works, ii, 357.—Mex.
- barbata** LOEW, Cent., v, 40.—Sitka.  
WILLISTON, Synop. N. A. Syrph., 233.—Ore., Wash., Cal.  
COQUILLET, Proc. Wash. Acad. Sci., ii, 437, oc. in Alaska.  
HUNTER, Canad. Ent., xxix, 101, notes.—Cal.
- bicolor** LOEW, Cent., v, 39.—Ill.  
WILLISTON, Synop. N. A. Syrph., 229.—Pa.  
N. J.—Smith Cat.
- brachygaster** WILLISTON, Biologia, Dipt., iii, 72.—Guerrero, Mex.
- chalybea** WIEDEMANN, Auss. Zweifl., ii, 98.—No locality.  
WILLISTON, Synop. N. A. Syrph., 233.—Pa., Va., Ill.  
TOWNSEND, Trans. Amer. Ent. Soc., xxii, 53, oc. in D. C.  
N. J.—Smith Cat.
- coloradensis** BIGOT, Annales, 1884, 544.—Col.  
WILLISTON, Synop. N. A. Syrph., 236, quotes desc.
- communis** WALKER, List, iii, 557.—Martin Falls, Canada.
- curvipes** LOEW, Neue Beiträge, ii, 19.—Central Europe.  
SCHINER, Fauna Austr., i, 355.  
OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., iii, 70; Cat., 252.  
? BIGOT, Annales, 1884, 546 (*satanica*).—Cal. [Will., with a query.]  
WILLISTON, Synop. N. A. Syrph., 232.—N. H., N. Y., Minn., Cal.  
CHAGNON, Ét. Prélim. les Syrph., 63.—Ottawa, Canada.  
White Mts., N. H.—Slosson; Montreal—Chagnon; Axton, N. Y.—M. and H.
- ejuncida** SAY, Amer. Entomol., i, pl. viii; Compl. Works, i, 15.—E. Fla. and Philadelphia.  
WIEDEMANN, Auss. Zweifl., ii, 100.  
OSTEN SACKEN, Cat., 252, note.  
BIGOT, Annales, 1884, 545 (*annulifera*).—N. A. [Will.]  
WILLISTON, Synop. N. A. Syrph., 229, pl. xi, f. 8.—U. S. generally.  
HUNTER, Canad. Ent., xxix, 143, oc. at Cook's Inlet, Alaska.  
CHAGNON, Ét. Prélim. les Syrph., 64.—St. Jean and St. Hilaire, Quebec.  
N. J.—Smith Cat.; Fla., Johnson; Axton, N. Y.—M. and H.  
See *quadrinaculata*.
- elongata** WILLISTON, see *angustiventris*.
- flavifrons** WALKER, List, iii, 537.—Martin Falls, Canada.  
WILLISTON, Synop. N. A. Syrph., 234, note.
- flavitibia** BIGOT, Annales, 1884, 546.—Cal.  
WILLISTON, Proc. Amer. Phil. Soc., xx, 327 (*Xylota*, n. sp.); Synopsis N. A. Syrph., 228, pl. xi, f. 6.—Col.

HUNTER, Canad. Ent., xxviii, 101, oc. in Nebr.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 53, oc. in D. C.

Beulah, N. M.—Skinner.

**fraudulosa** LOEW, Cent., v, 41.—Ill., Wis.

WILLISTON, Synop. N. A. Syrph., 230.—N. Y., N. H., Wash.

HUNTER, Canad. Ent., xxviii, 101, oc. in Nebr.

White Mts., N. H.—O. S. Cat.

**libo** WALKER, List, iii, 556.—Nova Scotia.

**marginalis** WILLISTON, Synop. N. A. Syrph., 226.—White Mts., N. H.; may not be distinct from *libo*.

Axton, N. Y.—M. and H.

**metallica** WIEDEMANN, Auss. Zweifl., ii, 102.—Ga.

WILLISTON, Synop. N. A. Syrph., 235, orig. desc., transl., and note.

**metallifera** BIGOT, Annales, 1884, 545.—Col.

WILLISTON, Synop. N. A. Syrph., 236, quotes desc.

**nemorum** FABRICIUS, Syst. Antl., 192 (*Milesia*).—Europe.

FALLÉN, Syrphici, ii (id.).

MEIGEN, Syst. Besch., iii, 219.

MACQUART, Hist. Nat. Dipt., i, 521.

ZETTERSTEDT, Dipt. Scand., ii, 871.

SCHINER, Fauna Austr., i, 356.

VAN DER WULP, Tijdschr. v. Ent., xxvi, 8, oc. in N. A.—Quebec.

WILLISTON, Synop. N. A. Syrph., 231, notes.

VERRALL, Brit. Flies, viii, 604, 676, oc. in America requires investigation.

Montreal—Chagnon.

**notha** WILLISTON, Synop. N. A. Syrph., 228.—Col.

Beulah, N. M.—Skinner.

**obscura** LOEW, Cent., vi, 55.—Red R. of the North.

WILLISTON, Synop. N. A. Syrph., 233.—Ore., Cal.

HUNTER, Canad. Ent., xxviii, 101, oc. in Nebr.

**pachymera** LOEW, Cent., vi, 54.—Cuba.

WILLISTON, Synop. N. A. Syrph., 237, transl. orig. desc.

Porto Rico—Roeder.

**pauzilla** WILLISTON, Biologia, Dipt., iii, 71, pl. ii, f. 9.—Guerrero, Mex.

**pigra** FABRICIUS, Ent. Syst., iv, 295 (*Syrphus*); Syst. Antl., 192, 193 (*Milesia pigra* and *hamatodes*).—Germany; Carolina.

LATREILLE, Gen. Crust., iv, 331 (*Milesia*).

MEIGEN, Syst. Besch., iii, 221.

SAY, Amer. Ent., i, pl. viii (*hamatodes*); Compl. Works, i, 16 (id.).—E. Fla.

WIEDEMANN, Auss. Zweifl., ii, 99 (id.).

MACQUART, Dipt. Exot., ii, 2, 73, pl. xiii, f. 4 (id.).—N. A.

ZETTERSTEDT, Dipt. Scand., ii, 878; viii, 3192.

WAHLBERG, Acta Holmiæ, 1838, 15 (*crassipes*).

LOEW, in Silliman's Jour., oc. in N. A.

WILLISTON, Synop. N. A. Syrph., 227, pl. xi, f. 7.—Atlantic and Pacific States.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 53, note.—D. C.

CHAGNON, Ét. Prélim. les Syrph., 63.—Ottawa and Montreal.

DÆCKE, Ent. News, xiv, 275, reared from larvæ under bark of a pine tree.

Fla.—Johnson; N. J.—Smith Cat.; Beulah, N. M.—Skinner.

See *rubiginigaster*.

*pretiosa* LOEW, Wien. Ent. Monatsch., i, 39; Cent., vi, 53.—Cuba.

WILLISTON, Synop. N. A. Syrph., 237, quotes desc.

*quadrifasciata* LOEW, Cent., vi, 56.—Ill.

WILLISTON, Synop. N. A. Syrph., 229, probably not distinct from *ejuncida*.  
*rubiginigaster* BIGOT, Annales, 1884, 544.—Col.

WILLISTON, Synop. N. A. Syrph., 227, probably teneral form of *pigra*.

*rufipes* WILLISTON, Biologia, Dipt., III, 71.—Guerrero, Mex.

*satanica* BIGOT, see *curvipes*.

*stenogaster* WILLISTON, Biologia, Dipt., III, 72.—Guerrero, Mex.; Guatemala.

*subcostalis* WALKER, Trans. Ent. Soc., n. ser., v, 291.—Mex.

*subfasciata* LOEW, Cent., vi, 57.—Red R. of the North.

WILLISTON, Synop. N. A. Syrph., 230, transl. orig. desc.

? *tuberans* WILLISTON, Synop. N. A. Syrph., 225.—Texas. Query by Will.

*vecors* OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., III, 69; Cat., 252.—White Mts., N. H.

WILLISTON, Synop. N. A. Syrph., 232, quotes Osten Sacken.

CHAGNON, Ét. Prélim. les Syrph., 63.—Montreal.

#### CERIOGASTER.

WILLISTON, Trans. Amer. Ent. Soc., xv, 285, 1888; Biologia, Dipt., III, 73, 1891.

*auricaudata* WILLISTON, Biologia, Dipt., III, 73, pl. II, f. 10.—Guerrero, Mex.

#### CHRYSOCHLAMYS.

RONDANI, in Walker's Ins. Brit., Dipt., i, 279, 1851, change of name.

RONDANI, Ann. Sci. Nat. Bologna, 1844 (*Ferdinandca*); Dipt. Ital. Prod., II, 145, 1857.

SCHINER, Fauna Austr., i, 363, 1862.

WILLISTON, Synop. N. A. Syrph., 240, def. and table of species, 1886.

VERRALL, Brit. Flies, VIII, 623, 1901.

*buccata* LOEW, Cent., iv, 72.—Va.

WILLISTON, Synop. N. A. Syrph., 242, transl. orig. desc.

*cræsus* OSTEN SACKEN, West. Dipt., 341.—Utah, Salt Lake City.

WILLISTON, Synop. N. A. Syrph., 241.—Cal., Wash., N. M.

SNOW, Kans. Univ. Quart., III, 245.—Col., N. M.

TOWNSEND, Psyche, March, 1897, oc.; Annals and Mag. Nat. Hist., XIX, 142, oc.—Gila R., N. M.; Rio Ruidosa, N. M.

*dives* OSTEN SACKEN, West. Dipt., 340.—Ky.

WILLISTON, Synop. N. A. Syrph., 241, pl. XI, f. 5.—Ill., Mo., Canada.

N. J.—Smith Cat.

*nigripes* OSTEN SACKEN, West. Dipt., 341.—Mass.

WILLISTON, Synop. N. A. Syrph., 242, quotes desc.

? White Mts., N. H.—Slosson (*nigriceps*, probably an error).

#### BRACHYPALPUS.

MACQUART, Hist. Nat. Dipt., i, 523, 1834.

SCHINER, Fauna Austr., i, 353, 1862.

WILLISTON, Synop. N. A. Syrph., 221, def. and table of species, 1886.

VERRALL, Brit. Flies, VIII, 592, 1901.

CHAGNON, Ét. Prélim. les Syrph., 64, 1901.

*amithaon* WALKER, List, III, 567 (*Milesia*).—N. C.

OSTEN SACKEN, Cat., 251, note on type.

WILLISTON, Synop. N. A. Syrph., 297, quotes desc.; note, not seen.



- frontosus** LOEW, Cent., x, 50.—D. C.  
 ? WALKER, List, III, 558 (*Xylota oarus*).—Trenton Falls, N. Y. [O. S., with a doubt.]  
 WILLISTON, Synop. N. A. Syrph., 221, pl. x, f. 8.—D. C., Pa.  
 CHAGNON, Ét. Prélim. les Syrph., 65.—Rigaud and Montreal, Quebec.  
 N. J.—Smith Cat.
- inarmatus** HUNTER, Canad. Ent., XXIX, 142.—Vollmer, Idaho.
- morrisoni** BIGOT, see *Pocota grandis*.
- parvus** WILLISTON, Synop. N. A. Syrph., 222.—Col.
- pulcher** WILLISTON, Canad. Ent., XIV, 79; Synop. N. A. Syrph., 223, pl. x, f. 9.  
 —Ore., Wash.  
 BIGOT, Annales, 1883, 352 (*Calliprobola arca*).—Wash. [Will.]
- rileyi** WILLISTON, Synop. N. A. Syrph., 222.—N. C.  
 N. J.—Smith Cat.
- sorosis** WILLISTON, Synop. N. A. Syrph., 223, 297.—Ga.  
 ? WALKER, List, III, 557 (*Xylota apalius*).—Ga. [Will., with a doubt.]  
 N. J.—Smith Cat.
- verbosus** HARRIS, of WALKER, see *Criorhina*.

## POCOTA.

- ST. FARGEAU et SERVILLE, Encycl. Méth., x, 518, 1825.  
 SCHINER, Verh. Zool.-Bot. Ges., VII, 440; Fauna Austr., I, 351 (both *Plocota*).  
 EGGER, Verh. Zool.-Bot. Ges., VIII, 711 (*Dasymyia*).  
 WILLISTON, Canad. Ent., 1882, 78 (*Hadromyia*); Synop. N. A. Syrph., 220, 1886.  
 VERRALL, Brit. Flies, VIII, 586, 1901.
- bomboides** HUNTER, Canad. Ent., XXIX, 141.—Cal.
- grandis** WILLISTON, Canad. Ent., XIV, 79, female (*Hadromyia*); Synop. N. A. Syrph., 221, pl. x, f. 7.—Wash.  
 BIGOT, Annales, 1883, 355 (*Brachypalpus morrisoni*).—Wash. [Will.]  
 RILEY and HOWARD, Ins. Life, IV, 86, notes on the male.—Vancouver Id.

## CRIOPRORA.

- OSTEN SACKEN, Cat., 251, 1878.  
 BIGOT, Annales, 1883, 356 (*Romaleosyrphus*).  
 WILLISTON, Synop. N. A. Syrph., 217, 1886, def. and table of species; Biologia, Dipt., III, 72, 1891, syn.
- alopex** OSTEN SACKEN, West. Dipt., 338 (*Pocota*); Cat., 251, note.—Marin Co., Cal.
- arctophiloides** GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 123, 1892; Ditt. del Mess., II, 25, pl. II, f. 2.—Angang, Mex.
- cyanella** OSTEN SACKEN, West. Dipt., 339 (*Pocota*); Cat., 251, notes.—Santa Barbara, Cal.  
 WILLISTON, Synop. N. A. Syrph., 218, pl. x, f. 6.—Cal.
- cyanogaster** LOEW, Cent., x, 51 (*Brachypalpus*).—Pa.  
 WILLISTON, Synop. N. A. Syrph., 218.—Col.  
 Montreal—Chagnon.
- femorata** WILLISTON, Proc. Amer. Phil. Soc., XX, 329; Synop. N. A. Syrph., 219, pl. x, f. 5.—Ore., Wash.
- villosa** BIGOT, Bull. Soc. Ent. France, 1882 (*Romaleosyrphus*); Annales, 1883, 356 (id.).—Mex.  
 WILLISTON, Biologia, Dipt., III, 72, oc. in Mex., and gen. ref.

## MERAPIOIDUS.

BIGOT, Bull. Soc. Ent. France, 1879, 64.

WILLISTON, Synop. N. A. Syrph., 243, 1886.

**villosus** BIGOT, Bull. Soc. Ent. France, 1879, 64.—N. A.

WILLISTON, Synop. N. A. Syrph., 243, pl. XI, f. 2.—Ga.

## CRIORHINA.

MEIGEN, Syst. Besch., III, 236, 1822, subg. of *Milesia*.

ST. FARGEAU et SERVILLE, Encycl. Méth., x, 518, 1825 (subg. of *Milesia*).

MACQUART, Hist. Nat. Dipt., I, 497, 1834; Dipt. Exot., Suppl., II, 57, 1847 (*Somula*).

SCHINER, Fauna Austr., I, 349, 1862.

PHILIPPI, Verh. Zool.-Bot. Ges., xv, 736, 1865 (*Eriophora*).

WILLISTON, Canad. Ent., XIV, 77, 1882 (*Brachymyia*).

BIGOT, Bull. Soc. Ent. France, 1882, No. 6 (*Eurhinomallota*); Annales, 1883, 225, note.

WILLISTON, Synop. N. A. Syrph., 209, 1886, distinguishes three subgenera—*Criorhina*, *Somula*, and *Cynorhina* (the last new).

VERRALL, Brit. Flies, VIII, 576, 1901, makes *Cynorhina* a separate genus.

**analis** MACQUART, Dipt. Exot., II, 2, 79, pl. xv, f. 2 (*Milesia*).—N. A.

WILLISTON, Proc. Amer. Phil. Soc., xx, 330, notes; Synop. N. A. Syrph., 214, pl. IX, f. 3.—Eastern States.

N. J.—Smith Cat.; Montreal—Chagnon; Sea Cliff, L. I.—Banks.

**armillata** OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., III, 68; Cat., 251.—Quebec.

WILLISTON, Synop. N. A. Syrph., 213, quotes desc.

COQUILLET, Proc. Wash. Acad. Sci., II, 436, oc. in Alaska, N. H., and Mont.

White Mts., N. H.—Slosson.

**badia** WALKER, List, III, 559 (*Xylota*).—N. Y.

OSTEN SACKEN, Cat., 253, probably is identical with *intersistens*.

**coquilletti** WILLISTON, Ent. News, III, 145.—S. Cal.

**decora** MACQUART, Dipt. Exot., Suppl. III, 57, pl. II, f. II (*Somula*).—Philadelphia.

WILLISTON, Synop. N. A. Syrph., 216, pl. x, f. 3.—Conn., Mass., Pa.

VAN DER WULP, Tijdschr. v. Ent., xxvii, 2, notes.—Conn.

CHAGNON, Ét. Prélim. les Syrph., 66.—Montreal.

N. J.—Smith Cat.; Sea Cliff, L. I.—Banks.

**humeralis** WILLISTON, Proc. Amer. Phil. Soc., xx, 330; Synop. N. A. Syrph., 214, pl. IX, f. 4.—Wash.; Cal.

**intersistens** WALKER, List, III, 615 (*Eristalis*).—Trenton Falls, N. Y.

WILLISTON, Synop. N. A. Syrph., 212.—N. H., Pa., N. J., Minn.

CHAGNON, Ét. Prélim. les Syrph., 65.—Montreal.

N. J.—Smith Cat.; Axton, N. Y.—M. and H.

See *badia*.

**johnsoni** COQUILLET, Ent. News, v, 125.—Wash.

**kincaidi** COQUILLET, Proc. U. S. N. M., xxiii, 611.—Seattle.

**lupina** WILLISTON, Canad. Ent., XIV, 77 (*Brachymyia*); Proc. Amer. Phil. Soc., xx, 330 (*Eurhinomallota*); Synop. N. A. Syrph., 211, pl. IX, f. 6.—Cal.

**metallica** BIGOT, Bull. Soc. Ent. France, 1882, 78 (*Eurhinomallota*).—Mex.

WILLISTON, Synop. N. A. Syrph., 211, probably same as *lupina*.

**nigripes** WILLISTON, Canad. Ent., XIV, 78 (*Brachymyia*); Proc. Amer. Phil. Soc.,

xx, 330 (*Eurhinomallota*); Synop. N. A. Syrph., 210, pl. x, f. 1.—Cal.

**notata** WIEDEMANN, Auss. Zweifl., II, 109 (*Milesia*).—Savannah, Ga.

- MACQUART, Dipt. Exot., II, 2, 80, pl. xv, f. 5 (id.).—Carolina and Georgia.
- WALKER, List, III, 578 (*Syrphus profusus*).—Ga. [O. S.]
- ? BIGOT, Annales, 1883, 354 (*Calliprobola pictipes*).—Carolina. [Will. with a doubt.]
- WILLISTON, Synop. N. A. Syrph., 215, transl. orig. desc.; see also p. 296.
- scitula** WILLISTON, Proc. Amer. Phil. Soc., XX, 331; Synop. N. A. Syrph., 215.—Wash.
- COQUILLET, Proc. Wash. Acad. Sci., II, 436, oc. at Fox Point, Alaska, and in Oregon.
- tricolor** COQUILLET, Proc. Wash. Acad. Sci., II, 436.—Sitka.
- umbratilis** WILLISTON, Synop. N. A. Syrph., 212, pl. IX, f. 7.—Conn.
- SNOW, Kans. Univ. Quart., I, 38, note.—Kans.
- HINE, Ohio Nat., II, 229, oc. in Cincinnati, O., and Nashville, Tenn.
- verbosa** WALKER, List, III, 568 (" *Milesia verbosa* HARRIS, Cat. Ins. Mass.").—N. A.
- OSTEN SACKEN, Cat., 136, ref. to *Brachypalpus*.
- SWEDERUS, Vetensk. Ak. Nya Handl., 1787 (*Musca tomentosa*).—N. A. [O. S.]
- WILLISTON, Synop. N. A. Syrph., 211, pl. x, f. 2.—Mass., Maine.
- HUNTER, Canad. Ent., XXIX, 141.—Minn.
- N. J.—Smith Cat.

## MILESIA.

- LATREILLE, Hist. Nat. Crust. et Ins., XIV, 361, 1804.
- FALLÉN, Syrphici, 7, 1816.
- MEIGEN, Syst. Besch., III, 226, 1822.
- SCHINER, Fauna Austr., I, 366, 1862.
- WILLISTON, Synop. N. A. Syrph., 254, 1886.
- bella** TOWNSEND, Annals and Mag. Nat. Hist., XIX, 142.—Rio Ruidosa, N. M.
- HINE, Canad. Ent., XXXV, 246, notes.—Elden Mt., Ariz.
- ornata** FABRICIUS, see *virginiensis*.
- virginiensis** DRURY, Illust. Exot. Ent., App., II, pl. XXXVII, f. 6 (*Musca*).—Va.
- HAUSMAN, Ent. Bemerk., II, 67 (*Syrphus trifasciatus*). [Wied.]
- FABRICIUS, Syst. Antl., 188 (*ornata*).—Carolina. [Wied.]
- WIEDEMANN, Auss. Zweifl., II, 106 (*ornata*).—N. A.
- WESTWOOD, Drury's Exot. Ent., 2d ed., II, 77 (id.).
- BIGOT, Annales, 1884, 341 (*Sphyvea fulvifrons*).—Ga. [Will.]
- WILLISTON, Synop. N. A. Syrph., 255, pl. XII, f. 2 (*ornata*).—New Eng., Ill., Md.
- N. J.—Smith Cat.; Fla., several places—Johnson.
- profusa** WALKER, List, III, 578 (*Syrphus*).—Ga.
- OSTEN SACKEN, Cat., 124, gen. ref.
- pulchra** WILLISTON, Biología, Dipt., III, 74, pl. II, f. 11.—Guatemala.

## SPILOMYIA.

- MEIGEN, Illig. Mag., II, 273, 1803.
- MACQUART, Hist. Nat. Dipt., I, 491, 1834 (*Mixtemyia*).
- RONDANI, Dipt. Ital. Prod., I, 47, 1856 (*Calliprobola*).
- SCHINER, Fauna Austr., I, 364, 1862.
- WILLISTON, Synop. N. A. Syrph., 244, def. and table of species, 1886.
- CHAGNON, Ét. Prélim. les Syrph., 67, 1901.
- area** BIGOT, see *Brachypalpus pulcher*.
- calorhina** BIGOT, see *Sphecomomyia pattoni*.

- ephippium** OSTEN SACKEN, Bull. Buff. Soc. Nat. Sci., III, 70; Cat., 254 (both *Mixtemyia*).—Mex.  
WILLISTON, Syno. N. A. Syrph., 249, quotes desc.; Biologia, Dipt., III, 74, oc. in Mex.
- fusca** LOEW, Cent., v, 34.—Pa.  
WILLISTON, Synop. N. A. Syrph., 246.—Pa., N. H., Ga., Mass., Canada.  
CHAGNON, Ét. Prélim. les Syrph., 68.—Rigaud and Montreal.  
N. J.—Smith Cat.; Adirondacks—Lintner.
- hamifera** LOEW, Cent., v, 33.—Pa.  
WILLISTON, Synop. N. A. Syrph., 247.—N. H.  
Va., Fla., Ky.—O. S. Cat.: St. Augustine and Inverness, Fla.—Johnson;  
N. J.—Smith Cat.
- interrupta** WILLISTON, Proc. Amer. Phil. Soc., XX, 327; Synop. N. A. Syrph., 246, pl. XII, f. 4.—Wash.
- kahlii** SNOW, Kans. Univ. Quart., III, 245.—N. M., 9,000 ft.
- litorata** WILLISTON, Synop. N. A. Syrph., 245.—N. M.
- longicornis** LOEW, Cent., x, 49.—Mass., Pa., Tex.  
WILLISTON, Synop. N. A. Syrph., 245.—Ill., Pa., D. C., New Eng.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 54, notes.—Mich., Va.  
CHAGNON, Ét. Prélim. les Syrph., 69.—Montreal.  
N. J.—Smith Cat.; Kans., O. S. Cat.
- obscura** COQUILLET, Canad. Ent., 1902, 195.—Sierra Madre in Chihuahua, Mex.
- pallipes** BIGOT, Annales, 1883, 352.—Mex.  
WILLISTON, Biologia, Dipt., III, 74, oc.—Mex.
- pictipes** BIGOT, see *Criorhina notata*.
- pleuralis** WILLISTON, Synop. N. A. Syrph., 247.—Mex.
- quadrifasciata** SAY, Long's Exped. App., 377; Compl. Works, I, 257 (both *Paragus*).—N. W. Terr.  
WIEDEMANN, Auss. Zweifl., II, 91 (*Psarus*).—N. W. Terr.  
MACQUART, Hist. Nat. Dipt., I, 491, pl. XI, f. 8 (*Mixtemyia*).—Pa.  
OSTEN SACKEN, Cat., 139, oc. in Quebec, Mass., Conn., and White Mts., N. H.  
WILLISTON, Synop. N. A. Syrph., 248, pl. XII, f. 3.—N. Y.  
TOWNSEND, Trans. Amer. Ent. Soc., XXII, 54, oc. in Mich.  
HUNTER, Canad. Ent., XXVIII, oc. in Nebr.  
CHAGNON, Ét. Prélim. les Syrph., 67.—Montreal and St. Jean, Quebec.  
Kans.—SNOW.

## SPHECOMYIA.

- LATREILLE, Dict. Class. d'Hist. Nat., xv, 545, 1829.  
GORSKI, Anal. Ent., 1852, I, 70 (*Tyzenhausia*).  
ZETTERSTEDT, Dipt. Scand., XII, 4645, 1855.  
RONDANI, Dipt. Ital. Prod., II, 185, 1857 (*Sphirca*).  
SCHINER, Fauna Austr., I, 367, 1862.  
OSTEN SACKEN, Cat., 254, 1878, historical sketch.  
WILLISTON, Synop. N. A. Syrph., 256, def. and table of species, 1886.  
CHAGNON, Ét. Prélim. les Syrph., 71, 1901.
- brevicornis** OSTEN SACKEN, West. Dipt., 341.—Webber L., Cal.  
WILLISTON, Synop. N. A. Syrph., 258, quotes Osten Sacken.
- fulvifrons** BIGOT, see *Milcsia virginiensis*.
- pattoni** WILLISTON, Proc. Amer. Phil. Soc., XX, 328; Synop. N. A. Syrph., 258, pl. XII, f. 8.—Wash.  
BIGOT, Annales, 1884, 353 (*Caliprobola calorhina*).—Wash. [Will.]

- vittata** WIEDEMANN, *Atiss. Zweifl.*, II, 87 (*Chrysotoxum*); 91 (*Psarus ornatus*).  
—No locality.
- MACQUART, *Hist. Nat. Dipt.*, I, 491 (*Psarus ornatus*); *Dipt. Exot.*, II, 2, 18, pl. III, f. 3, syn. and brief desc.—Ga.
- CUVIER, *Règne Anim.*, XIV, 495.
- GORSKI, *Analecta Ent.*, 1852, 170, pl. I, f. 1 (*Tyzenhausia vespiformis*).—Europe.
- WAHLBERG, *Oefv. Ak. Förh.*, XI, 156 (*Milesia vespiformis*).—Europe.
- ZETTERSTEDT, *Dipt. Scand.*, XII, 4646 (*vespiformis*).
- SCHINER, *Fauna Austr.*, I, 368 (id.).
- ROEDER, *Ent. Nachrichten*, 1879, 96.
- WILLISTON, *Synop. N. A. Syrph.*, 257.—New Eng., So. States, Minn.
- HUNTER, *Canad. Ent.*, XXVIII, 101, oc.—Nebr.
- CHAGNON, *Ét. Prélim. les Syrph.*, 71.—Montreal.
- AXTON, N. Y.—M. and H.; N. J.—Smith Cat.

## TEMNOSTOMA.

- ST. FARGEAU et SERVILLE, *Encycl. Méth.*, X, 518, 1825.
- WILLISTON, *Synop. N. A. Syrph.*, 249, 1886; ref. and table of species.
- VERRALL, *Brit. Flies*, VIII, 628, 1901.
- CHAGNON, *Ét. Prélim. les Syrph.*, 69, 1901.
- æqualis** LOEW, *Cent.*, V, 36.—English R., Huds. B. Terr.
- WILLISTON, *Synop. N. A. Syrph.*, 253.—New Eng., Col.
- White Mts., N. H.—Slosson.
- alternans** LOEW, *Cent.*, V, 37.—Philadelphia.
- WILLISTON, *Synop. N. A. Syrph.*, 252, pl. XII, f. 7.—Canada, Maine, N. H., Conn., Pa., Mass.
- CHAGNON, *Ét. Prélim. les Syrph.*, 70.—St. Hilaire and Montreal, Quebec.
- White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.
- bombylans** FABRICIUS, *Syst. Antl.*, 189 (*Milesia*).—Europe.
- PANZER, *Fauna Germ.*, VIII, 11 (id.).
- MEIGEN, *Syst. Besch.*, III, 233 (id.).
- MACQUART, *Hist. Nat. Dipt.*, I, 534 (id.).
- FALLÉN, *Syrphici*, 8 (*Milesia zetterstedtii*).
- WALKER, *List*, III, 577 (*Doros balyras*).—Trenton Falls, N. Y. [Will.]
- SCHINER, *Fauna Austr.*, I, 365 (*Spilomyia*).
- LOEW, *Cent.*, V, 35 (*obscura*).—Saskatchewan R. [Will.]
- WILLISTON, *Synop. N. A. Syrph.*, 250, pl. XII, f. 6.—N. Y., Conn., White Mts., N. H., and Pa.
- CHAGNON, *Ét. Prélim. les Syrph.*, 70.—Montreal and St. Hilaire, Quebec.
- White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.
- excentrica** HARRIS, *Ins. Inj. to Veg.*, 3d ed., 609 (*Milesia*).—Mass.
- OSTEN SACKEN, *ibidem*, fig. 267; *Cat.*, 253, note (the male only).
- WILLISTON, *Synop. N. A. Syrph.*, 251.—Mass., Tenn., Ill.
- pictula** WILLISTON, *Synop. N. A. Syrph.*, 251.—Pa.
- trifasciata** ROBERTSON, *Canad. Ent.*, XXXIII, 285.—Carlinville, Ill.
- venusta** WILLISTON, *Synop. N. A. Syrph.*, 253.—White Mts., N. H.
- OSTEN SACKEN, in *Harris' Ins. Inj. to Veg.*, 610; *Cat.* 253, note (*excentrica*, the female).—Mass., L. Superior.
- White Mts., N. H.—Slosson.

## CERIA.

- FABRICIUS, Syst. Ent., IV, 277, 1774; Syst. Antl., 173, 1805.  
 MEIGEN, Illig. Mag., II, 271, 1803; Klassif., I, 281, 1804; Syst. Besch., III, 158, 1822.  
 LATREILLE, Hist. Nat. Crust. et Ins., XIV, 356, 1804; Gen. Crust., IV, 327, 1809.  
 FALLÉN, Syrphici, 6, 1816.  
 MACQUART, Hist. Nat. Dipt., I, 484, 1834.  
 ZETTERSTEDT, Dipt. Scand., II, 631, 1842.  
 RONDANI, Ann. Soc. Ent. France, ser. 2, VIII, 211, 212 (*Ceroides* and *Sphiximorpha*), 1850; Dipt. Ital. Prod., I, 55, 1856 (*Ceria* and *Sphiximorpha*); II, 212, 214, 1857 (id.).  
 LOEW, Neue Beitr., I, 1853.  
 SCHINER, Fauna Austr., I, 368, 1862.  
 WILLISTON, Synop. N. A. Syrph., 259, def. and table of species, 1886; Biologia, Dipt., III, 75, 1891, table of Mex. species.  
 VERRALL, Brit. Flies, VIII, 664, 1901.  
 CHAGNON, Ét. Prélim. les Syrph., 72, 1901.
- abbreviata** LOEW, Cent., v, 48; x, 57, note.—Pa., Fla.  
 WILLISTON, Synop. N. A. Syrph., 261.—Comm., Va.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 54, notes.—Col. N. Y.—O. S. Cat.; N. J.—Smith Cat.; Kans.—J. M. A.
- ancoralis** COQUILLET, Canad. Ent., XXXIV, 196 (*Sphiximorpha*).—Las Cruces, N. M.
- arietis** LOEW, Neue Beitr., I, 17.—Mex.  
 GIGLIO-TOS, Ditt. del Mess., I, 32.—Cordova, Mex.
- bergrothi** WILLISTON, Biologia, Dipt., III, 77.—Vera Cruz, Mex.
- cacica** WALKER, Trans. Ent. Soc., n. ser., v, 287.—Mex.
- daphnaea** WALKER, List, III, 537.—Jamaica.  
 WESTWOOD, Trans. Ent. Soc., v, 231, pl. XXIII, f. 7.  
 LOEW, Neue Beitr., I, 17.  
 Jamaica—Johnson.
- loewii** WILLISTON, Synop. N. A. Syrph., 260.—Ariz.
- meadowi** WILLISTON, Biologia, Dipt., III, 76, pl. II, f. 12.—Guerrero, Mex.
- nigra** BIGOT, Annales, 1883, 317 (*Sphiximorpha*).—Mex.  
 WILLISTON, Biologia, Dipt., III, 77, oc.—Guerrero, Mex.
- nigripennis** WILLISTON, Synop. N. A. Syrph., 263.—Mex.
- pedicellata** WILLISTON, Synop. N. A. Syrph., 264; Biologia, Dipt., III, 77.—Mex.: Guanajuato and Tehuantepec, Mex.
- pictula** LOEW, Neue Beitr., I, 17.—So. States.  
 WILLISTON, Synop. N. A. Syrph., 261, quotes Loew.
- rufibasis** BIGOT, Annales, 1883, 318 (*Sphiximorpha*).—Mex.
- schnablei** WILLISTON, Biologia, Dipt., III, 76.—Vera Cruz, Mex.
- scutellata** WILLISTON, Synop. N. A. Syrph., 265.—Mex.
- signifera** LOEW, Neue Beitr., I, 18.—Mex.  
 GIGLIO-TOS, Ditt. del Mess., I, 32.—Cordova, Mex.  
 JOHNSON, Ent. News, IV, 91, desc. of puparium, etc.—Pa. Inverness, Fla.—Johnson.  
 For Williston's ref., see *willistonii*.
- superba** WILLISTON, Synop. N. A. Syrph., 264.—Mex.
- townsendi** SNOW, Kans. Univ. Quart., III, 246.—Las Cruces, N. M.
- tricolor** LOEW, Wien. Ent. Monatsch., v, 37.—Cuba.
- tridens** LOEW, Cent., x, 57.—Cal.



WILLISTON, Synop. N. A. Syrph., 263.—Cal., Wash.

JOHNSON, Ent. News, iv, 91, oc. at Denver, Col.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 54, notes.—N. M.

**verralli** WILLISTON, Biologia, Dipt., iii, 75.—Panama.

**willistonii** KAHL, Kans. Univ. Quart., vi, 141.—Kans.

WILLISTON, Synop. N. A. Syrph., 262 (*signifera* LOEW).—Texas, Fla.

BANKS, Proc. Ent. Soc. Wash., v, 310, puparium.—Va.

## CONOPIDÆ.

### TROPIDOMYIA.

WILLISTON, Canad. Ent., xx, 1, 1888.

**bimaculata** WILLISTON, Canad. Ent., xx, 11; Biologia, Dipt., iii, 84, oc.—Brazil (type); Guerrero, Mex.

? GIGLIO-TOS, Ditt. del Mess., ii, 68, doubtfully recognized from Orizaba.

### CONOPS.

LINNÉ, Syst. Nat., 10th edit., No. 226, 1758.

FABRICIUS, Syst. Antl., 174, 1805.

FALLÉN, Conopsariæ, 7, 1817.

MEIGEN, Syst. Besch., iv, 119, 1824.

MACQUART, Hist. Nat. Dipt., ii, 21, 1835.

SCHINER, Fauna Austr., i, 369, 1862.

WILLISTON, Trans. Conn. Acad., vi, 387, 1885, revision of U. S. spp.; Biologia, Dipt., iii, 79, 1892, table of Mexican spp.

Among the synonyms may be mentioned:

*Leopoldius* RONDANI, Nuovo Ann. Sc. Nat. Bologna, x, 35, 1843.

*Conopæjus* RONDANI, Guérin's Mag. Zool., No. 153, 1845.

*Conopilla*, *Sphyrrosoma* and *Brachyglossum* RONDANI, Dipt. Ital. Prod., i, 56, 1856.

*Pleurocina* MACQUART, Dipt. Exot., Suppl., iv, 164, 1850.

*Bombidia* and *Cylindrogaster* LIOY, Acta Venet., 3 ser., ix, 1326 and 1327, 1864.

**affinis** WILLISTON, see *Physoccephala*.

? **analis** FABRICIUS, Syst. Antl., 175.—S. A.

WIEDEMANN, Auss. Zw., ii, 237.—S. A.

MACQUART, Dipt. Exot., ii, 3, 14, pl. 1, f. 4, oc. in Carolina.

WILLISTON, Trans. Conn. Acad., iv, 342, quotes Fabricius and Wiedemann. Macquart's identification is in all probability incorrect, in which case the species is extra-limital; hence the query.

**anthreas** WILLISTON, Biologia, Dipt., iii, 80.—Guerrero, Presidio and Vera Cruz, Mex.

**auratus** TOWNSEND, Trans. Amer. Ent. Soc., xxvii, 161.—Organ Mts., N. M.

**brachyrhynchus** MACQUART, Dipt. Exot., ii, 3, 15; pl. 1, f. 8.—N. A.

WILLISTON, Trans. Conn. Acad., iv, 341, quotes orig. desc.: 328 (*obscuripennis*).—Va., S. C., Ga., Mass., Kans., S. D.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 61, notes; oc. in N. M.

N. J.—Smith Cat.; St. Augustine, Fla.—Johnson.

**bulbrosstris** LOEW, Neue Beitr., i, 30.—No locality; referred to N. A. in O. S. Cat. on Loew's authority.

WILLISTON, Trans. Conn. Acad., iv, 331.—Ga., N. C.

N. J.—Smith Cat.; St. Augustine, Fla.—Johnson.

- carbonarius** BIGOT, see *Physoccephala*.
- ? **costatus** FABRICIUS, Syst. Antl., 175.—S. A.  
 WIEDEMANN, Auss. Zw., II, 238.—S. A.  
 MACQUART, Dipt. Exot., II, 3, 14, pl. 1, f. 4, oc. in Carolina.  
 WILLISTON, Trans. Conn. Acad., IV, 342, quotes Wiedemann.  
 VAN DER WULP, Tijdschr. v. Ent., XXV, 11; Macquart probably had a different species, making this extra-limital.
- discalis** WILLISTON, Biologia, Dipt., III, 80.—Guerrero and Tabasco, Mex.  
 GIGLIO-TOS, Ditt. del Mess., II, 67, note.—Orizaba.
- excisus** WIEDEMANN, Auss. Zweifl., II, 234 and 236 (*excisus* and *sugens*).—Ga.; no local.  
 WILLISTON, Trans. Conn. Acad., IV, 330.—Ga., Fla., N. C.  
 N. J.—Smith Cat.; Fla.—Johnson (*Physoccephala*).
- flaviceps** MACQUART, Dipt. Exot., II, 3, 15.—N. A.  
 WILLISTON, Trans. Conn. Acad., IV, 341, quotes orig. desc.
- fronto** WILLISTON, Trans. Conn. Acad., VI, 378.—W. Kans.  
 GIGLIO-TOS, Ditt. del Mess., II, 64, refers to *Physoccephala*.—Mex.
- fulvipennis** MACQUART, Dipt. Exot., II, 3, 13, pl. 1, f. 9.—N. A.  
 WILLISTON, Trans. Conn. Acad., IV, 341, quotes orig. desc.
- genualis** LOEW, see *Physoccephala sagittaria*.
- gracilis** WILLISTON, Trans. Conn. Acad., VI, 377.—Ariz.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 61, notes; oc. in N. M.
- nigrimanus** BIGOT, Annales, 1887, 38.—Ga.
- obscuripennis** WILLISTON, see *brachyrhynchus*.
- ocellatus** GIGLIO-TOS, see *parvus*.
- ochreiceps** BIGOT, see *Physoccephala*.
- parvus** WILLISTON, Kans. Univ. Quart., 1892, 46.—Brazil.  
 GIGLIO-TOS, Boll. R. Univ. Torino, VII, No. 132, 1892 (*ocellatus*); Ditt. del Mess., II, 67, syn., etc.—Mex.
- pictus** FABRICIUS, Ent. Syst., IV, 391; Syst. Antl., 176.—West Indies.  
 WIEDEMANN, Auss. Zw., II, 239.—S. A.  
 MACQUART, Dipt. Exot., II, 3, 13 (in part).—Carolina.  
 BIGOT, in Sagra's Cuba, 808 (*ramondi*).—Cuba. [Lw.]  
 OSTEN SACKEN, Cat., 255, note.  
 WILLISTON, Trans. Conn. Acad., IV, 340, quotes Fabricius and Bigot. Porto Rico—Roeder.
- sequax** WILLISTON, Biologia, Dipt., III, 80.—Guerrero, Mex.  
 GIGLIO-TOS, Ditt. del Mess., II, 67, note, oc. in Orizaba.
- sylvosus** WILLISTON, Trans. Conn. Acad., IV, 329; Biologia, Dipt., III, 81, oc. and notes.—Mass., Conn., Kans.; Guerrero, Mex.  
 GIGLIO-TOS, Ditt. del Mess., II, 67, note; oc. in Tehuacan, Mex.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- xanthopareus** WILLISTON, Trans. Conn. Acad., IV, 332.—Tex., Mass.  
 N. J.—Smith Cat.

#### PHYSOCEPHALA.

- SCHINER, Wien. Ent. Monatsch., V, 1861; Fauna Austr., 1, 375, 1862.  
 WILLISTON, Trans. Conn. Acad., VI, 388, 1885, table of species; Biologia, Dipt., III, 82, 1892, table of Mexican species.
- affinis** WILLISTON, Trans. Conn. Acad., IV, 339 (*Conops*); VI, 391, gen. ref.—Kans., Cal., Wash.  
 GIGLIO-TOS, Ditt. del Mess., II, 65, oc. in Mex.

- DAVIDSON, Ent. News, vi, 253, larvæ parasitic in nests of *Anthidium emarginatum*, in Cal.
- TOWNSEND, Trans. Amer. Ent. Soc., xxii, 62, notes.—Mich.
- burgessi** WILLISTON, Trans. Conn. Acad., iv, 337 (*Conops*); vi, 391, gen. ref.—Col., and Mendocino, Cal.
- Benlah, N. M.—Skinner.
- carbonaria** BIGOT, Annales, 1887, 42 (*Conops*).—Mex.
- ? WILLISTON, Biologia, Dipt., iii, 82, pl. II, f. 13.—Vera Cruz, Mex., with a doubt.
- GIGLIO-TOS, Ditt. del Mess., II, 66, oc. in Orizaba.
- castanoptera** LOEW, Neue Beitr., I, 33 (*Conops*).—Savannah.
- WILLISTON, Trans. Conn. Acad., iv, 336, transl. orig. desc.
- TOWNSEND, Trans. Amer. Ent. Soc., xxii, 62.—Mich.
- St. Augustine, Fla.—Johnson.
- furcillata** WILLISTON, Trans. Conn. Acad., iv, 336 (*Conops*); vi, 391, gen. ref.—N. H., Canada.
- ? WALKER, List, III, 671 (*Conops aethiops*).—N. A. [Will., with a doubt.]
- N. J.—Smith Cat.; Montreal—Chagnon; Adirondacks, N. Y.—Lintner and Needham.
- marginata** SAY, Jour. Acad. Sci. Phil., III, 82; Compl. Works, II, 73 (*Conops*).—Mo.
- WIEDEMANN, AUSS. ZW., II, 240 (id.).
- LOEW, Neue Beitr., I, 34 (id.), redesc. Wiedemann's specimen.
- WILLISTON, Trans. Conn. Acad., iv, 338 (id.); vi, 391, gen. ref.—Pa. N. H.
- maxima** GIGLIO-TOS, Boll. R. Univ. Torino, VII, no. 132, 1892; Ditt. del Mess., II, 64.—Mex.
- nigrifacies** BIGOT, Annales, 1887, 40 (*Conops*).—Mex.
- WILLISTON, Biologia, Dipt., III, 82.—Guerrero, Mex.
- ochreiceps** BIGOT, Annales, 1887, 39 (*Conops*).—Ga.; Mex.
- TOWNSEND, Trans. Amer. Ent. Soc., xxii, 62, notes, and oc. in N. M.
- WILLISTON, Biologia, Dipt., III, 83, notes.—Guerrero, Mex.
- sagittaria** SAY, Jour. Acad. Sci. Phil., III, 82; Compl. Works, II, 73 (*Conops*).—Pa.
- LOEW, Neue Beitr., I, 32 (*Conops genualis*).—Ky. [Will.]
- GIGLIO-TOS, Ditt. del Mess., II, 65, oc. in Mex.
- N. J.—Smith Cat.; Inverness, Fla.—Johnson.
- sororcula** WILLISTON, Biologia, Dipt., III, 83.—Guerrero, Mex.
- GIGLIO-TOS, Ditt. del Mess., II, 66, note.—Mex.
- texana** WILLISTON, Trans. Conn. Acad., iv, 338 (*Conops*); vi, 391, gen. ref.—Texas.
- Montreal—Chagnon.
- tibialis** SAY, Jour. Acad. Sci. Phil., VI, 171; Compl. Works, II, 363 (*Conops*).—Ind.
- WIEDEMANN, AUSS. ZW., II, 236 (*Conops nigricornis*).—Pa. [Will.]
- LOEW, Neue Beitr., I, 31 (id.).
- WILLISTON, Trans. Conn. Acad., iv, 334.—Mass., Conn., D. C., Va., N. C., Kans.
- TOWNSEND, Trans. Amer. Ent. Soc., xxii, 63, oc. in Mich., and Va. Fla.—Johnson.
- xanthops** WILLISTON, Biologia, Dipt., III, 83.—Guerrero and Tabasco, Mex.
- GIGLIO-TOS, Ditt. del Mess., II, 66, oc. in Tuxpango, Mex.

## ZODION.

- LATREILLE, Précis. des caract. gén., 1796.  
 SCHINER, Fauna Austr., I, 380, 1862.  
 WILLISTON, Trans. Conn. Acad., VI, 379, 1885; table of U. S. species, p. 392.  
 ADAMS, Kans. Univ. Sci. Bull., II, 33, 1903, table of species.  
**abitus** ADAMS, Kans. Univ. Sci. Bull., II, 33.—Kansas and Mass.  
**albonotatum** TOWNSEND, Jour. N. Y. Ent. Soc., V, 175; VI, 52, notes.—Brownsville, Texas.  
 [**americanum** WIEDEMANN, doubtfully recognized by Walker, List, III, 678, is almost certainly extra-limital.]  
**auricaudatum** WILLISTON, Biologia, Dipt., III, 85, pl. II, f. 14a.—Guerrero, Mex.  
**bicolor** ADAMS, Kans. Univ. Sci. Bull., II, 35.—Douglass Co., Kans.  
**flavipennis** BIGOT, see *fulvifrons*.  
**fulvifrons** SAY, Jour. Acad. Sci. Phil., III, 83 and 84 (*fulvifrons* and *abdominale*); Compl. Works, II, 74 (id.).—Md., Pa.; near Rocky Mts.  
 WIEDEMANN, Auss. Zw., II, 241, 242 (id.).  
 ?ROBINEAU-DESVOIDY, Myodaires, 247 (*Myopa rubrifrons*).—Philadelphia. [Walker, List, III, 678; questioned by Williston.]  
 WILLISTON, Trans. Conn. Acad., VI, 380, 392; Biologia, Dipt., III, 84, oc. and syn.—New England, Cal., Wash., Ariz.; Guerrero, Mex.  
 BIGOT, Annales, 1887, 204 (*flavipenne*).—Mex. [Will.]  
 TOWNSEND, Psyche, 1897, 93, 127, 140; Trans. Amer. Ent. Soc., XXII, 63, notes.—N. M.; Ottawa, Canada.  
 GIGLIO-TOS, Ditt. del Mess., II, 68, oc. in Puebla, Cordova and Cautla, Mex.  
 Montreal—Chagnon; Fla.—Johnson; Beulah, N. M.—Skinner; Axton, N. Y.—M. and H.  
**leucostoma** WILLISTON, see *obliquefasciatum*.  
**nanellum** LOEW, Cent., VIII, 75.—D. C.  
 ?WALKER, List, III, 676 (*occidensis*).—Ohio. [Will., with a query.]  
 WILLISTON, Trans. Conn. Acad., VI, 382, transl. of Loew.  
 N. J.—Smith Cat.; Montreal—Chagnon; Porto Rico—Roeder; Fla.—Johnson.  
**occidensis** WALKER, see *nanellum*.  
**obliquefasciatum** MACQUART, Dipt. Exot., Suppl., I, 141 (*Myopa*).—Texas.  
 JÆNNICKE, Neue Exot. Dipt., 405 (97) (*splendens*).—Mexico.  
 WILLISTON, Trans. Conn. Acad., VI, 380 (*leucostoma*).—Kans., Mont., Ariz., S. D. [Will., Biol., III, 85.]  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 63, note; Psyche, 1897, 127, 148, notes.—Zacatecas, Mex.; N. M.; N. M. (*splendens*).  
 ADAMS, Kans. Univ. Sci. Bull., II, 33, syn. Beulah, N. M.—Skinner.  
**palpale** ROBERTSON, Canad. Ent., XXXIII, 284.—Carlinville, Ill.  
**parvum** ADAMS, Kans. Univ. Sci. Bull., II, 34 (*parvis*).—Ariz.  
**perlongum** COQUILLET, Canad. Ent., XXXIV, 199.—Rio Ruidosa, N. M.; Chihuahua, Mex.; Col.  
**pictulum** WILLISTON, Trans. Conn. Acad., VI, 379.—N. M.  
**pygmæum** WILLISTON, Trans. Conn. Acad., VI, 381; Biologia, Dipt., III, 84, oc.—Cal., Col.; Guerrero, Mex.  
**scapulare** ADAMS, Kans. Univ. Sci. Bull., II, 34.—Ariz.  
**splendens** JÆNNICKE, see *obliquefasciatum*.  
**triste** BIGOT, Annales, 1887, 203.—Cal.  
**zebrinum** BIGOT, Annales, 1887, 204.—Mexico.

## STYLOGASTER.

MACQUART, Hist. Nat. Dipt., II, 38, 1835; Dipt. Exot., II, 3, 17, 1845.

WESTWOOD, Proc. Zool. Soc. Lond., 1850, 270 (*Stylomyia*).

BIGOT, Rev. et Mag. de Zool., 1859, no. 7 (*Ptychoproctus*).

WILLISTON, Trans. Conn. Acad., VI, 91, 1883; Kans. Univ. Quart., I, 120, 1893.

TOWNSEND, Annals and Mag. Nat. Hist., XIX, 1897, 25, table of species; believes them parasitic on ants of the genus *Eciton*, from his observations.

ROEDER, Wien. Ent. Zeit., XI, 287, 1891, table of species.

**biannulata** SAY, Jour. Acad. Sci. Phil., III, 81; Compl. Works, II, 72 (*Myopa*). Pa.

WIEDEMANN, Auss. Zw., II, 243 (*Myopa stylata* FAB., in part).—S. A.

MACQUART, Dipt. Exot., II, 3, 17 (? *Stylogaster stylatus* FAB.), note.

WESTWOOD, Proc. Zool. Soc. Lond., 1850, 271 (*Stylomyia confusa*).

LOEW, Schaum's Jahresbericht, 1851, 133, note on syn.

OSTEN SACKEN, Cat., note 259, syn.

WILLISTON, Trans. Conn. Acad., VI, 93; Kans. Univ. Quart., I, 120, full discussion of *stylatus* FAB. and WIED.—Conn.

**ethiops** TOWNSEND, Annals and Mag. Nat. Hist., XIX, 26.—Vera Cruz.

**minuta** TOWNSEND, Annals and Mag. Nat. Hist., XIX, 27.—Vera Cruz.

**neglecta** WILLISTON, Trans. Conn. Acad., VI, 91; Kans. Univ. Quart., I, 120.—Conn.

WIEDEMANN, Auss. Zw., II, 243 (*Myopa stylata* FAB., in part).—S. A. [Will.]

TOWNSEND, Trans. Amer. Ent. Soc., XXII, 64, oc. in Kans.

N. J.—Smith Cat.

**stylata** FABRICIUS, Syst. Antl., 177 (*Conops*).—Brazil.

As to the possibility of present or future recognition of this species, see Roeder, Wien. Ent. Zeit., XI, 287, 1891, for the affirmative, and Williston, Kans. Univ. Quart., I, 120, 1893, for the negative.

**stylosa** TOWNSEND, Annals and Mag. Nat. Hist., XIX, 24.—Vera Cruz.

## DALMANNIA.

ROBINEAU-DESVOIDY, Myodaires, 248, 1830.

MACQUART, Dipt. du Nord. de la France, 1833 (*Stachynia*); Hist. Nat. Dipt., II, 36, 1835 (id.).

SCHINER, Fauna Austr., I, 388, 1862.

WILLISTON, Trans. Conn. Acad., VI, 94, 1883.

COQUILLET, Ent. News, III, 150, table of species.

**nigriceps** LOEW, Cent., VII, 71.—Va.

WILLISTON, Trans. Conn. Acad., VI, 94.—Conn., N. Y., D. C., Mont.

N. J.—Smith Cat.

**picta** WILLISTON, Trans. Conn. Acad. Sci., VI, 94.—N. M. S. Cal.—Coq.

**vitiosa** COQUILLET, Ent. News, III, 150.—Cal., Los Angeles Co.

## ONCOMYIA.

ROBINEAU-DESVOIDY, Dipt. Env. Paris, 50, 1853 (*Occemyia*; changed by Loew, Cent., VII, 73).

RONDANI, Dipt. Ital. Prod., I, 58, 1856 (*Thecophora*).

SCHINER, Fauna Austr., I, 381, 1862.

WILLISTON, Trans. Conn. Acad., VI, 95, 392, def. and table of species, 1883.

- abbreviata** LOEW, Cent., vii, 73.—D. C.  
 WILLISTON, Trans. Conn. Acad., vi, 97; Biologia, Dipt., iii, 86, oc. and note.—N. Y., D. C., Cal., Wash.; Durango, Mex.  
 GIGLIO-TOS, Ditt. del Mess., ii, 69, note.  
 PANAMINT Val., Cal.—Williston; N. J.—Smith Cat.; Montreal—Chagnon.
- baroni** WILLISTON, Trans. Conn. Acad., vi, 97.—Cal., Col.  
 TOWNSEND, Trans. Amer. Ent. Soc., xxii, 63, oc. in N. H., and note.  
 Beulah, N. M.—Skinner.
- loraria** LOEW, Cent., vii, 74.—N. H.  
 WILLISTON, Trans. Conn. Acad., vi, 98; Biologia, Dipt., iii, 86, oc.—Conn., Cal.; Guerrero, Mex.  
 TOWNSEND, Trans. Amer. Ent. Soc., xxii, 64, oc. in D. C., and note.  
 GIGLIO-TOS, Ditt. del Mess., ii, 10, oc. in Puebla, Mex., and note.  
 White Mts., N. H.—Slosson.
- modesta** WILLISTON, Trans. Conn. Acad., vi, 96.—Wash., Col.  
 var. **melanopoda** WILLISTON, loc. cit.—N. H.
- propinqua** ADAMS, Kans. Univ. Sci. Bull., ii, 32.—No locality.

#### MYOPA.

- FABRICIUS, Syst. Ent., 798, 1775; Syst. Antl., 178, 1805.  
 MEIGEN, Syst. Besch., iv, 140, 1824.  
 RONDANI, Dipt. Ital. Prod., i, 58, 1856 (*Myopa* and *Gonirhynchus*).  
 SCHINER, Fauna Austr., i, 384, 1862.  
 WILLISTON, Trans. Conn. Acad., vi, 382, 393, table of species; also gives the divisions proposed by Robineau-Desvoidy and Liroy.  
 ADAMS, Kans. Univ. Sci. Bull., ii, 35, 1903, table of species.
- bistria** WALKER, List, iii, 679.—N. A.
- castanea** BIGOT, Annales, 1887, 207 (*Gonirhynchus*).—Nev.
- clausa** LOEW, Cent., vii, 72.—Me.  
 WILLISTON, Trans. Conn. Acad., vi, 385.—Mass., Conn., Mont., Cal., Ariz., Wyo., Wash.  
 White Mts., N. H.—Slosson; Hudsonian Zone, N. M.—Cockerell.
- conjuncta** THOMSON, Eugen. Resa, 515.—Cal.
- fenestrata** COQUILLET, Canad. Ent., xxxiv, 197.—Sierra Madre, Chihuahua, Mex.
- longicornis** SAY, Jour. Acad. Sci. Phil., iii, 83; Compl. Works, ii, 72.—Mo.  
 WIEDEMANN, Auss. Zw., ii, 245.—Pa.  
 WILLISTON, Trans. Conn. Acad., vi, 386, quotes both desc.
- maculifrons** BIGOT, Annales, 1887, 206 (*Glossigona*).—Nev.
- obliquefasciata** MACQUART, see *Zodion*.
- pictipennis** WILLISTON, Trans. Conn. Acad., vi, 382.—Ariz., Cal.  
 GIGLIO-TOS, Ditt. del Mess., ii, 70, oc. in Toluca, Mex.
- pilosa** WILLISTON, Trans. Conn. Acad., vi, 383.—Cal.
- plebeia** WILLISTON, Trans. Conn. Acad., vi, 384.—Ariz.
- pulchra** COQUILLET, Canad. Ent., xxxiv, 198.—Sierra Madre, Chihuahua, Mex.
- rubida** BIGOT, Annales, 1887, 206 (*Glossigona*).—Col.
- tectura** ADAMS, Kans. Univ. Sci. Bull., ii, 35.—No locality.
- vesiculosa** SAY, Jour. Acad. Sci. Phil., iii, 80; Compl. Works, ii, 72.—Pa.  
 WIEDEMANN, Auss. Zw., ii, 245.  
 ? WALKER, List, iii, 679 (*apicalis*).—N. A. [Will., with a doubt.]  
 WILLISTON, Trans. Conn. Acad., vi, 384.—Pa., N. H., Mass., Ga.  
 N. J.—Smith Cat.; Montreal—Chagnon.



**vicaria** WALKER, List, III, 679.—Nova Scotia.  
 WILLISTON, Trans. Conn. Acad., VI, 386, quotes orig. desc.  
 N. J.—Smith Cat.; Montreal—Chagnon.

### SICUS.

SCOPOLI, Entom. Carniolica, 1004, 1763.

SCHINER, Fauna Austr., I, 384, 1862.

**brevis** COQUILLET, Canad. Ent., XXXIV, 198.—Sierra Madre, Chihuahua, Mex.

### CESTRIDÆ.

BRAUER, Monographie der Cestriden, Vienna, 1863, is the great classic work on this family.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 158 and VI, 180, tables of genera of the world.

BRAUER, Zweifl. d. Kaiserl. Mus., III, 36, table of genera, based on larvæ of the third stage.

BRAUER, Denkschr. d. Kaiserl. Akad. Wiss., Math.-Naturwiss. Classe, LXIV, 259-282, 1 pl., has a fascinating article on the descent of the Cestridæ and on the elephant bot, *Cobboldia elephantis*, which may be brought to the United States in elephants from India.

TOWNSEND, Proc. Ent. Soc. Wash., II, 94, 1891, gives tables of genera, both for larvæ and adults, from Brauer.

OSBORN, Bull. Div. Ent., No. 5, notes on *Gastrophilus* and other bots.

HUNTER, Nebraska Bd. of Hort., 189, 291-300, popular illustrated account of bots.

AUSTEN, Annals and Mag. Nat. Hist., 6th ser., XV, 391, 1895, table of genera of *Cuterebrinae*.

The following references have not been assigned to any genus:

**Ground-squirrel bot:** RILEY and HOWARD, Insect Life, IV, 147, extract from correspondence, on a new species from Kansas, not *emasculator*.

**Bots affecting Man:** BLANCHARD, Annales Soc. ent. de France, 1892, full summary of American cases.

RILEY and HOWARD, Ins. Life, V, 2, brief review of foregoing; p. 58, addition—notes on same subject.

See also under *Dermatobia*.

**Botfly of Cat:** RILEY and HOWARD, Insect Life, VI, 266, extract from correspondence on, in North Carolina; p. 327, two more cases, in N. Y. and Mo.

**Botfly of Rabbit:** RILEY and HOWARD, Insect Life, III, 21, extract from correspondence on, affecting jack-rabbits in Texas. See also *Cuterebra*.

### GASTROPHILUS.

LEACH, On the Genera and Species of Eproboscideous Insects, 1817.

MEIGEN, Syst. Besch., IV, 174, 1824 (*Gastrus*).

SCHINER, Fauna Austr., I, 390, 1862.

BRAUER, Mon. Cestriden, 53, 1863, full biology, table of species, etc.

**[epilepsalis]** FRENCH, Canad. Ent., 1900, 263, fig.; 1904, 83.—Ill.

ALDRICH, Canad. Ent., 1900, 318, rejects species.

*Note.*—Described from a larval specimen 2 mm. long, passed by a boy who had had epileptic spasms for four years!]

WASHBURN, Canad. Ent., XXXV, 320, case of a subcutaneous human parasite,—almost certainly a different species.

- BANKS, *Canad. Ent.*, xxxv, 333, the original was not an *Æstrid* larva at all.
- equi** CLARK, *Trans. Linn. Soc.*, III, 226, pl. XXIII, f. 7-9, 1788 (*Æstrus equi*).—Europe.
- FABRICIUS, *Syst. Antl.*, 228, 1805 (id.).
- CLARK, *Essay on Bots*, 17, pl. I, f. 1-16 (id.).
- LEACH, *Eproboscideous Insects*, 1817.
- MEIGEN, *Syst. Besch.*, iv, 175 (*Gastrus*).
- MACQUART, *Hist. Nat. Dipt.*, II, 52 (*Æstrus*).
- SCHINER, *Fauna Austr.*, I, 391, 1862.
- BRAUER, *Mon. Æstriden*, 68, full bibliogr. to 1863; figs. all stages, etc.
- FITCH, *Trans. N. Y. Agl. Soc.*, IX, 799 (*Æstrus*), oc. in U. S., etc.
- HARRIS, *Ins. of New England*, 3d ed., 623, pl. VIII, f. 2.
- GARMAN, *Annual Rept. Ky. Expt. Station*, 1894, figs., etc.; notes an early account by Rev. Rowland Green, *Adams' Medical and Agl. Register*, 1806, 53.
- RILEY, *Rept. Dept. of Agriculture*, 1893, 213, summarizes results of investigations made for the Department by Osborn.
- TOWNSEND, *Trans. Amer. Ent. Soc.*, XXII, 64, oc. in Jamaica.
- LUGGER, 2d *Rept. Ent. Minn.*, 1896, 212-216, figs., habits, etc.
- HERRICK, *Bull.* 53, *Miss. Expt. Station*, 1900, brief account.
- The common stomach bot of the horse; N. A., wherever horses occur.
- hæmorrhoidalis** LINNÉ, *Fauna Suec.*, 2d ed., No. 1733, year 1761 (*Æstrus*).—Europe.
- DEGEER, *Hist. Nat. Ins.*, VI, 291, pl. xv, f. 13 (id.).
- CLARK, *Trans. Linn. Soc.*, III, 289, pl. XXIII, f. 10-12 (id.).
- LEACH, *Eproboscideous Ins.*, 1817.
- MEIGEN, *Syst. Besch.*, iv, 177, 1824 (*Gastrus*).
- ZETTERSTEDT, *Dipt. Scand.*, III, 981, 1844 (id.).
- SCHINER, *Fauna Austr.*, I, 392, 1862.
- BRAUER, *Mon. Æstriden*, 83, figs., biology, etc.
- GARMAN, *Ann. Rept. Ky. Expt. Station*, 1894.
- LUGGER, 2d *Rept. Ent. Minn.*, 216, notes and good fig.
- Larvæ in stomach, duodenum and rectum of the horse; N. A. generally, as preceding.
- nasalis** LINNÉ, *Fauna Suecica*, 2d ed., no. 1722, year 1761; *Systema Naturæ*, 12th ed., II, 969 (*Æstrus*).—Europe.
- FABRICIUS, *Syst. Ent.*, 746 (id.); *Ent. Syst.*, IV, 232 (*Æstrus equi*, var. *nasalis*); *Syst. Antl.*, 230 (*veterinus* CLK.).
- CLARK, *Trans. Linn. Soc.*, V, III, 328 (*Æstrus veterinus*); *Essay on Bots*, 33, pl. I (*Æstrus salutiferus*).
- LEACH, *Eproboscideous Ins.*, 2 (*Æstrus clarkii*).
- MEIGEN, *Syst. Besch.*, IV, 176-180 (*Gastrus salutaris*, *nasalis*, *jumentorum*, and *clarkii*).
- FALLÉN, *Hæmatomyz.*, 12, 6 (*Æstrus veterinus*).
- MACQUART, *Hist. Nat. Dipt.*, II, 53 (*Æstrus salutaris*).
- ZETTERSTEDT, *Dipt. Scand.*, III, 979, 981 (*Gastrus nasalis* and *nigritus*).
- FITCH, *Trans. N. Y. Agl. Soc.*, IX, 799, 1849, oc. in N. Y., and popular account (*Æstrus*).
- WALKER, *List*, III, 687 (*subjacens*).—Nova Scotia. [Brauer.]
- SCHINER, *Fauna Austriaca*, I, 391.
- BRAUER, *Mon. Æstriden*, 86, full biology, etc.
- TOWNSEND, *Entom. News*, III, 227, habits.

GARMAN, Ann. Rept. Ky. Expt. Station, 1894.

LUGGER, 2d Rept. Ent. Minn., 1896, 217-219, notes and good figure.

Larvæ in the duodenum and about pylorus of the horse; distribution as the preceding.

[**pecorum** FABRICIUS, Ent. Syst., iv, 230, 1794 (*Æstrus*).—Europe.

WALKER, List, III, 686, oc. in Jamaica.

BRAUER, Mon. *Æstriden*, 75, biology, bibliography, etc.; larvæ in the alimentary canal of the horse, clinging to the rectum like *hæmorrhoidalis*.—Europe.

GARMAN, Ann. Rept. Ky. Expt. Station, 1894, compiled desc.

Seems not to have been authoritatively recorded from North America.]

### ÆSTRUS.

LINNÉ, *Fauca Suecica*, 2d ed., 428, 1761.

LATREILLE, *Fam. Nat.*, Règne Animal., 1825 (*Cephalomyia*).

SCHINER, *Fauna Austr.*, I, 392, 1862.

BRAUER, Mon. *Æstriden*, 147, 1863.

**ovis** LINNÉ, *Fauna Suecica*, 2d ed., 430, 1761.—Sweden.

FABRICIUS, *Syst. Ent.*, 747; *Ent. Syst.*, iv, 232; *Syst. Antl.*, 230.

CLARK, *Trans. Linn. Soc.*, III, 289, pl. XXIII, f. 14-17.

LATREILLE, *Gen. Crust.*, iv, 341; *Dict. d'Hist. Nat.*; *Fam. Nat. d. Règne Animal.* (the last *Cephalomyia*).

SCHINER, *Fauna Austr.*, I, 392, 1862.

BRAUER, Mon. *Æstriden*, 151, full bibliog., biology, etc.—Europe and N. A.

FITCH, *Trans. N. Y. Agl. Soc.*, IX, 800, 1849 (*Cephalomyia*).

RILEY, *First Mo. Rept.*, 161-165, figs., life hist., etc.

CURTICE, *Animal Parasites of Sheep*, Govt. Printing Office, Washington, 1890; full discussion, figs., etc.

BAKER, *Entom. News*, VI, 174, notes on biology, and oc. at Fort Collins, Col.

LUGGER, 2d Rept. Ent. Minn., 1896, 219-225, life hist. and good figs.

HERRICK, *Bull.* 53, *Miss. Expt. Station*, brief notes.

Larvæ in frontal sinuses of sheep; widely distributed in N. A.

### CEPHENOMYIA.

LATREILLE, *Fam. Nat. du Règne Animal.*, 1825.

SCHINER, *Fauna Austr.*, I, 394, 1862.

BRAUER, Mon. *Æstriden*, 183, 1863, amended.

Undetermined bots, supposed to belong to *Cephenomyia*:

**Bots in deer**: BRAUER, Mon. *Æstriden*, 211, pl. IX, f. 9, a larva found in throat of *Cervus macrotis* by Say, in N. W. Terr., U. S.

RILEY and HOWARD, *Insect Life*, I, 386, note on larva from deer in Cal.

**Bots in the pig**: RILEY and HOWARD, *Insect Life*, III, 151, extract from correspondence, on bots in throats of hogs in W. Va.

**Bots in man**: RILEY and HOWARD, *Insect Life*, II, 116, extract from correspondence, on larvæ in man's head; San Bernardino, Cal.

? **phobifer** CLARK, *Essay on Bots*, 69, pl. II, f. 30 (*Æstrus*).—Ga.

BRAUER, Mon. *Æstriden*, 213, 291, pl. V, f. II (copied fig.). Referred with a doubt to this genus.

WIEDEMANN, *Auss. Zw.*, II, 255, data compiled from Clark (*Æstrus*).

- MACQUART, Dipt. Exot., II, 3, 25, pl. II, f. 8, brief compiled reference, and the figure does not agree with Brauer.
- [*ulrichii* BRAUER, Mon. Cestrinen, 199, pl. III, f. 8 and IX, f. 7.—Europe, in *Cervus alces*. Only larvæ were seen from N. A., hence the species here may not be the same.]

## HYPODERMA.

- CLARK, Essay on Bots, 1815.
- LATREILLE, Fam. Nat. du Règne Animal., 1825.
- SCHINER, Fauna Austr., I, 396, 1862.
- BRAUER, Mon. Cestrinen, 93, 1863.
- Undetermined species:
- Bot of man: RILEY and HOWARD, Insect Life, II, 238, account of larva removed from a boy in Pa.
- 
- bonassi* BRAUER, Verh. Zool.-Bot. Ges., 1875, 75, larva only, on the buffalo.
- Note*.—I take the reference from O. S. Cat.; whether the buffalo is not the old-world species, as the name indicates, I am unable to ascertain.
- [*bovis* DEGEER, see under *lineata*; *bovis* is not positively known from N. A.]
- lineata* DE VILLIERS, Ent. Linn., III, 349, pl. IX, f. 1, 1789 (*Estrus*).—Europe.
- LEACH, Eproboscideous Insects, Suppl., 3 (*Estrus cricctorum*).
- CLARK, Essay on Bots, 37, 67 and 72, pl. I, f. 30, 31, 32 (*Estrus bovis*, var. *vernalis*).
- SCHINER, Fauna Austr., I, 397.
- LOEW, Wien. Ent. Monatschr., Feb., 1863.
- BRAUER, Mon. Cestrinen, 122, 1863; Verh. Zool.-Bot. Ges., 1890, 509-516, discovery of host-relations, biology, etc.; infests the cow.
- WALKER, List, III, 685 (*Estrus supplens*).—Nova Scotia.
- OSTEN SACKEN, Cat., 143, synonymy.
- FITCH, Trans. N. Y. Agl. Soc., IX, 800, popular account (*bovis*).
- RILEY, Scientific American, Jan., 1877, pop. account (*bovis*).
- COMSTOCK, Rept. Dept. Agriculture, 1881, 258, identifies the "Texas cattle heel fly" as *bovis*.
- FARMERS' REVIEW, Chicago, July 17, 1889, et seq., investigation of damage to hides, etc.
- CURTICE, Insect Life, II, 207, notes on larvæ (as *bovis*); thinks eggs or larvæ are taken through the mouth; Jour. Com. Medicine and Vet. Archives, XII, 265, June, 1891; announces conclusion that the American species is *lineata*, not *bovis*; life hist. and figs.
- RILEY, The Ox Bot in the United States. Bulletin Dept. of Agriculture. Washington, 1892. 16 pp. and figs.
- RILEY, Rept. Dept. of Agriculture, 1892, 159, pl. I, f. 2, and pl. II. Synopsis of life hist.
- RILEY and HOWARD, Insect Life, I, 318, notes on, in Texas; II, 156, notes on work of Farmers' Review (*bovis*); II, 201, comments on theory of Curtice (*bovis*); II, 172, figs., habits, etc. (*bovis*); IV, 234, review of Curtice; IV, 302-317, full desc. and biology, with figs.
- LINTNER, 6th N. Y. Report, 111-116, full life hist., figs., etc. (*bovis*).
- HOLSTEIN, Ent. News, IV, 299, life hist.
- LUGGER, 2d Rept. Ent. Minn., 1896, 226, notes and good fig.
- The "Warble Fly" of cattle; larvæ under the skin of the back. Occurs very generally throughout the United States, and presumably other cattle-raising sections of North America.

## CEDEMAGENA.

LATREILLE, Fam. Nat. du Règne Animal., 1825.

BRAUER, Mon. Cestrinen, 130, 1863 (as a subg. of *Hypodermia*; in later works, as in Zweifl. d. Kaiserl. Mus., he accords the genus full rank.

**tarandi** LINNÉ, Fauna Suec., 2d ed., 429, no. 1731, year 1761 (*Cestrus*).—Europe.

FABRICIUS, Syst. Antl., 227 (id.).

FALLÉN, Hæmatomyz., 10 (id.).

MEIGEN, Syst. Besch., iv, 169, pl. xxxviii, f. 15 (*Cestrus*).

MACQUART, Hist. Nat. Dipt., ii, 49, oc. in N. A.

ZETTERSTEDT, Dipt. Scand., iii, 973.

BRAUER, Mon. Cestrinen, 131, bibliog., biology, etc.—Europe and N. A.

WILLISTON, Trans. Amer. Ent. Soc., xiii, 307, confirms oc. in N. A.

COQUILLET, Proc. Wash. Acad. Sci., ii, 438, oc. in Alaska.

The larvæ live under the skin of the reindeer, hence only far north.

## BOGERIA.

AUSTEN, Annals and Mag. Nat. Hist., 6th ser., xv, 391-393, 1895.

TOWNSEND, Psyche, 1897, 8, says he has obtained larvæ of this genus from jack-rabbits in N. M.; had previously referred them to *Dermatobia*.

**principes** AUSTEN, loc. cit., 393-395, pl. xiii, f. 5, 5b.—Gulf of Cal., Mex.

## CUTEREBRA.

CLARK, Essay on Bots, 1815.

WIEDEMANN, Auss. Zw., ii, 256, 1830 (*Trypodermia*).

BRAUER, Mon. Cestrinen, 219, 1863.

AUSTEN, Annals and Mag. Nat. Hist., ser. 6, xv, 377, 1895 (*Cutiterebra*).

MIK, Wien. Ent. Zeitung, xvi, 35, no. 62, has a few sensible remarks on the use of *Cutiterebra* and on the propriety of short forms in general.

Undetermined species:

**Bot in Rabbit**, mentioned by Townsend, see *Icpusculi*.

**Bot in Mouse**: RILEY and HOWARD, Insect Life, vi, 46, note on a bot in mouse, *Sitomys californicus*, at West Creek, Cal.

**americana** FABRICIUS, Syst. Ent., 774; Ent. Syst., iv, 315; Syst. Antl., 288 (all *Musca*).—W. I.

CLARK, Essay on Bots, 70, pl. ii, f. 3 (*cauterium*).—Ogeechee Riv. [Wied.]

WIEDEMANN, Auss. Zw., ii, 258 (*Trypodermia*).—N. A.

MACQUART, Dipt. Exot., ii, 3, 23.—N. A.

BRAUER, Mon. Cestrinen, 242, pl. iv, f. 2 and vi, f. 7.—Mex.

AUSTEN, Annals and Mag. Nat. Hist., 6th ser., xv, 383, rescind.—Ga.

TOWNSEND, Proc. Cal. Acad. Sci., iv, 618, note on doubtful oc. in Cal.; Trans. Amer. Ent. Soc., xxii, 64, oc. in Ariz.; notes.

Beulah, N. M.—Skinner.

**analis** MACQUART, Dipt. Exot., ii, 3, 22, pl. ii, f. 5.—Brazil.

GUÉRIN-MÉNEVILLE, Iconographie du Règne Animal., Ins., 547, pl. ci, f. 1 (*apicalis*).—America. [Austen.]

VAN DER WULP, Biologia, Dipt., ii, 1 (*emasculator* FITCH).—N. Sonora and Presidio, Mex. [Austen.]

AUSTEN, Annals and Mag. Nat. Hist., xv, 386.—Orizaba, Mex., and Brazil.

- approximata** WALKER, in Lord's "Naturalist in Vancouver Id. and British Col.," II, 338, 1866.—Vancouver Id.  
AUSTEN, Annals and Mag. Nat. Hist., xv, 380, 382, type redesc.  
VAN DER WULP, Biologia, Dipt., II, 2, oc. in Chihuahua, Mex., and Guatemala.
- atrox** CLARK, Essay on Bots. addenda, f. 5.—Mex.  
WALKER, List, III, 683 (*terrisona*).—Guatemala.  
BRAUER, Mon. Cestrinen, 241, 242 and 244, 245 (latter as *terrisona* WALK., reproducing Walker's desc.).—Mexico and Guatemala.  
VAN DER WULP, Biologia, Dipt., II, 2 (*approximata* WALKER).—Chihuahua, Mex.  
AUSTEN, Annals and Mag. Nat. Hist., ser. 6, xv, 382, pl. XIII, f. 2, 2a, redesc. of Walker's type, above synonymy, etc.
- buccata** FABRICIUS, Genera Ins., 305, 1776; Mantissa Ins., 305; Ent. Syst., IV, 230; Syst. Antl., 227 (*Estrus*).—S. Carolina.  
WIEDEMANN, Auss. Zw., II, 259 (*Trypoderma*).—N. A.  
OLIVIER, Encycl. Méthodique, VIII, 464.  
MACQUART, Hist. Nat. Dipt., II, 47.—N. A.; larvæ under skin of a species of hare.  
CLARK, Essay on Bots, 70, 4, pl. II, f. 29 (*purivora*).  
BRAUER, Mon. Cestrinen, 249, pl. IV, f. 4; VI, f. 9.—Ky.; Pa.  
WALKER, List, III, 683 (*horripilum* CLARK).—Nova Scotia.  
RATHVON, Amer. Entomologist, I, 1869, 116, oc. of larvæ in a striped squirrel.  
LUGGER, 2d Rept. Ent. Minn., 1896, 229, fig., no desc. (*baccata*, by mistake).  
AUSTEN, Annals and Mag. Nat. Hist., 6th ser., xv, 384, notes and synonymy.  
Mass.—Harris; N. J.—Smith Cat.; Fla.—Johnson.
- cuniculi** CLARK, Trans. Linn. Soc., III, 299; Essay on Bots, 70, pl. II, f. 26 (*Estrus*).—Ga.; larva under skin of rabbits.  
FABRICIUS, Syst. Antl., 230 (*Estrus*).—Ga.  
WIEDEMANN, Auss. Zw., II, 256 (*Trypoderma*).—Ga.  
OLIVIER, Encycl. Méthodique, VIII, 464.  
MACQUART, Hist. Nat. Dipt., II, 47, pl. XIII, f. 17.—Ga.  
BRAUER, Mon. Cestrinen, 240; doubts if it be different from *horripilum*.  
RILEY and HOWARD, Insect Life, v, 137, extract from correspondence, on this species affecting rabbits in Va. and Ind.  
Mass.—O. S. Cat.
- emasculator** FITCH, see *fontinella*.
- fontinella** CLARK, Trans. Linn. Soc., xv, 410.—Ill.  
FITCH, 2d N. Y. Report, 210; 3d Rept., Suppl., 478-485 (*emasculator*).—N. Y.; larva lives in scrotum of chipmunk, *Tamias striatus*.  
WALKER, List, III, 683 (*americana* FABR.).—Nova Scotia.  
BRAUER, Mon. Cestrinen, 232, abstract of Fitch; 242, quotes Clark.  
LINTNER, 2d N. Y. Report, 45 (*emasculator*).—N. Y.; same habits.  
RILEY and HOWARD, Insect Life, I, 214, fig. of larva and notes (*emasculator*); occurs in other parts than the scrotum; probably affects several species of squirrels.  
VAN DER WULP, Biologia, Dipt., II, 1, oc. at Presidio, Mex. (*emasculator*).  
AUSTEN, Annals and Mag. Nat. Hist., ser. 6, xv, 384, desc.; XVI, 152, notes and syn. of Walker.  
COQUILLETT, Canad. Ent., XXX, 9, syn. of *emasculator*, from Fitch's type.



- funnebris** AUSTEN, Annals and Mag. Nat. Hist., ser. 6, xv, 378, pl. XIII, f. 1, 1b.—Trinidad, W. I.; larva in Spiny Rat, *Loncheres Guianæ*. Quotes circular by Hart, Botanical Dept., Trinidad, on rearing the larvæ.
- histrion** COQUILLET, Proc. U. S. N. M., xxv, 103.—Guanaxuato, Mex.
- horripilum** CLARK, Essay on Bots, 70, pl. II, f. 27.—Savannah, Ga.  
WIEDEMANN, Auss. Zw., II, 257 (*Trypoderma*).—Ga.  
WALKER, List, III, 683, oc. in Nova Scotia.  
BRAUER, Mon. Cestriden, 235, pl. IV and VI.—N. Y., Ga.  
LUGGER, 2d Rept. Ent. Minn., 1896, 229, fig., no desc.—Minn.  
See also *cuniculi*.
- latifrons** COQUILLET, Canad. Ent., xxx, 10.—Los Angeles Co., Cal.
- leporivora** COQUILLET, Canad. Ent., xxx, 9, 10 (*leporivora*).—Cal., Wyo.; bred from the cotton-tail rabbit.  
JOHNSON, Ent. News, XII, 293, oc. at Beulah, N. M.  
COQUILLET, Proc. U. S. N. M., xxv, 104, important addition to desc.  
Beulah, N. M.—Skinner.
- lepusculi** TOWNSEND, Psyche, 1897, 8, desc.; Psyche, 1892, 299, description of larva from cotton-tail rabbit; Insect Life, v, 319, refers larva to *fontinella* CLK.—New Mexico and Colorado.  
AUSTEN, Annals and Mag. Nat. Hist., ser. 6, xv, 384, shows that Townsend's species is not *fontinella*.
- nitida** COQUILLET, Canad. Ent., xxx, 10.—Los Angeles Co., Cal.  
TOWNSEND, Psyche, 1898, 268, oc. in N. M., and notes.
- polita** COQUILLET, Canad. Ent., xxx, 10.—National Park, Wyo.
- scutellaris** BRAUER, Mon. Cestriden, 230, pl. IV and VI.—N. A. Wash.—J. M. A.
- similis** JOHNSON, Trans. Amer. Ent. Soc., xxix, 101.—Beulah, N. M.
- sterilator** LUGGER, 2d Rept. Ent. Minn., 227-229, fig.—Minn.; larva supposed to live in scrotum of ground-squirrel, *Spermophilus tredecimlineatus*.
- tenebrosa** COQUILLET, Canad. Ent., xxx, 11.—Col., Cal., Ore.  
Piedmont, S. D.—J. M. A.
- terrisona** WALKER, see *atrox*.

## DERMATOBIA.

BRAUER, Verh. Zool.-Bot. Ges., 1860; Mon. Cestriden, 251, 1863.

No North American species have been described. The following papers relate to this genus:

SAY, "On the South American species of *Cestrus*, which inhabits the Human Body," Jour. Acad. Sci. Phil., II, 354, 1822; Compl. Works, II, 32.

RUDOLPH MATAS, M.D., paper by, on species infesting man in New Orleans; reprinted, with figs., in Insect Life, I, 76.

OSBORN, Insect Life, I, 226, quotes another account from Miss.

TOWNSEND, Psyche, Aug., 1892, 299, describes a larva from *Lepus californicus*; afterward refers it to *Bogeria*, q. v.

## TACHINIDÆ.

*Notc.*—The classification adopted follows closely that of Coquillett, Revision of the Tachinidæ, Bulletin of Division of Entomology, Technical series, No. 7, 1897. This work seems to embody a far clearer and more consistent idea of the genera than any other general work on the American species of the family. It includes, however, only the fauna of the United States, and that no farther than seen by the author. This has necessitated my adding a large number of

genera and species, which I have endeavored to distribute in accordance with the classification in the work mentioned. I cannot hope to have made a perfect success of this, considering the difficulty of the family.

The work of Brauer and Bergenstamm. *Vorarbeiten zu einer Monographie der Muscaria schizometopa*, forming parts IV, V and VI of the series called *Zweiflügler des Kaiserlichen Museums zu Wien*, is an elaborate and extensive work, characterized by a minute subdivision of the group into numerous so-called families, sections, super-genera, and genera. Although it shows an immense amount of patient and faithful study, it is vitiated by a failure to grasp the natural divisions between groups of the same category. Hence it must be used with caution, and much experience is necessary before one can judge of its authoritativeness in a particular case. The table contains many illusory characters, and the usefulness of the work is further marred by a succession of addenda, modifying the system in numerous parts, and making it still more difficult to follow.

The work of Townsend shows itself to have been powerfully influenced by the one just mentioned; hence there is a serious confusion of genera, and in some instances the same species is described several times under different genera, or in the same genus. The worst instance of this will be found under *Myiophasia anca*. This was not the result of carelessness but of a too narrow splitting up of genera and species, in the attempt to follow Brauer and Bergenstamm. The specific descriptions of Townsend are conscientious and faithful, and among the most recognizable of any in the family.

The extensive article by Van der Wulp on the Mexican and Central American fauna, published in vol. II of the *Diptera in Biologia Centrali-americana*, goes to the other extreme in the matter of genera, and the large genera in it are without exception heterogeneous collections, which can at present hardly be placed consistently in the system here adopted.

The descriptions by Bigot are in every way objectionable, almost always referred to the wrong genus, and seldom containing the essential data. Most fortunately, the types of nearly all the species have been examined by Brauer, who has elucidated them in accordance with his system in three articles in *Sitzungsberichten der Kaiserlichen Akademie der Wissenschaften (Mathematischen-Naturwissenschaftlichen Classe, Bd. CVI, CVII and CVIII)*. This makes it possible to arrange them fairly well in the present work.

The following tables of genera may be consulted:

TOWNSEND, *Proc. Ent. Soc. Wash.*, II, 92, 96; *Trans. Amer. Ent. Soc.*, XIX, 134.

VAN DER WULP, *Biologia, Dipt.*, II, 5 and 41.

COQUILLET, *Revision Tach.*, 30; this is most important.

The synonymy adopted by Coquillett in his *Revision* has been followed rather closely for the species included in that work, without giving credit in the references.

To facilitate reference through the index, I mention the following cases where the genus might not otherwise be found:

*Argyrophylax rostrata* Coq. has been placed in *Siphosturnia*.

*Ceromasia* Rond. is a synonym of *Masicera*; but only *chrysocephala* and *zonata* of Bigot have been placed there. His *abbreviata*, *pictigaster*, *quadrivittata* and *spinipes* will be found in *Hypostena*, while his *castanifrons* has been referred to *Prospberrya*.

*Chætolyga* is a synonym of *Winthemia*; but the species of Bigot will be found under *Exorista*, *Hypostena*, *Phorocera* and *Winthemia*.

*Dimorphomyia calliphoroides* BIGOT. Bull. Soc. Ent. France, 1885, has been found on examination of the type to consist of the head of a Syrphid glued to the body of a Muscid. See BRAUER, Sitzungsbericht Kaiserl. Akad., CVII, 14. We may say at least that it was admirably named!

*Eggonia* VAN DER WULP, mentioned by Brauer and Bergenstamm, Zweifl. Kaiserl. Mus., VI, 104, lacks a specific name for the type, and must have been a manuscript name on some of Van der Wulp's material.

*Eurigaster* MACQ. is a synonym of *Exorista*, but *E. septentrionalis* WALKER will be found under *Euphorocera claripennis*.

*Fabricia* DESV. is a synonym of *Echinomyia*, but Bigot's *F. infumata* will be found under *Archytas bicolor*.

*Loewia* EGGER; the species of Townsend all fall under *Myiophasia anca*.

*Lophosia setigena* THOMSON has been placed under *Clausicella*.

*Lydella doryphoræ* RILEY will be found under *Phorocera*, although the genus is a synonym of *Exorista*.

*Melanosphora diabroticæ* SHIMER is a *Celatoria*.

*Micropalpus* is a synonym of *Linnamyia*, but some of the species are placed under *Epalpus* and *Cuphocera*.

*Oplisa albifacies* BIGOT is referred to *Pseudodexia* by Brauer, and *O. nigri-facies* to *Medina*.

*Pachychaeta jarowchewskyi* PORTSCHINSKY, from Russian America, is listed by B. and B. among the material in the Vienna Museum; but I have found no other reference to it.

*Phasia atripennis* SAY is referred to *Xanthomelana*, and *jugatoria* to *Trichopoda pennipes*.

*Podotachina americana* B. B. is referred to *Tachina mella*, and *P. vibrissata* B. B. to *Euphorocera claripennis*.

*Pseudogermaria georgiæ* B. B. is referred to *Distichona*.

*Ptilocera americana* MACQ. is referred to *Phyto*.

*Pyrrosia ochracea* BIGOT is referred to *Æstrophasia*.

*Siphoniomyia melas* BIGOT is referred to *Trichophora analis*.

*Thysanomyia inermis* BIGOT, mentioned by Johnson, Dipt. of Florida, may be *Blepharipca inermis*, but I am not certain.

The species of *Tryphera* described by Townsend all go in *Polidca*.

*Viviana citrina* BIGOT will be found under *Chatona longiseta*; *georgiæ* in *Biomyia*; and *rufopygata* in *Lcskia*.

*Wahlbergia* is a synonym of *Besseria*, but Townsend's *atripennis* is a *Xanthomelana*.

*Xysta didyma* LOEW is a *Clytiomyia*.

#### CISTOGASTER.

LATREILLE, in Cuvier's Règne Anim., v, 1829.

DESVOIDY, Myodaires, 239, 1830 (*Pallasia*).

SCHINER, Fauna Austr., I, 411, 1862.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 156, 157 (the latter as *Gymnoclytia*), 1893.

TOWNSEND, Canad. Ent., XXV, 166; Annals and Mag. Nat. Hist., XX, 284, table of species; both articles contain speculations on the synonymy of the genus.

VAN DER WULP, Biologia, Dipt., II, 445, 1903, table of Mexican species.

*ferruginea* VAN DER WULP, Tijdschr. v. Ent., XXXV, 187; Biologia, Dipt., II, 448.

—Guerrero and Tabasco, Mex.

- griseonigra** VAN DER WULP, Tijdschr. v. Ent., xxxv, 187; Biologia, Dipt., II, 447.  
—Guerrero, Mex.
- hirticollis** VAN DER WULP, Tijdschr. v. Ent., xxxv, 187; Biologia, Dipt., II, 448.  
—Guerrero, Mex.
- immaculata** MACQUART, Dipt. Exot., II, 3, 233 (76), pl. VIII, f. 7.—Carolina.  
WALKER, List, IV, 692 (*Gymnosoma occidua*).—Nova Scotia.  
LOEW, Cent., IV, 88 (*divisa*).—Conn.  
WILLISTON, Trans. Amer. Ent. Soc., XIII, 296, female described (*divisa*).  
—Conn., Kans., Col., Cal.  
COQUILLET, Revis. Tachin., 43.—Canada to Texas and S. D.; Col., Cal.  
TOWNSEND, Canad. Ent., XXII, 66; Annals and Mag. Nat. Hist., XIX, 31  
and XX, 283. Notes on sexual differences, etc.  
FORBES, Psyche, 1893, 466, bred from ?*Leucania unipuncta* HAW.  
AXTON, N. Y.—M. and H.; Province of Quebec—Fyles.
- insularis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 351.—St. Vincent, W. I.
- melanosoma** VAN DER WULP, Tijdschr. v. Ent., xxxv, 186; Biologia, Dipt., II,  
446.—Guerrero, Mex.
- pallasii** TOWNSEND, Proc. Ent. Soc. Wash., II, 1891, 42.—S. D.  
COQUILLET, Canad. Ent., XXX, 233, not seen.  
*Note*.—The type looked to me like a melanian variety of *immaculata*.
- propinqua** VAN DER WULP, Tijdschr. v. Ent., xxxv, 187; Biologia, Dipt., II, 447.  
—Guerrero, Mex.
- ruficornis** VAN DER WULP, Tijdschr. v. Ent., xxxv, 186; Biologia, Dipt., II, 446.  
—Tabasco, Mex.  
TOWNSEND, Canad. Ent., XXV, 166, would refer to *Gymnosoma filiola*—that  
is, *G. fuliginosa* of this catalogue.
- subpetiolata** VAN DER WULP, Tijdschr. v. Ent., xxxv, 186; Biologia, Dipt., II,  
446.—Vera Cruz, Mex.
- variegata** VAN DER WULP, Tijdschr. v. Ent., xxxv, 187; Biologia, Dipt., II, 449.  
—Guerrero, Mex.  
GIGLIO-TOS, Ditt. del Mess., III, 6, notes.—Orizaba, Mex.

#### GYMNOSOMA.

- MEIGEN, Illig. Mag., II, 278, 1803.  
SCHINER, Fauna Austr., I, 409, 1862.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 153, 1893.
- fuliginosa** DESVOIDY, Myodaires, 237.—Carolina.  
WALKER, List, IV, 692 (*par*).—Nova Scotia.  
LOEW, Cent., X, 66 (*filiola*).—Texas.  
COQUILLET, Rev. Tachin., 43.—N. H. to Cal.; Canada; La., etc.  
Porto Rico—Roeder; N. M.—Townsend; Montreal—Chagnon; Axton, N.  
Y.—M. and H.
- occidua** WALKER, see *Cistogaster immaculata*.

#### ELIOZETA.

- RONDANI, Dipt. Ital. Prod., I, 82, 1856.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 150, 1889; V, 388,  
1891; VI, 157, 1893.
- americana** BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 407.—Ga.

#### PHORANTHA.

- RONDANI, Dipt. Ital. Prod., V, 21, 1862.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 149, 1899; VI,  
157, 1893.

- COQUILLET, Revis. Tachin., 43, 1897.
- bidwelli** HINE, Ohio Naturalist, II, 229, 1902.—Baldwin, Kans.
- calyptrata** COQUILLET, Revis. Tachin., 44.—D. C., Va., Ky.
- fenestrata** BIGOT, Annales, 1888, 255 (*Alophora*).—Nev.  
COQUILLET, Proc. U. S. N. M., xxv, 105, oc. at Moscow, Ida.  
For the *Alophora fenestrata* of Coquillett's Revision, 46, see *A. splendida*.
- humeralis** ROBERTSON, see *occidentis*.
- nigrens** VAN DER WULP, Tijdschr. v. Ent., xxxv, 185 (*Hyalomyia*); Biologia, Dipt., II, 443 (id.).—Guerrero, Mex.  
COQUILLET, Revis. Tachin., 43.—Los Angeles Co., Cal.
- occidentis** WALKER, Dipt. Saund., I, 260 (*Hyalomyia*).—U. S.  
BIGOT, Annales, 1888, 255 (*Alophora luctuosa*).—Nevada.  
TOWNSEND, Proc. Ent. Soc. Wash., II, 136 (*Hyalomyia punctigera, aldrichi, robertsonii* and *purpurascens*); Trans. Amer. Ent. Soc., xxii, 65 (*H. celer*); Annals and Mag. Nat. Hist., xx, 32 (*H. violascens*).—Va., S. D., Ill., N. M., and San Rafael, Vera Cruz, Mex.  
COQUILLET, Revis. Tachin., 44.—Ft. McLeod, British Amer. to Mex.; Md. to Cal.  
ROBERTSON, Canad. Ent., xxxiii, 285 (*pruinosa* and *humeralis*).—Carlinville, Ill. [J. M. A.]  
*Note*.—I examined Townsend's types, except *violascens*, and agree with Mr. Coquillett in the above synonymy.
- pruinosa** ROBERTSON, see *occidentis*.

## ALOPHORA.

- DESVOIDY, Myodaires, 293, 1830; op. cit., 298 (*Hyalomyia*).
- SCHINER, Fauna Austr., I, 401, 1862.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 149, 1889; VI, 157, 1893.
- HINE, Ohio Naturalist, II, 229, note on habits of this and *Phorantha*.
- VAN DER WULP, Biologia, Dipt., II, 440, 1903, table of Mexican species (*Hyalomyia*).
- Note*.—Some of the species published under *Hyalomyia* will be found under *Phorantha* and *Hyalomyodes*.
- æneovenstris** WILLISTON, Trans. Amer. Ent. Soc., XIII, 296 (*Hyalomyia*).—Wash.  
COQUILLET, Revis. Tachin., 45.—Wash., Ida., N. H., Va.  
N. J.—Smith Cat.
- argenteiceps** VAN DER WULP, Tijdschr. v. Ent., xxxv, 185 (*Hyalomyia*); Biologia, Dipt., II, 442 (id.).—Guerrero, Mex.
- diversa** COQUILLET, Revis. Tachin., 45.—Mass.; Oswego, N. Y.
- ecitonis** TOWNSEND, Annals and Mag. Nat. Hist., xx, 30 (*Hyalomyia*).—Vera Cruz, Mex.; hovering over an army of ants, *Eciton foreli*, and supposed to be parasitic on them.
- fenestrata** BIGOT, see *Phorantha*.
- fumosa** COQUILLET, Revis. Tachin., 46.—N. J., Va.
- grandis** COQUILLET, Revis. Tachin., 45.—Lufkin, Tex.; So. Ill.
- hebes** VAN DER WULP, Tijdschr. v. Ent., xxxv, 185 (*Hyalomyia*); Biologia, Dipt., II, 441 (id.).—Vera Cruz and Tabasco, Mex.
- luctuosa** BIGOT, see *Phorantha occidentis*.
- moerens** VAN DER WULP, Tijdschr. v. Ent., xxxv, 186 (*Hyalomyia*); Biologia, Dipt., II, 443 (id.).—Guerrero, Mex.

- munda** VAN DER WULP, Tijdschr. v. Ent., xxxv, 185 (*Hyalomyia*); Biologia, Dipt., II, 441, pl. XIII, f. 9 (id.).—Vera Cruz and Guerrero, Mex.
- nitida** COQUILLET, Revis. Tachin., 45.—Potomac Cr., Va.; Sherbrooke, Canada.
- ochriceps** VAN DER WULP, Tijdschr. v. Ent., xxxv, 185 (*Hyalomyia*); Biologia, Dipt., II, 442 (id.).—Guerrero, Mex.
- opaca** COQUILLET, Revis. Tachin., 44.—E. Wash.
- phasioides** COQUILLET, Revis. Tachin., 46.—Franconia, N. H.
- piceipes** VAN DER WULP, Tijdschr. v. Ent., xxxv, 186 (*Hyalomyia*); Biologia, Dipt., II, 443 (id.).—Guerrero, Mex.
- pulverea** COQUILLET, Revis. Tachin., 46.—Grimsby, Canada.
- splendida** COQUILLET, Proc. U. S. N. M., xxv, 105, footnote; Revis. Tachin., 46 *fenestrata* BIGOT.—N. H.
- subopaca** COQUILLET, Revis. Tachin., 47.—Woodbury, N. J.
- umbrifera** VAN DER WULP, Tijdschr. v. Ent., xxxv, 186 (*Hyalomyia*); Biologia, Dipt., II, 444 (id.).—Guerrero, Mex.
- umbrosa** VAN DER WULP, Tijdschr. v. Ent., xxxv, 186 (*Hyalomyia*); Biologia, Dipt., II, 444, pl. XIII, f. 10 (id.).—Guerrero, Mex.
- villosa** VAN DER WULP, Tijdschr. v. Ent., xxxv, 185 (*Hyalomyia*); Biologia, Dipt., II, 441 (id.).—Orizaba, Mex.

#### HIMANTOSTOMA.

- LOEW, Cent., iv, 87, 1863.
- sugens** LOEW, Cent., iv, 87.—Ill.

#### EUSCOPOLIA.

- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 123, 1892.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 199, 1893.
- dakotensis** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 123.—Brookings, S. D.

#### TRICHOPODA.

- LATREILLE, in Cuvier's Règne Anim., v, 512, 1829.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 147, 1889; VI, 155, 1893.
- COQUILLET, Revis. Tachin., 47, 1897.
- TOWNSEND, Ent. News, IV, 69, range and distribution of the genus; Proc. Ent. Soc. Wash., II, 137, numerous notes; Annals and Mag. Nat. Hist., XX, 273, notes and table of N. A. species.
- VAN DER WULP, Biologia, Dipt., II, 434, 1903, table of Mex. species.
- alipes** VAN DER WULP, Tijdschr. v. Ent., xxxv, 183, and Biologia, Dipt., II, 435.—Guerrero, Mex.
- cilipes** WIEDEMANN, Auss. Zweifl., II, 276, change of name and desc. FABRICIUS, Syst. Antl., 219 (*Thereva pennipes*).—Carolina.
- TOWNSEND, Proc. Ent. Soc. Wash., II, 140 (*aurantiaca*).—Va.
- COQUILLET, Revis. Tachin., 48.—Mass., D. C., Va., Ga., Fla., Mo., Kans., Tex.
- N. J.—Smith Cat.
- flava** ROEDER, Stett. Ent. Zeit., 1885, 343.—Porto Rico.
- TOWNSEND, Proc. Ent. Soc. Wash., II, 139, brief desc.
- formosa** WIEDEMANN, see *lanipes*.
- histrion** WALKER, see *plumipes*.
- lanipes** FABRICIUS, Syst. Antl., 220 (*Thereva*), male.—Carolina.
- WIEDEMANN, Auss. Zweifl., II, 268 and 270 (*lanipes* FABR., male, and *formosa*, female).—Carolina and Georgia.



- LOEW, Cent., iv, 89 (*radiata*).—D. C.
- TOWNSEND, Proc. Ent. Soc. Wash., II, 138 (*radiata* Lw.).
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 412, syn. of *formosa*.
- JOHNSON, Ent. News, XII, 294, same.
- GIGLIO-TOS, Ditt. del Mess., III, 6, oc. at Cuautla, Mex.
- COQUILLET, Revis. Tachin., 47.—Fla.: Waco, Tex.; Col.
- COQUILLET, Revis. Tachin., 48 (*formosa*).—D. C.; Waco, Tex.; Tehuantepec, Mex.
- TOWNSEND, Annals and Mag. Nat. Hist., XX, 276, etc., varieties of *formosa* and *lanipes* in Mexico.
- VAN DER WULP, Biologia, Dipt., II, 434.—Mex., several places.
- mexicana** MACQUART, Dipt. Exot., Suppl. I, 172.—Mex.
- nigricauda** BIGOT, Annales, 1876, 394.—Mex.
- BRAUER, Sitzungsbericht K. Akad., CVII, 16, note, "related to *ciliata* F."
- nigripes** VAN DER WULP, Tijdschr. v. Ent., XXXV, 184; Biologia, Dipt., II, 436.—Guerrero, Mex.
- nitidiventris** VAN DER WULP, Tijdschr. v. Ent., XXXV, 183; Biologia, Dipt., II, 435.—Atoyac, Mex.
- pennipes** FABRICIUS, Ent. Syst., IV, 348 (*Musca*); Syst. Antl., 219 (*Thereva hirtipes* and *pennipes*); I. c., 315 (*Ocyptera ciliata*).—Carolina; Carolina; N. A.
- WIEDEMANN, Auss. Zweifl., II, 272, 273, 274 (*pyrrhogaster, ciliata, and pennipes*).—S. A. ?; S. A.; N. A.
- SAY, Jour. Acad. Sci. Phil., VI, 172; Compl. Works, II, 364 (*Phasia jugatoria*).—Indiana.
- DESVOIDY, Myodaires, 285 (*haitensis*).—Hayti. [Roeder.]
- GIGLIO-TOS, Ditt. del Mess., III, 6, oc. in Orizaba and Cuernavaca, Mex. (*pyrrhogaster*). Also p. 7, oc. in Presidio and Orizaba, Mex. (*pennipes*).
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 412 (*pennipes* is the male, *ciliata* and *pyrrhogaster* the female).
- WILLISTON, Trans. Ent. Soc. Lond., 1896, 352, pl. XI, f. 100, oc. in St. Vincent, W. I.
- COQUILLET, Revis. Tachin., 48.—Grimsby, Canada, to Mexico; Fla. to S. Cal.; bred from *Anasa tristis* DEG.
- TOWNSEND, Annals and Mag. Nat. Hist., XX, 279.—Vera Cruz, Mex.
- CHITTENDEN, Bull. 33, n. ser., Div. of Ent., 25, fig., reared from *Lcftoglossus oppositus*.
- VAN DER WULP, Biologia, Dipt., II, 434, oc. Orizaba and N. Yucatan; notes.
- Guadeloupe—Wulp; Fla.—Johnson; N. J.—Smith Cat.; Porto Rico—Roeder.
- phasiana** TOWNSEND, Annals and Mag. Nat. Hist., XX, 282.—Vera Cruz, Mex.
- pilipes** FABRICIUS, Syst. Antl., 220 (*Thereva*).—S. A.
- WIEDEMANN, Auss. Zweifl., II, 272.—S. A.
- PERTY, Delectus Anim. art. Brasil., 186, pl. XXXVII, f. 5.—Brazil.
- TOWNSEND, Annals and Mag. Nat. Hist., XX, 279 (var. of *pennipes*).—Vera Cruz, Mex.
- VAN DER WULP, Biologia, Dipt., II, 437.—Mexico, several places.
- plumipes** FABRICIUS, Syst. Antl., 220 (*Thereva*).—Carolina.
- WIEDEMANN, Auss. Zweifl., II, 277.
- WALKER, List, IV, 697 (*histrion*).—No locality.

LOEW, Cent., iv, 90 (*trifasciata*).—Com.

COQUILLET, Revis. Tachin., 48.—D. C.; Texas; Napa Co., Cal.; bred from *Dissosteiira venusta* STAL.

N. J.—Smith Cat.; Inverness, Fla.—Johnson.

*pyrrhogaster* WIEDEMANN, see *pennipes*.

*squamipes* VAN DER WULP, Tijdschr. v. Ent., xxxv, 184; Biologia, Dipt., ii, 436, pl. xiii, f. 7.—Guerrero, Mex.

*subciliipes* TOWNSEND, Jour. N. Y. Ent. Soc., ii, 78.—San Domingo.

*tegulata* TOWNSEND, Annals and Mag. Nat. Hist., xix, 29; op. cit., 439, notes.—Vera Cruz, Mex.; N. Yucatan, etc.

#### ACAULONA.

VAN DER WULP, Biologia, Dipt., ii, 4, 1888.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 388, 1891; vi, 156, 1893.

*costata* VAN DER WULP, Biologia, Dipt., ii, 4, pl. iii, f. 1.—Orizaba, Mex.

GIGLIO-TOS, Ditt. del Mess., iii, 7, oc. in Orizaba, and notes.

TOWNSEND, Annals and Mag. Nat. Hist., xix, 29, near Vera Cruz.

#### HOMOGENIA.

VAN DER WULP, Tijdschr. v. Ent., xxxv, 184, 1892; Biologia, Dipt., ii, 437, 1903, table of species.

TOWNSEND, Canad. Ent., xxv, 166, 1893.

*latipennis* VAN DER WULP, Tijdschr. v. Ent., xxxv, 184; Biologia, Dipt., ii, 438, pl. xiii, f. 8.—Guerrero, Vera Cruz and Jalisco, Mex.

*nigroscutellata* VAN DER WULP, Tijdschr. v. Ent., xxxv, 184; Biologia, Dipt., ii, 439.—Guerrero, Mex.

*rufipes* VAN DER WULP, Tijdschr. v. Ent., xxxv, 184; Biologia, Dipt., ii, 438.—Guerrero and N. Yucatan, Mex.

#### GYMNOPHANIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 143, 1889; vi, 154, 1893.

*montana* COQUILLET, Revis. Tachin., 50.—White Mts., N. H.

#### HEMITHRIXION.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 357, 1891; vi, 157, 1893.

*œstriforme* BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 357.—Col.

#### MYIOPHASIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 362, 1891; vi, 170, 1893.

TOWNSEND, Trans. Amer. Ent. Soc., xviii, 369.—Dec., 1891—(*Phasioclista*); l. c., 371 (*Ennyomma*).

COQUILLET, Revis. Tachin., 50, 1897, pt. desc.

*ænea* WIEDEMANN, Auss. Zweifl., ii, 298 (*Tachina*).—Montevideo, S. A.

DESVOIDY, Myodaires, 288 (*Clytia atra*).—Carolina.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 362.—Montevideo, S. A., and Ga., N. A.

TOWNSEND, Trans. Amer. Ent. Soc., xviii, 370 (*Phasioclista metallica*); p. 371 (*Ennyomma clistoides*); Canad. Ent., xxiv, 77 (*Larvia ruficornis*

and *nigrifrons*); p. 78 (*Clytia americana*); Ent. News, III, 129 (*Lawia globosa*).—Ill. and Fla.; Ill.; Mich.; Ill.; Ill.; Fla.

COQUILLET, Revis. Tachin., 50, syn., etc.—N. H., Mass., Ga., Fla., Col., N. M.; reared from *Balaninus nasicus* SAY, *Chalcodermus* sp., and *Conotrachelus juglandis* LEC.

WEBSTER, Ent. News, x, 53, fig., and records rearing from *Ampelogypter sesostris*, a snout-beetle making galls on the grape-vine.

N. J.—Smith Cat.; White Mts., N. H.—Slosson; Fla.—Johnson; Beulah, N. M.—Skinner.

*Note*.—I examined Townsend's types, and agree with Coquillett in the synonymy.

**robusta** COQUILLET, Revis. Tachin., 50.—Los Angeles Co., Cal.; bred from larva of *Sphenophorus robustus* HORN.

#### MERIANIA.

DESVOIDY, Myodaires, 69, 1830.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 112, 1893.

COQUILLET, Proc. U. S. N. M., XXV, 119, 1902, note.

**chalybæa** COQUILLET, Proc. U. S. N. M., XXV, 119.—N. Idaho, several places.

#### PHYTO.

DESVOIDY, Myodaires, 218, 1830.

RONDANI, Dipt. Ital. Prod., IV, 140, 1861 (*Savia*).

? **americana** MACQUART, Hist. Nat. Dipt., II, 173 (*Ptilocera*).—Philadelphia.

OSTEN SACKEN, Catalogue, 155, note on genus, referring doubtfully to *Phyto*.

**clesides** WALKER, List, IV, 757 (*Tachina*).—N. A.

COQUILLET, Jour. N. Y. Ent. Soc., III, 99 (*setosa*); Revis. Tachin., 51, syn. and brief desc.—N. Ill. and Mo.

**nigricornis** TOWNSEND, see *Leucostoma senilis*.

**senilis** TOWNSEND, see *Leucostoma*.

#### MAUROMYIA.

COQUILLET, Revis. Tachin., 51, 1897.

**pulla** COQUILLET, loc. cit.—White Mts., N. H.

#### CRYPTOMEIGENIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 311, 1891.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 120, 1892 (*Emphanopteryx*).

**theutis** WALKER, List, IV, 778 (*Tachina*); 780 (*Tachina prisca*).—Nova Scotia.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 121 (*Emphanopteryx cumyothyroides*).—N. Y.

COQUILLET, Revis. Tachin., 52.—Toronto, Canada; N. H., Mass., N. Y., D. C., and Ill.; bred from *Lachnosterna inversa* HORN.

N. J.—Smith Cat.; Montreal—Chagnon; Axton, N. Y.—M. and H.

#### MEIGENIELLA.

COQUILLET, Proc. U. S. N. M., XXV, 104, 1902.

**hinei** COQUILLET, loc. cit.—Hanging Rock, Ohio.

#### CERATOMYIELLA.

TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 379, 1891.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 189, 1893.

- conica* TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 380.—Carlinville, Ill.  
*COQUILLET*, Revis. Tachin., 52.—D. C., S. Ill., Ga. N. J.—Smith Cat.

## LASIONA.

- VAN DER WULP, *Biologia*, Dipt., II, 127, 1890.  
*multisetosa* VAN DER WULP, *Biologia*, Dipt., II, 128, pl. III, f. 20, 20a.—Costa Rica.

## EULASIONA.

- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 119, 1892.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 199, 1893.  
 COQUILLET, Revis. Tachin., 52, brief desc., 1897.  
*comstocketii* TOWNSEND, Trans. Amer. Ent. Soc., XIX, 120.—Ithaca, N. Y.  
 COQUILLET, Revis. Tachin., 52.—N. Y., N. H., Ga.  
*setigena* COQUILLET, Revis. Tachin., 53.—Opelousas, La.  
*spinosa* COQUILLET, Revis. Tachin., 52.—Ft. Wrangel, Alaska.

## ADMONTIA.

- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 104, 1889; VI, 150, 1893.  
 COQUILLET, Revis. Tachin., 53, additional notes, 1897.  
 VAN DER WULP, *Biologia*, Dipt., II, 484, 1903.  
*americana* BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 410, listed, but not described.—N. A. See VAN DER WULP, *Biologia*, Dipt., II, 484.  
*degeerioides* COQUILLET, Jour. N. Y. Ent. Soc., III, 58 (*Hypostena*); Revis. Tachin., 54.—N. H., Mass., D. C., Ill., Ga. Montreal—Chagnon; N. J.—Smith Cat.  
*demylus* WALKER, List, IV, 779 (*Tachina*).—N. A.?  
 COQUILLET, Revis. Tachin., 53.—Md., D. C., Va.; bred from *Lophyrus abbottii* and *L. lecontei* FITCH. N. J.—Smith Cat.; Fla.—Johnson.  
*hylotomæ* COQUILLET, Canad. Ent., XXX, 233.—Wood's Hole, Mass.; bred from *Hylotoma humeralis* BEAUV.  
*limata* COQUILLET, Proc. U. S. N. M., XXV, 105.—Moscow, Idaho.  
*nasoni* COQUILLET, Jour. N. Y. Ent. Soc., III, 55; Rev. Tachin., 53.—N. Ill.  
*occidentalis* VAN DER WULP, Tijdschr. v. Ent., XXXV, 195; *Biologia*, Dipt., II, 485.—Guerrero, Mex.  
*pergandei* COQUILLET, Jour. N. Y. Ent. Soc., III, 54; Revis. Tachin., 54.—Mass., D. C., Miss. N. J.—Smith Cat.  
*polita* COQUILLET, Canad. Ent., XXX, 234.—N. Y., Fla.  
*retiniæ* COQUILLET, Revis. Tachin., 54.—Alameda, Cal.; bred from chrysalids of *Retinia* sp.  
*tarsalis* COQUILLET, Canad. Ent., XXX, 234.—Opelousas, La.  
*unispinosa* COQUILLET, Canad. Ent., XXX, 234.—Opelousas, La.

## PARADMONTIA.

- COQUILLET, Proc. U. S. N. M., XXV, 106, 1902.  
*brevis* COQUILLET, loc. cit.—Biscayne Bay, Fla.

## RHINOPHORA.

- DESVOIDY, *Myodaires*, 258, 1830.  
 SCHINER, *Fauna Austr.*, I, 545, 1862.  
 VAN DER WULP, *Biologia*, Dipt., II, 205, 1890.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 161, 1893.

*lævigata* VAN DER WULP, *Biologia*, Dipt., II, 205, pl. IV, f. 17, 17a.—Vera Cruz, Mex.

GIGLIO-TOS, *Ditt. del Mess.*, III, 53, oc. in Mex.

*mexicana* TOWNSEND, *Trans. Amer. Ent. Soc.*, XXIV, 168.—Las Cruces, N. M.

*valida* TOWNSEND, *Trans. Amer. Ent. Soc.*, XXIV, 167.—Las Cruces, N. M.

#### SARCOCLISTA.

TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 122, 1892.

*dakotensis* TOWNSEND, *loc. cit.*—Brookings, S. D.

#### CLISTA.

MEIGEN, *Syst. Besch.*, VII, 208, 1838.

SCHINER, *Fauna Austr.*, I, 541, 1862.

*americana* TOWNSEND, see *Myiophasia inca*.

*muscæformis* VAN DER WULP, *Biologia*, Dipt., II, 207, pl. IV, f. 18, 18a.—Vera Cruz, Mex.

#### MEDINA.

DESVOIDY, *Myodaires*, 138, 1830.

MEIGEN, *Syst. Besch.*, VII, 240, 1838 (*Degeeria*).

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 106 (*Amcdoria*): v. 356, syn.

VAN DER WULP, *Biologia*, Dipt., II, 150, 1890, table of Mexican spp. (*Degeeria*).

COQUILLET, *Revis. Tachin.*, 55, 1897.

*albomarginata* VAN DER WULP, *Biologia*, Dipt., II, 155 (*Degeeria*).—Morelos and Orizaba, Mex.

? *anthracina* BIGOT, *Annales*, 1888, 259 (*Degeeria*).—Mex.

GIGLIO-TOS, *Ditt. del Mess.*, III, 47 (id.).—Mex.

BRAUER, *Sitzungsbericht k. Akad.*, CVI, 35, notes on type, genus doubtful.

*basalis* VAN DER WULP, *Biologia*, Dipt., II, 152 (*Degeeria*).—Guerrero, Mex.

? *compressa* VAN DER WULP, *Biologia*, Dipt., II, 152, pl. IV, f. 9, 9a (*Degeeria*).—Guerrero and Vera Cruz, Mex.

BRAUER, *Sitzungsbericht k. Akad.*, CVI, 34, doubts generic position; probably same genus as *cora* BIGOT.

? *cora* BIGOT, *Annales*, 1888, 259 (*Degeeria*).—Mex.

BRAUER, *Sitzungsbericht k. Akad.*, CVI, 34, type redesc.; genus doubtful.

*cruralis* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 158, 1893; *Ditt. del Mess.*, III, 49 (both *Degeeria*).—Mex.

*dicax* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 158, 1893; *Ditt. del Mess.*, III, 49 (both *Degeeria*).—Mex.

*hyalinipennis* VAN DER WULP, *Biologia*, Dipt., II, 152 (*Degeeria*).—Guerrero, Mex.

*insecta* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 158, 1893; *Ditt. del Mess.*, III, 48 (both *Degeeria*).—Mex.

*lateralis* MACQUART (*Degeeria*), see *Mctopia leucocephala*.

*leucocycla* VAN DER WULP, *Biologia*, Dipt., II, 154 (*Degeeria*).—Guerrero and Vera Cruz, Mex. St. Augustine and Tick Id., Fla.—Johnson.

*longifacies* B. B., see *nigrifacies*.

*longipes* VAN DER WULP (*Degeeria*), see *nigrifacies*.

*magnicornis* VAN DER WULP, *Biologia*, Dipt., II, 153 (*Degeeria*).—Vera Cruz and Guerrero, Mex.

*mexicana* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 158, 1893; *Ditt. del Mess.*, III, 46 (both *Degeeria*).—Orizaba, Mex.

- monochroma* VAN DER WULP, *Biologia*, Dipt., II, 154 (*Degeeria*).—Vera Cruz, Mex.
- nervosa* VAN DER WULP, *Biologia*, Dipt., II, 155 (*Degeeria*).—Guerrero, Mex.
- nigrifacies* BIGOT, *Annales*, 1888, 268 (*Oplisa*).—Mex.
- VAN DER WULP, *Biologia*, Dipt., II, 155 (*Deg. longipes*); 264, synonymy. —Omiteme, Mex.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 356, note (*Degeeria longifacies*).
- nigriventris* WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 359, pl. XI, f. 96 (*Degeeria*).—St. Vincent, W. I.
- ? *nigrocostalis* VAN DER WULP, *Biologia*, Dipt., II, 151, pl. IV, f. 10 (*Degeeria*).—Guerrero and Orizaba, Mex.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 183, doubt generic position.
- nitidiuscula* VAN DER WULP, *Biologia*, Dipt., II, 151 (*Degeeria*).—Guerrero, Mex.
- washingtonæ* COQUILLET, *Jour. N. Y. Ent. Soc.*, III, 104 (*Degeeria*); *Revis. Tachin.*, 55.—Mt. Washington, N. H.

#### SCHIZOTACHINA.

- WALKER, *Dipt. Saund.*, 61, 1856.
- convecta* WALKER, *Dipt. Saund.*, 276 (*Tachina*); 277 (*Tachina crul*).—U. S.
- COQUILLET, *Revis. Tachin.*, 55.—Mass., Tex., Col.

#### CLAUSICELLA.

- RONDANI, *Dipt. Ital. Prod.*, I, 61, 1856.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 144, 1893 (*Argyromima*).
- COQUILLET, *Revis. Tachin.*, 55, additional desc., 1897.
- johnsoni* COQUILLET, *Revis. Tachin.*, 55.—Natrona, Penn.
- setigera* THOMSON, *Eugenies Resa*, 527 (*Lophosia*).—Cal.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 408, refer to *Argyromima*.
- COQUILLET, *Jour. N. Y. Ent. Soc.*, III, 56 (*antennalis*); *Rev. Tachin.*, 56.—S. Cal. and Wyoming.
- tarsalis* COQUILLET, *Jour. N. Y. Ent. Soc.*, III, 56; *Revis. Tachin.*, 56.—N. H., Md., Ill. White Mts., N. H.—Slosson.
- usitata* COQUILLET, *Revis. Tachin.*, 56.—White Mts., N. H., and Mass.

#### NEÆRA.

- DESVOIDY, *Myodaires*, 84, 1830.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 103, 1889; VI, 98, 1893.
- longicornis* COQUILLET, *Proc. U. S. N. M.*, XXV, 106.—Oswego, N. Y.

#### PLECTOPS.

- COQUILLET, *Revis. Tachin.*, 57, 1897.
- melissopodis* COQUILLET, loc. cit.—D. C. and Kirkwood, Mo.; bred from *Melissopus latiferrcana* WLSM.

#### LISPIDEA.

- COQUILLET, *Jour. N. Y. Ent. Soc.*, III, 51, 1895; *Revis. Tachin.*, 51, 1897.
- palpiger* COQUILLET, *Jour. N. Y. Ent. Soc.*, III, 51; *Revis. Tachin.*, 57.—Canada and N. Ill.



## THRYPTOCERA.

MACQUART, Hist. Nat. Dipt., II, 87, 1835.

DESVOIDY, Annales Soc. Ent. France, 1851, 184 (*Herbstia*, preoc.).

VAN DER WULP, Biologia, Dipt., II, 127, notes, 1890.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 150, 1893; p. 187, agree with Desvoidy, Dipt. Env. Paris, I, 722, in making this a synonym of *Actia*.

*americana* TOWNSEND, see *Actia pilipennis*.

*atripes* COQUILLET, Revis. Tachin., 58.—New Bedford, Mass.

Beulah, N. M.—Skinner.

*dunningii* COQUILLET, see *Hypostena*.

*flavipes* COQUILLET, Revis. Tachin., 58; Proc. Wash. Acad. Sci., II, 438, oc. in Alaska.

White Mts., N. H.

## ANISIA.

VAN DER WULP, Biologia, Dipt., II, 186, 1890, def. and table of Mexican species.

*aberrans* VAN DER WULP, Biologia, Dipt., II, 198.—Guerrero, Mex.

*accedens* VAN DER WULP, Biologia, Dipt., II, 196.—Guerrero, Mex.

*aegrota* VAN DER WULP, Biologia, Dipt., II, 192.—Sierra de las Aguas Escondidas, Mex.

*albifrons* VAN DER WULP, see *Pseudodecia*.

*approximata* VAN DER WULP, Biologia, Dipt., II, 202.—Guerrero, Mex.

*ciliicans* VAN DER WULP, Biologia, Dipt., II, 194.—Morelos, Mex.

*ciliata* VAN DER WULP, Biologia, Dipt., II, 203.—Morelos, Mex.

*cineraria* VAN DER WULP, Biologia, Dipt., II, 189.—Guerrero, Mex.

*congerens* VAN DER WULP, Biologia, Dipt., II, 194.—Guerrero, Mex.

*conspicua* VAN DER WULP, Biologia, Dipt., II, 199.—Guerrero, Mex.

*fatua* VAN DER WULP, Biologia, Dipt., II, 197.—Guerrero, Mex.

*fulvipennis* VAN DER WULP, Biologia, Dipt., II, 190, pl. IV, f. 15, 15a.—Guerrero and Tabasco, Mex.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 356, note.

*gagatina* VAN DER WULP, Biologia, Dipt., II, 201.—Guerrero, Mex.

*inepta* VAN DER WULP, Biologia, Dipt., II, 195.—Guerrero, Mex.

*infima* VAN DER WULP, Biologia, Dipt., II, 204.—Guerrero, Mex.

*inflexa* VAN DER WULP, Biologia, Dipt., II, 188.—Guerrero, Mex.

*intrusa* VAN DER WULP, Biologia, Dipt., II, 193.—Guerrero, Mex.

*macroptera* VAN DER WULP, Biologia, Dipt., II, 198.—Mexico City.

*misella* VAN DER WULP, Biologia, Dipt., II, 204.—Guerrero, Mex.

*mionella* VAN DER WULP, Biologia, Dipt., II, 195.—Guerrero, Mex.

*mucorea* VAN DER WULP, Biologia, Dipt., II, 199.—Guerrero and Morelos, Mex.

*neglecta* VAN DER WULP, Biologia, Dipt., II, 191.—Guerrero, Mex.

*nigella* VAN DER WULP, Biologia, Dipt., II, 193.—Tabasco, Mex.

GIGLIO-TOS, Ditt. del Mess., III, 51, note.—Mex.

*nigrithorax* VAN DER WULP, Biologia, Dipt., II, 197.—Vera Cruz and Tabasco, Mex.

*nigrocincta* VAN DER WULP, Biologia, Dipt., II, 201.—Guerrero, Mex.

*niveomarginata* VAN DER WULP, Biologia, Dipt., II, 200.—Guerrero, Mex.

*obscurifrons* VAN DER WULP, Biologia, Dipt., II, 197.—Tabasco, Mex.

*opaca* VAN DER WULP, Biologia, Dipt., II, 200.—Guerrero, Mex.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 356, "related to *Gymnostylia*."

- GIGLIO-TOS, Ditt. del Mess., III, 52, oc. at Coscom, Mex.  
*ophthalmica* VAN DER WULP, Biologia, Dipt., II, 203.—Guerrero, Mex.  
*pallidipalpis* VAN DER WULP, Biologia, Dipt., II, 190.—Tabasco, Mex.  
*palposa* VAN DER WULP, Biologia, Dipt., II, 202.—Vera Cruz, Mex.  
*peregrina* VAN DER WULP, Biologia, Dipt., II, 196.—Guerrero, Mex.  
*pulicaria* VAN DER WULP, Biologia, Dipt., II, 191.—Orizaba, Mex.  
*pullata* VAN DER WULP, Biologia, Dipt., II, 195.—Guerrero, Mex.  
*remissa* VAN DER WULP, Biologia, Dipt., II, 201.—Guerrero, Mex.  
*rubripes* VAN DER WULP, Biologia, Dipt., II, 189.—Vera Cruz, Mex.  
*ruficoxa* VAN DER WULP, Biologia, Dipt., II, 190.—Tabasco, Mex.  
*signata* VAN DER WULP, Biologia, Dipt., II, 193.—Vera Cruz, Mex.  
*similis* VAN DER WULP, Biologia, Dipt., II, 203.—Guerrero, Mex.  
*stolidula* VAN DER WULP, Biologia, Dipt., II, 192.—Guerrero, Mex.  
*triflata* VAN DER WULP, Biologia, Dipt., II, 192.—Guerrero, Mex.  
*umbrina* VAN DER WULP, Biologia, Dipt., II, 200.—Tabasco, Mex.  
*vanderwulpi* TOWNSEND, Ent. News, III, 81.—Jamaica.

## EURYCEROMYIA.

- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 115, 1892.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 198, 1893.  
*robertsonii* TOWNSEND, Trans. Amer. Ent. Soc., XIX, 115.—S. III.

## SPHÆRINA.

- VAN DER WULP, Biologia, Dipt., II, 205, 1890.  
*nitidula* VAN DER WULP, loc. cit., pl. IV, f. 16, 16a.—Tabasco, Mex.

## ACTIA.

- DESVOIDY, Myodaires, 85 and 86 (*Actia* and *Ceromya*), 1830.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 103, 1889 (*Gymnopardia*); VI, 226 and 228, syn., 1893.  
 COQUILLET, Revis. Tachin., 58, note, 1897.  
*palloris* COQUILLET, Jour. N. Y. Ent. Soc., III, 50 (*Lasioncura*); Revis. Tachin., 58.—White Mts., N. H.  
*pilipennis* FALLÉN, Dipt. Suec. Muscides, 18, 1820 (*Tachina*).—Europe.  
 MEIGEN, Syst. Besch., IV, 352 (*Tachina*).  
 SCHINER, Fauna Austr., I, 518 (*Thryptocera*).  
 ZETTERSTEDT, Dipt. Scand., III, 1045 (*Tachina*).  
 TOWNSEND, Canad. Ent., XXIV, 69 (*Thryptocera americana*).—D. C.  
 COQUILLET, Revis. Tachin., 59.—White Mts., N. H.; D. C.; So. Ill.; Germany.  
 N. J.—Smith Cat.

## LASIONEURA.

- COQUILLET, Jour. N. Y. Ent. Soc., III, 50, 1895.  
*johnsoni* COQUILLET, Jour. N. Y. Ent. Soc., III, 50; Revis. Tachin., 59.—Santa Cruz Co., Cal.; Wash.  
 Beulah, N. M.—Skinner.  
*palloris* COQUILLET, see *Actia*.

## CHÆTOPHLEPS.

- COQUILLET, Jour. N. Y. Ent. Soc., III, 51, 1895.  
*nebulosa* COQUILLET, of Smith's New Jersey Catalogue, probably refers to *Sci-asma nebulosa*, q. v.

- polita** COQUILLET, Proc. U. S. N. M., xxv, 107.—Brookings, S. D.  
**rostrata** COQUILLET, Canad. Ent., xxx, 235.—Biscayne Bay, Fla., and Opelousas, La.  
**setosa** COQUILLET, Jour. N. Y. Ent. Soc., III, 51; Revis. Tachin., 59.—Mass., Md., D. C.

## CELATORIA.

- COQUILLET, Insect Life, II, 235, 1890; Psyche, 1895, 251.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 189, 1893.  
**diabroticæ** SHIMER, Amer. Naturalist, v, 219 (*Melanosphora*). Bred from *Diabrotica vittata* FABR.  
 COQUILLET, Insect Life, II, 235 (*cravii*), bred from adult *Diabrotica soror* LEC. at Los Angeles, Cal.; Revis. Tachin., 59, bred from *Diabrotica duodecimpunctata* OLIV., and *D. vittata* FABR.—D. C., Texas, Cal.  
**spinosa** COQUILLET, Revis. Tachin., 60.—N. H., S. Cal., Idaho, Mich. N. J.—Smith Cat.

## POLYGASTER.

- VAN DER WULP, Biologia, Dipt., II, 139, 1890.  
**egregia** VAN DER WULP, loc. cit., pl. IV, f. 3, 3a.—Tabasco, Mex.

## HYPOSTENA.

- MEIGEN, Syst. Besch., VII, 239, 1838.  
 SCHINER, Fauna Austr., I, 537, 1862.  
 VAN DER WULP, Biologia, Dipt., II, 140, table of Mexican species, 1890.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 374, 1891; VI, 151, 1893 (*Gymnostylia*, pt.).  
 TOWNSEND, Trans. Amer. Ent. Soc., XIX, 130, 1892 (*Tachinophyto* and *Pseudomyiothyria*).  
**abbreviata** BIGOT, Annales, 1888, 262 (*Ceromasia*).—Mex.  
 BRAUER, Sitzungsbericht k. Akad., CVI, 16, gen. ref., from type.  
**ænea** COQUILLET, Jour. N. Y. Ent. Soc., III, 57; Revis. Tachin., 62.—Los Angeles Co., Cal.  
**albocingulata** VAN DER WULP, Biologia, Dipt., II, 148.—Costa Rica.  
**albopicta** BIGOT, Annales, 1888, 258 (*Chatolyga*).—Mex.  
 BRAUER, Sitzungsbericht k. Akad., CVI, 23, gen. ref., from type (*Gymnostylia*).  
**barbata** COQUILLET, Jour. N. Y. Ent. Soc., III, 57 and 58 (the latter as *pusilla*); Revis. Tachin., 62.—White Mts., N. H., to Allende, Mex.; Ga. to Wash.; reared from *Coptocycla clavata* FABR. and *Disonycha xanthomclena* DALM.  
 Axton, N. Y.—M. and H.  
**blandita** VAN DER WULP, see *triangulifera*.  
**concinna** VAN DER WULP, Biologia, Dipt., II, 142.—Guerrero, Mex.  
 GIGLIO-TOS, Ditt. del Mess., III, 51, note.—Mex.  
**cylindriventris** VAN DER WULP, Biologia, Dipt., II, 145.—Guerrero, Mex.  
**degeerioides** COQUILLET, see *Admontia*.  
**deplanata** VAN DER WULP, Biologia, Dipt., II, 147.—Costa Rica.  
**dunningii** COQUILLET, Jour. N. Y. Ent. Soc., III, 54 (*Thryptocera*); Revis. Tachin., 60.—Canada, Mass., Conn., D. C., N. C., N. Ill.  
 N. J.—Smith Cat.  
**elegans** VAN DER WULP, Biologia, Dipt., II, 143.—Guerrero, Mex.  
**flaveola** COQUILLET, Revis. Tachin., 61.—Franconia, N. H.; N. C.  
 N. J.—Smith Cat.

- flavocalyptrata** VAN DER WULP, *Biologia*, Dipt., II, 147, pl. IV, f. 8.—Costa Rica.
- floridensis** TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 131 (*Tachinophyto*).—Fla. COQUILLET, *Revis. Tachin.*, 62.—N. H., D. C., Va., N. C., Ga., Miss., Fla., Jamaica, N. Ill.; reared from *Blastobasis nubiliclla* ZELL. and *Schizocera ebena* NORTON. N. J.—Smith Cat.
- golvipes** COQUILLET, *Revis. Tachin.*, 61.—Mass., N. J., Ga.
- immunda** VAN DER WULP, *Biologia*, Dipt., II, 148.—Vera Cruz and Tabasco, Mex.
- indecisa** TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 132 (*Pseudomyiothyria*).—Ill. COQUILLET, *Revis. Tachin.*, 62, places this as a synonym of *floridensis*; an examination of the types of both convinces me that they are distinct.
- Inverness, Fla.—Johnson.
- leucophæa** VAN DER WULP, *Biologia*, Dipt., II, 141.—Guerrero, Mex.
- maculosa** COQUILLET, *Proc. Acad. Nat. Sci.*, 1895, 313; *Revis. Tachin.*, 63.—St. Augustine, Fla.
- melaleuca** VAN DER WULP, *Biologia*, Dipt., II, 145, pl. IV, f. 6.—Tabasco, Mex.
- minima** VAN DER WULP, *Biologia*, Dipt., II, 148.—Tabasco, Mex.
- nigripalpis** BIGOT, *Annales*, 1888, 259 (*Chatolyga*).—Mex.
- BRAUER, *Sitzungsbericht k. Akad.*, CVI, 21, refers to *Gymnostylia*, from type.
- nitens** COQUILLET, *Revis. Tachin.*, 63.—Biscayne Bay, Fla.
- nubilosa** VAN DER WULP, *Biologia*, Dipt., II, 149.—Guerrero, Mex.
- obumbrata** VAN DER WULP, *Biologia*, Dipt., II, 143.—Guerrero and Vera Cruz, Mex.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 375, make this the type of a new genus, *Ptilodegceria*; VI, 133, same is referred to the *Dexiida*.
- pedestris** WALKER, *Dipt. Saund.*, 313 (*Dexia*).—U. S.
- COQUILLET, *Revis. Tachin.*, 61.—S. Cal.
- Note*.—Thè *Masicera cucerata* of Bigot, referred here by Coquillett, will be found in *Leskia*.
- pictigaster** BIGOT, *Annales*, 1888, 261 (*Ceromasia*).—Mex.
- BRAUER, *Sitzungsbericht k. Akad.*, CVI, 15, refers to *Gymnostylia*, from type.
- pilosa** VAN DER WULP, *Biologia*, Dipt., II, 144, pl. IV, f. 7.—Guerrero and Morelos, Mex.
- quadristriata** VAN DER WULP, *Biologia*, Dipt., II, pl. IV, f. 5, 5a.—Costa Rica.
- quadrivittata** BIGOT, *Annales*, 1888, 261 (*Ceromasia*).—Mex.
- BRAUER, *Sitzungsbericht k. Akad.*, CVI, 16, gen. ref., from type.
- setinervis** COQUILLET, *Canad. Ent.*, XXX, 236.—Biscayne Bay, Fla.
- spinipes** BIGOT, *Annales*, 1888, 262 (*Ceromasia*).—Mex.
- BRAUER, *Sitzungsbericht k. Akad.*, CVI, 16, note; gen. ref., from type.
- strigosa** VAN DER WULP, *Biologia*, Dipt., II, 146.—Tabasco, Mex.
- subtilis** VAN DER WULP, *Biologia*, Dipt., II, 149.—Guerrero, Mex.
- tortricis** COQUILLET, *Jour. N. Y. Ent. Soc.*, III, 55 (*Pseudomyiothyria*); *Revis. Tachin.*, 60.—N. J., S. Cal., Ida.; bred from a Tortricid on *Solanum*. Beulah, N. M.—Skinner.
- triangulifera** BIGOT, *Annales*, 1888, 268 (*Homoderia*).—Mex.
- VAN DER WULP, *Biologia*, Dipt., II, 142, pl. IV, f. 4 (*blandita*); 264, syn.—Guerrero and Orizaba in Mex.; Costa Rica.
- GIGLIO-TOS, *Ditt. del Mess.*, III, 51, note.—Mex.
- turbinata** VAN DER WULP, *Biologia*, Dipt., II, 146.—Vera Cruz, Mex.

- umbripennis** VAN DER WULP, *Biologia, Dipt.*, II, 144.—Tabasco, Mex.  
**vanderwulpi** TOWNSEND, *Ent. News*, III, 131 (*Myothyria*).—S. Fla.  
 COQUILLET, *Revis. Tachin.*, 63.—S. Cal., S. Fla. Also *Proc. U. S. N. M.*, XXII, 254, oc. in Porto Rico. Inverness, Fla.—Johnson.  
**variabilis** COQUILLET, *Jour. N. Y. Ent. Soc.*, III, 57; *Revis. Tachin.*, 62.—N. H. to S. Cal.; bred from *Carpocapsa pomonella* LINN., *Pyrausta penitatis* GR., and a Tenthredinid. Montreal—Chagnon.

## DIDYMA.

- VAN DER WULP, *Biologia, Dipt.*, II, 156, 1890, def. and table of Mexican species.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 337, is a mixture of genera, according to their standards.  
 COQUILLET, *Revis. Tachin.*, 63, notes, 1897.  
**albomicans** VAN DER WULP, *Biologia, Dipt.*, II, 162.—Orizaba and Guerrero, Mex.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 337; VI, 118, notes.  
**ambulatrix** VAN DER WULP, *Biologia, Dipt.*, II, 158.—Guerrero, Mex.  
**basilaris** VAN DER WULP, *Biologia, Dipt.*, II, 159.—Guerrero, Mex.  
**calyptrata** WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 359, pl. XI, f. 95.—St. Vincent, W. I.  
**commixta** VAN DER WULP, *Biologia, Dipt.*, II, 163.—Tabasco, Mex.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 402; VI, 122, refer to *Mesochata* (mentioned as *connexa*).  
**exigua** VAN DER WULP, *Biologia, Dipt.*, II, 160.—Guerrero, Mex.  
 COQUILLET, *Revis. Tachin.*, 63.—Kirkwood, Mo.  
**fuliginipennis** VAN DER WULP, *Biologia, Dipt.*, II, 164.—Guerrero, Mex.  
**inconspicua** VAN DER WULP, *Biologia, Dipt.*, II, 163.—Guerrero, Mex.  
 COQUILLET, *Revis. Tachin.*, 63.—Fla.  
**modesta** VAN DER WULP, *Biologia, Dipt.*, II, 160.—Guerrero, Mex.  
**moesta** VAN DER WULP, see *Myiopharus metopia*.  
**nigricolor** VAN DER WULP, *Biologia, Dipt.*, II, 158.—Vera Cruz and Tabasco, Mex.; Costa Rica.  
**otiosa** VAN DER WULP, *Biologia, Dipt.*, II, 159.—Guerrero, Mex.  
**pavida** VAN DER WULP, *Biologia, Dipt.*, II, 165.—Guerrero, Mex.  
**prompta** VAN DER WULP, *Biologia, Dipt.*, II, 161.—Guerrero, Mex.  
**pullula** VAN DER WULP, *Biologia, Dipt.*, II, 162.—Guerrero, Mex.  
 COQUILLET, *Proc. Wash. Acad. Sci.*, II, 438, oc. in Alaska.  
**timida** VAN DER WULP, *Biologia, Dipt.*, II, 161.—Guerrero, Mex.  
 COQUILLET, *Revis. Tachin.*, 63.—D. C.  
**vagabunda** VAN DER WULP, *Biologia, Dipt.*, II, 161.—Guerrero, Mex.  
**validinervis** VAN DER WULP, see *Paradidyma*.  
**volucris** VAN DER WULP, *Biologia, Dipt.*, II, 165.—Guerrero, Mex.

## MACQUARTIA.

- DESVOIDY, *Myodaires*, 204, 207, 209 (*Macquartia, Amedea, and Albinia*), 1830.  
 MACQUART, *Dipt. Exot., Suppl.*, I, 168, 1846 (*Aporia*).  
 VAN DER WULP, *Biologia, Dipt.*, II, 128, 1890, def. and table of Mexican species.  
 COQUILLET, *Revis. Tachin.*, 64, 1897.  
**acuminata** VAN DER WULP, *Biologia, Dipt.*, II, 130.—Guerrero, Mex.

*atrifrons* BIGOT, Annales, 1888, 259.—Mex.

*caloptera* BIGOT, Annales, 1888, 263 (*Tricholyga*).—Mex.

BRAUER, Sitzungsbericht k. Akad., cvI, 24, notes on type; refers to *Aporia*.

*elegans* GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 147, 1893; Ditt. del Mess., iii, 66, f. 15 (both *Aporia*).—Tuxpango, Mex.

*johnsoni* TOWNSEND, see *Hyalurgus*.

*pristis* WALKER, List, iv, 841 (*Deria*).—Mass.

TOWNSEND, Psyche, vi, 275 (*Aporia limacodis*).—N. Y.; bred from *Limacodes* sp.

COQUILLET, Revis. Tachin., 64.—N. H., Mass., D. C., Oreg., Cal.; bred from *Halisdota argentata* PACK.

N. J.—Smith Cat.

*setiventris* VAN DER WULP, Biologia, Dipt., ii, 129, pl. iii, f. 21, 21a.—Guerrero and Orizaba, Mex.

GIGLIO-TOS, Ditt. del Mess., iii, 50, note.—Solco, Mex.

*venusta* VAN DER WULP, Biologia, Dipt., ii, 130.—Guerrero, Mex.

*versicolor* VAN DER WULP, Biologia, Dipt., ii, 130.—Guerrero, Mex.

#### HYALURGUS.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., vi, 136, 1893.

*johnsoni* TOWNSEND, Canad. Ent., xxiv, 81 (*Macquartia*).—Pa.

COQUILLET, Revis. Tachin., 64.—Ill., Pa.

#### POLIDEA.

MACQUART, Annales Soc. Ent. France, 1848, 92.

MEIGEN, Syst. Besch., vii, 260, 1838 (*Harrisia*, preoc.).

RONDANI, Atti Soc. Ital. Sci. Nat., viii, 35, 1865 (*Somol:ja*).

COQUILLET, Revis. Tachin., 64, 1897.

*americana* TOWNSEND, Canad. Ent., xxiv, 78 (*Tryphera*).—Ill.

*areos* WALKER, List, iv, 766 (*Tachina*).—N. A.

TOWNSEND, Canad. Ent., xxiv, 79 (*Tryphera polidoides*); 82 (*Pol. americana*).—N. Y.; Mich.

COQUILLET, Revis. Tachin., 65.—Georgetown, Canada; N. H. to S. Cal. Montreal—Chagnon.

*Note.*—Coquillett makes Townsend's *Tryphera americana* a synonym of this also. I was able to ascertain from the types that Townsend's *Tryphera americana* is not identical with his *Polidea americana*, hence I separate the former from *areos*.

#### HYPOCHÆTA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 93, 1889.

*longicornis* SCHNER, Fauna Austr., i, 527 (*Fricaldskia*).—Europe.

COQUILLET, Revis. Tachin., 65, and footnote.—White Mts., N. H.

N. J.—Smith Cat.

#### PARAHYPOCHÆTA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 337, 1891.

*heteroneura* BRAUER and BERGENSTAMM, loc. cit.; vi, 117.—N. A.

#### METADORIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., vi, 117, 208, 1893.

*barbata* BIGOT, Annales, 1888, 260 (*Phorocera barbata*, and *melanocephs*).—Mex.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., vi, 117, 208 (*mericana*).—Mex.



BRAUER, Sitzungsbericht k. Akad., CVI, 19, syn.

VAN DER WULP, Biologia, Dipt., II, 79 (*Phorocera atriceps*); 483, syn. with *melanoceps*, from Bigot's type.—Guerrero and Orizaba, Mex.

#### PELATACHINA.

MEADE, Ent. Mo. Mag., XXX, 109, 1894.

DESVOIDY, Dipt. Env. de Paris, 1100, 1863 (*Myria*, preoc.).

*limata* COQUILLET, Proc. U. S. N. M., XXV, 107.—Lewiston, Idaho.

*pellucida* COQUILLET, Revis. Tachin., 65.—N. A.

#### RACODINEURA.

RONDANI, Dipt. Ital. Prod., IV, 31, 1861.

DESVOIDY, Myodaires, 145, 1830 (*Raselia*, preoc.).

*americana* COQUILLET, Revis. Tachin., 66.—Tifton, Ga.

#### ERVIA.

DESVOIDY, Myodaires, 225, 1830.

MACQUART, Dipt. Exot., II, 3, 74, 1843.

*triquetra* OLIVIER, Encycl. Méthodique, VIII, 423 (*Ocyptera*).—Carolina.

COQUILLET, Revis. Tachin., 66.—Miss., Texas.

#### LESKIA.

DESVOIDY, Myodaires, 100, 1830; loc. cit., 98 (*Myobia*, preoc.); Annales Soc. Ent. France, 1848, 461 (*Solicnia*); 474 (*Orillia*).

RONDANI, Dipt. Ital. Prod., V, 8, 1861 (*Anthoica*); 48 (*Pyrosia*).

VAN DER WULP, Biologia, Dipt., II, 132, 1890, notes and table of Mexican species (*Myobia*).

TOWNSEND, Trans. Amer. Ent. Soc., XXII, 75, 1895 (*Myobia*).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 140, 191, 1893 (*Myobia*).

COQUILLET, Revis. Tachin., 66, 1897, syn. and notes.

See also *Calodexia*.

*analis* SAY, Jour. Acad. Sci. Phil., VI, 177; Compl. Works, II, 366 (*Dexia*).—Ind.

COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 313 (*Myobia depile*); Revis. Tachin., 67.—Fla., N. Y., Mass., Kans.

N. J.—Smith Cat.; Fla.—Johnson.

*angulata* VAN DER WULP, Biologia, Dipt., II, 136 (*Myobia*).—Guerrero, Mex.

*argenteiceps* VAN DER WULP, Biologia, Dipt., II, 135 (*Myobia*).—Guerrero, Mex.

*diadema* WIEDEMANN, Auss. Zweifl., II, 382 (*Dexia*).—Brazil.

VAN DER WULP, Biologia, Dipt., II, 137, pl. IV, f. 2 (*Myobia*).—Mexico, several places; Costa Rica.

TOWNSEND, Trans. Amer. Ent. Soc., XXII, 76, oc. at Ithaca, N. Y. (*Myobia*); Canad. Ent., XXIV, 70, note (id.).

*eucerata* BIGOT, Annales, 1888, 263 (*Masicera*).—Cal.

COQUILLET, Revis. Tachin., 61, refers to *Hypostena pedestris*.

BRAUER, Sitzungsbericht k. Akad., CVI, 12, refers to *Myobia*, from type.

*flavicornis* VAN DER WULP, Biologia, Dipt., II, 133, pl. IV, f. 11 (*Myobia*).—Tabasco, Mex.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 376; VI, 131, notes.

GIGLIO-TOS, Ditt. del Mess., III, 50, note (*Myobia*).—Mex.

*flavipennis* WIEDEMANN, see *Stomatodexia*.

- gilensis* TOWNSEND, Psyche, 1897, 40 (*Myobia*).—Gila R., N. M.  
*grata* VAN DER WULP, Biologia, Dipt., II, 134 (*Myobia*).—Guerrero, Mex.  
*lepida* VAN DER WULP, Biologia, Dipt., II, 135 (*Myobia*).—Guerrero, Mex.  
*longipalpis* VAN DER WULP, Biologia, Dipt., II, 138 (*Myobia*).—Guerrero, Mex.  
*opima* VAN DER WULP, Biologia, Dipt., II, 136 (*Myobia*).—Guerrero and Morelos, Mex.  
 ? *rufopygata* BIGOT, Annales, 1888, 262 (? *Uiviana*).—Mex.  
 BRAUER, Sitzungsbericht k. Akad., CVI, 7, redesc. type; gen. ref. with a doubt.  
*scurra* VAN DER WULP, Biologia, Dipt., II, 134 (*Myobia*).—Guerrero, Mex.  
*succincta* VAN DER WULP, Biologia, Dipt., II, 133 (*Myobia*).—Guerrero, Mex.  
*thecata* COQUILLET, Jour. N. Y. Ent. Soc., III, 105 (*Myobia*); Revis. Tachin., 67.—Bucks and Delaware Cos., Pa. N. J.—Smith Cat.

## LESKIOMIMA.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 372, 1891; VI, 133, 1893.  
*tenera* WIEDEMANN, Auss. Zweifl., II, 251 (*Stomorxy*).—No locality.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 133, pt. desc.—N. A.  
 COQUILLET, Revis. Tachin., 67.—N. H., N. Y., Pa., Va., N. C., Fla.; reared from a Pyralid.  
 N. J.—Smith Cat.

## APINOPS.

- COQUILLET, Revis. Tachin., 67, 1897.  
*atra* COQUILLET, Revis. Tachin., 67.—S. Ill.

## PSEUDAPINOPS.

- COQUILLET, Proc. U. S. N. M., XXV, 108, 1902.  
*nigra* COQUILLET, loc. cit.—Moscow, Idaho.

## EUMYOTHYRIA.

- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 121, 1892.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 199, 1892  
*illinoisensis* TOWNSEND, Trans. Amer. Ent. Soc., XIX, 121.—Ill.

## LEUCOSTOMA.

- MEIGEN, Illig. Mag., II, 280, 1803.  
 DESVOIDY, Myodaires, 255, 1830 (*Clelia*).  
 RONDANI, Dipt. Ital. Prod., I, 76, 1856 (*Psalida*).  
 SCHINER, Fauna Austr., I, 542, 1862.  
 VAN DER WULP, Biologia, Dipt., II, 205, 1890.  
 COQUILLET, Revis. Tachin., 68, 1897, syn.  
 ? *analis* MEIGEN, Syst. Besch., IV, 290 (*Tachina analis* and *tetraptera*).—Europe.  
 SCHINER, Fauna Austr., I, 543.—Austria.  
 VAN DER WULP, Biologia, Dipt., II, 206, doubtfully identified from Guerrero, Mex.  
*atra* TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 380.—Carlinville, Ill.  
 COQUILLET, Revis. Tachin., 69.—N. H., Mass., N. Ill.  
*gravipes* VAN DER WULP, Biologia, Dipt., II, 207.—Guerrero, Mex.  
 ? *neomexicana* TOWNSEND, Canad. Ent., XXIV, 169.—Las Cruces, N. M.

- Note*.—Coquillett, in his Revision, puts this as a synonym of *senilis*; but he has since changed this in Proc. U. S. N. M., xxv, 109. From the types, I thought them hardly of the same genus, hence the interrogation.
- senilis** TOWNSEND, Canad. Ent., xxiv, 81 (*Phyto*); 170 (*Phyto nigricornis*).—N. Y.; Las Cruces, N. M.  
COQUILLET, Revis. Tachin., 69.—Md., Ga., N. M., Col., Wash.  
N. J.—Smith Cat.  
See note under *neomexicana*.
- subopaca** COQUILLET, Revis. Tachin., 68.—Clementon, N. J.

## SCIASMA.

- COQUILLET, Revis. Tachin., 69, 1897.  
**nebulosa** COQUILLET, loc. cit.—Mass., N. J., Ga.

## HYALOMYODES.

- TOWNSEND, Psyche, 1893, 429.  
**dorsalis** COQUILLET, Proc. U. S. N. M., xxv, 108.—Moscow, Idaho.  
**triangulifera** LOEW, Cent., iv, 85 (*Hyalomyia*).—N. Y.  
TOWNSEND, Psyche, 1893, 429 (*veedii*).—N. H., Pa.  
COQUILLET, Revis. Tachin., 70.—N. H., Mass., Pa., Ga., Col. Also in Proc. U. S. N. M., xxv, 109, female desc.

## ŒSTROPHASIA.

- BRÄUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 145, 1889; loc. cit., 146 (*Phasiopteryx*); vi, 159, 1893 (id.).  
VAN DER WULP, Biologia, Dipt., II, 165, 1890 (*Neoptera*); loc. cit., 166 (*Ctenosoma*).  
TOWNSEND, Trans. Amer. Ent. Soc., xix, 133, 1892 (*Euœstrophasia*).  
COQUILLET, Revis. Tachin., 70, syn., etc., 1897.
- bilimekii** BRÄUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 147 (*Phasiopteryx*).—Orizaba, Mex.  
VAN DER WULP, Biologia, Dipt., II, 166, pl. iv, f. II, 12 (*Neoptera rufa*).—Vera Cruz and Tabasco, Mex. [B. B.]  
GIGLIO-TOS, Ditt. del Mess., III, 52, identifies this with *ochracea* BIGOT; but Bräuer's study of the type of the latter indicates the contrary.  
TOWNSEND, Proc. Cal. Acad. Sci., iv, 619, doubtfully identified from Lower Cal.; Annals and Mag. Nat. Hist., xix, 33, oc. at Vera Cruz, and notes.  
COQUILLET, Revis. Tachin., 71.—Texas.  
Georgiana, Fla.—Johnson.
- calva** COQUILLET, Proc. U. S. N. M., xxv, 109.—Williams, Ariz.; Ottawa, Canada.
- clausa** BRÄUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 145.—Col. Also op. cit., vi, 158.  
GIGLIO-TOS, Ditt. del Mess., III, 52, note.—Cuautla, Mex.  
COQUILLET, Revis. Tachin., 70.—Tewksbury, Mass., and Veta Pass, Col.  
N. J.—Smith Cat.; Ormond, Fla.—Johnson.
- ochracea** BIGOT, Annales, 268, 1888 (*Pyrrosia*).—Mex.  
COQUILLET, Rev. Tachin., 71.—Ga., Texas, Col.  
BRÄUER, Sitzungsbericht k. Akad., cvI, 42, refers to *Phasiopteryx*, from type.  
N. J.—Smith Cat.

- punctata** COQUILLET, Jour. N. Y. Ent. Soc., III, 52 (*Clytiomyia*); Revis. Tachin., 71.—Charlotte Harbor, Fla.
- setosa** COQUILLET, Proc. U. S. N. M., XXV, 110.—Col.
- signifera** VAN DER WULP, Biologia, Dipt., II, 167 (*Cenosoma*).—Guerrero and Vera Cruz, Mex.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 159, note.
- COQUILLET, Revis. Tachin., 70.—Toronto, Can.; N. H., Pa., Fla.
- N. J.—Smith Cat.

## CLYTIOMYIA.

- RONDANI, Dipt. Ital. Prod., IV, 9, 1861.
- DESVOIDY, Myodaires, 287, 1830 (*Clytia*, preoc.).
- TOWNSEND, Canad. Ent., XXIV, 79, 1892 (*Clistomorpha*).
- COQUILLET, Revis. Tachin., 71, 1897, notes.
- atrata** COQUILLET, Jour. N. Y. Ent. Soc., III, 53; Revis. Tachin., 71.—Wash.
- didyma** LOEW, Cent., IV, 86 (*Xysta*).—Ill.
- TOWNSEND, Canad. Ent., XXIV, 79 (*Clistomorpha hyalomoides*).—N. Y.
- COQUILLET, Canad. Ent., XXX, 233, syn.
- exilis** COQUILLET, see *Eutrixa masuria*.
- flava** TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 372 (*Clytia*).—Carlinville, Ill.
- COQUILLET, Revis. Tachin., 71.—N. H., Miss.
- ochracea** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 53 (both *Clistomorpha*).—Mex.
- punctata** COQUILLET, see *Æstrophasia*.

## DIONÆA.

- DESVOIDY, Myodaires, 254, 1830.
- MACQUART, Dipt. du Nord France, 109, 1834 (*Labidigaster*).
- VAN DER WULP, Biologia, Dipt., II, 131, 1890 (*Labidigaster*).
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 155, 1893 (id.).
- COQUILLET, Canad. Ent., XXX, 234, syn., etc., 1898.
- furcata** VAN DER WULP, Biologia, Dipt., II, 131, pl. III, f. 22 (*Labidigaster*).—Vera Cruz, Mex.
- nitoris** COQUILLET, Canad. Ent., XXX, 235.—Corvallis, Ore.

## TRIXA.

- MEIGEN, Syst. Besch., IV, 222, 1824.
- SCHINER, Fauna Austr., I, 445, 1862.
- VAN DER WULP, Biologia, Dipt., II, 87, 1890.
- differens** VAN DER WULP, Biologia, Dipt., II, 88.—Guerrero, Mex.
- gillettei** TOWNSEND, see *Paraphyto*.
- obsoleta** VAN DER WULP, Biologia, Dipt., II, 87.—Guerrero, Mex.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 416, would refer to *Macronychia*.

## EUTRIXA.

- COQUILLET, Revis. Tachin., 72, 1897.
- masuria** WALKER, List, IV, 753 (*Tachina*).—N. A.
- COQUILLET, Jour. N. Y. Ent. Soc., III, 53 (*Clytiomyia crile*); Revis. Tachin., 72.—N. H., Md., D. C.; bred from *Lachnosterna arcuata* SMITH.

## XANTHOMELANA.

- VAN DER WULP, Tijdschr. v. Ent., XXXV, 188, 1892; Biologia, Dipt., II, 451, def. and table of species, 1903.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., vi, 156, 1893.  
 TOWNSEND, Canad. Ent., xxv, 167, 1893, note.  
 COQUILLET, Revis. Tachin., 72, 1897.
- anceps** VAN DER WULP, Tijdschr. v. Ent., xxxv, 189; Biologia, Dipt., ii, 453, pl. XIII, f. 15.—Vera Cruz, Mex.
- arcuata** SAY, Jour. Acad. Sci. Phil., vi, 173; Compl. Works, ii, 363 (*Ocyptera*).—Ind.  
 BIGOT, Annales, 1888, 254 (*Stevcnia pictipes*).—Wash.  
 TOWNSEND, Proc. Ent. Soc. Wash., ii, 142 (*Wahlbergia*); Annals and Mag. Nat. Hist., xx, 285, oc. at Vera Cruz.  
 COQUILLET, Revis. Tachin., 73.—Col., S. Cal., Kans.
- articulata** VAN DER WULP, Tijdschr. v. Ent., xxxv, 188; Biologia, Dipt., ii, 452, pl. XIII, f. 13.—Vera Cruz and Orizaba, Mex.  
 GIGLIO-TOS, Ditt. del Mess., iii, 4, f. 12.—Orizaba, Mex.
- atripennis** SAY, Jour. Acad. Sci. Phil., vi, 172; Compl. Works, ii, 363 (*Phasia*).—Ind.  
 WALKER, List, iv, 797 (*Tachina corythus*).—Ga.  
 GIRSCHNER, Zeitsch. f. Naturwiss., LX, 1887, sep. p. 38, refers to subg. *Paralophora*.  
 ? TOWNSEND, Proc. Ent. Soc. Wash., ii, 145 (*Wahlbergia*).—Va.  
 COQUILLET, Revis. Tachin., 73.—N. Va., Ind.  
 Inverness and St. Augustine, Fla.—Johnson.
- dorsalis** VAN DER WULP, Tijdschr. v. Ent., xxxv, 188; Biologia, Dipt., ii, 453.—Guerrero and Vera Cruz, Mex.
- flavipes** COQUILLET, Revis. Tachin., 72.—Horse Neck Beach, Mass.
- gracilentata** VAN DER WULP, Tijdschr. v. Ent., xxxv, 189; Biologia, Dipt., ii, 454, pl. XIII, f. 14.—Guerrero, Mex.
- rubicunda** VAN DER WULP, Tijdschr. v. Ent., xxxv, 188; Biologia, Dipt., ii, 453.—Tabasco, Mex.
- trigonalis** VAN DER WULP, Tijdschr. v. Ent., xxxv, 188; Biologia, Dipt., ii, 454.—Guerrero, Mex.

## EVIBRISSA.

- RONDANI, Dipt. Ital. Prod., iv, 74, 1861.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 143, 1889; vi, 155, 1893.  
**americana** BIGOT, Annales, 1888, 256.—Wash.

## TELOTHYRIA.

- VAN DER WULP, Biologia, Dipt., ii, 167, 1890.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 377, 1891.
- adscripta** VAN DER WULP, Biologia, Dipt., ii, 170.—Vera Cruz, Mex.
- argentifrons** VAN DER WULP, Biologia, Dipt., ii, 183.—Guerrero, Mex.
- assimulata** VAN DER WULP, Biologia, Dipt., ii, 180.—Guerrero, Mex.
- carinata** VAN DER WULP, Biologia, Dipt., ii, 184.—Vera Cruz, Mex.
- connexa** VAN DER WULP, Biologia, Dipt., ii, 173.—Guerrero, Mex.
- comata** VAN DER WULP, Biologia, Dipt., ii, 177.—Guerrero, Mex.
- costalis** VAN DER WULP, Biologia, Dipt., ii, 178.—Guerrero and Vera Cruz, Mex.
- cupreiventris** VAN DER WULP, Biologia, Dipt., ii, 182, pl. iv, f. 14.—Vera Cruz and Tabasco, Mex.
- curva** VAN DER WULP, Biologia, Dipt., ii, 177.—Guerrero, Mex.
- disgrega** VAN DER WULP, Biologia, Dipt., ii, 171.—Guerrero, Mex.
- dissepta** VAN DER WULP, Biologia, Dipt., ii, 176.—Guerrero, Mex.

- fasciata* VAN DER WULP, *Biologia*, Dipt., II, 179.—Tabasco, Mex.  
*fimbricrura* VAN DER WULP, *Biologia*, Dipt., II, 172.—Guerrero, Mex.  
*forticula* VAN DER WULP, *Biologia*, Dipt., II, 174.—Guerrero, Mex.  
*hamata* VAN DER WULP, *Biologia*, Dipt., II, 173.—Guerrero, Mex.  
*humeralis* VAN DER WULP, *Biologia*, Dipt., II, 173.—Tabasco, Mex.  
*illucens* VAN DER WULP, *Biologia*, Dipt., II, 183.—Tabasco, Mex.  
*lugens* VAN DER WULP, *Biologia*, Dipt., II, 178.—Morelos and Vera Cruz, Mex.  
*murina* VAN DER WULP, *Biologia*, Dipt., II, 180.—Guerrero, Mex.  
*nubecula* VAN DER WULP, *Biologia*, Dipt., II, 170.—Tabasco, Mex.  
*occulta* VAN DER WULP, *Biologia*, Dipt., II, 184.—Guerrero, Mex.  
*ochrifrons* VAN DER WULP, *Biologia*, Dipt., II, 180.—Guerrero, Mex.  
*ovata* VAN DER WULP, *Biologia*, Dipt., II, 182.—Guerrero, Mex.  
*pacata* VAN DER WULP, *Biologia*, Dipt., II, 185.—Guerrero, Mex.  
*placida* VAN DER WULP, *Biologia*, Dipt., II, 182.—Tabasco, Mex.  
*pollens* VAN DER WULP, *Biologia*, Dipt., II, 174.—Guerrero, Mex.  
*rasilis* VAN DER WULP, *Biologia*, Dipt., II, 175.—Guerrero, Mex.  
*rava* VAN DER WULP, *Biologia*, Dipt., II, 178.—Guerrero, Mex.  
*recondita* VAN DER WULP, *Biologia*, Dipt., II, 176.—Guerrero, Mex.  
*refuga* VAN DER WULP, *Biologia*, Dipt., II, 185.—Guerrero, Mex.  
*relicta* VAN DER WULP, *Biologia*, Dipt., II, 171.—Vera Cruz, Mex.  
*remota* VAN DER WULP, *Biologia*, Dipt., II, 181.—Guerrero, Mex.  
*rufostriata* VAN DER WULP, *Biologia*, Dipt., II, 172.—Vera Cruz and Tabasco, Mex.  
*striolata* VAN DER WULP, *Biologia*, Dipt., II, 179.—Guerrero and Tabasco, Mex.  
*sublineata* VAN DER WULP, *Biologia*, Dipt., II, 181.—Guerrero, Mex.  
*trifurca* VAN DER WULP, *Biologia*, Dipt., II, 175.—Guerrero, Mex.  
*vaciva* VAN DER WULP, *Biologia*, Dipt., II, 176.—Guerrero, Mex.  
*vicina* VAN DER WULP, *Biologia*, Dipt., II, 184.—Guerrero and Tabasco, Mex.

#### CLINOASTER.

- VAN DER WULP, *Tijdschr. v. Ent.*, XXXV, 189, 1892; *Biologia*, Dipt., II, 457, 1903.  
*notabilis* VAN DER WULP, *Tijdschr. v. Ent.*, XXXV, 189, 1892; *Biologia*, Dipt., II, 457, pl. XIII, f. 17.—Guerrero, Mex.

#### BESSERIA.

- DESVOIDY, *Myodaires*, 232, 1830.  
 ZETTERSTEDT, *Dipt. Scand.*, III, 1223, 1844 (*Wahlbergia*).  
 SCHINER, *Fauna Austr.*, I, 419, 1862.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 143, 1889; VI, 154, 1893.  
 ? *brevipennis* LOEW, *Cent.*, IV, 91 (*Wahlbergia*).—Nebraska.  
 TOWNSEND, *Annals and Mag. Nat. Hist.*, XX, 288, says is not *Xanthomelana* nor *Wahlbergia*; from a figure of head of type.

#### HEMYDA.

- DESVOIDY, *Myodaires*, 226, 1830.  
 BIGOT, *Bull. Soc. Ent. France*, 1884, p. LXX (*Ancylogaster*).  
 GIGLIO-TOS, *Ditt. del Mess.*, III, 9, 1894, syn.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 143, 1889; VI, 154, 1893.  
 VAN DER WULP, *Biologia*, Dipt., II, 456, 1903 (*Ancylogaster*).



**aurata** DESVOIDY, Myodaires, 226.—Pa.

BIGOT, Bull. Soc. Ent. France, 1884, LXX (*Ancylogaster armatus*).—Mex.  
ROEDER, Berl. Ent. Zeitsch., xxv, 212, oc. in Mo.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 297 (*Hemyda* sp.).—Wash.

TOWNSEND, Trans. Amer. Ent. Soc., XXII, 68, notes.—Ill., Wash.

GIGLIO-TOS, Ditt. del Mess., III, 9, note on syn. of *Ancyl. armatus*.

BRAUER, Sitzungsbericht k. Akad., CVII, 15, syn. of same, from type.

COQUILLET, Revis. Tachin., 73.—N. Ill.

VAN DER WULP, Biologia, Dipt., II, 456, pl. XIII, f. 16 (*Anc. armatus*).—  
Orizaba, Mex.

N. J.—Smith Cat.; Idaho—J. M. A.

### BESKIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 139, 1889; VI,  
200, 1893.

TOWNSEND, Jour. N. Y. Ent. Soc., II, 79, 1894 (*Ocypterosipha*).

VAN DER WULP, Biologia, Dipt., II, 451, 1903.

**ælops** WALKER, List, IV, 796 (*Tachina*).—Ga.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 139, 170, f. 276  
(*cornuta*).—Brazil.

TOWNSEND, Jour. N. Y. Ent. Soc., II, 79 (*Ocypterosipha willistonii*).—  
San Domingo.

WILLISTON, Trans. Ent. Soc. Lond., 1896, 360, pl. XI, f. 97a (*cornuta*).—  
St. Vincent, W. I.

COQUILLET, Revis. Tachin., 73.—Va., Ga., Texas.

VAN DER WULP, Biologia, Dipt., II, 451, pl. XIII, f. 12 (*cornuta*).—Guer-  
rero and Vera Cruz, Mex.

### ISOGLOSSA.

COQUILLET, Canad. Ent., XXVII, 125, 1895.

**hastata** COQUILLET, Canad. Ent., XXVII, 126; Revis. Tachin., 73.—Los Angeles  
Co., Cal.

### EPIGRYMYIA.

TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 375, 1891; loc. cit., 377 (*Dre-  
panoglossa*); XIX, 117, 1892 (*Siphoclytia*); loc. cit., 127 (*Siphophyto*);  
128 (*Coronimyia*).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 138, 1893, note.

COQUILLET, Revis. Tachin., 74, 1897, notes and syn.

**floridensis** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 128 (*Siphophyto floridensis*  
and *neome.vicana*).—Fla. and N. M.

COQUILLET, Revis. Tachin., 75.—N. H., D. C., Va., S. Ill., West. S. D.,  
Fla., N. M.; bred from *Plodia* sp. by T. D. A. Cockerell.

N. J.—Smith Cat.; Inverness, Fla.—Johnson.

**geniculata** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 129 (*Coronimyia*).—S. Ill.  
COQUILLET, Revis. Tachin., 75.—Md.

**illinoisensis** ROBERTSON, Canad. Ent., XXXIII, 286.—Carlinville, Ill.

Probably a reddish var. of *polita*—J. M. A.

**lucens** TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 378 (*Drepanoglossa*).—Las  
Cruces, N. M.

COQUILLET, Revis. Tachin., 74.—N. M.

**occidentalis** COQUILLET, Canad. Ent., XXVII, 126 (*Drepanoglossa*); Revis  
Tachin., 74.—S. Cal.

Beulah, N. M.—Skinner.

- opaca** COQUILLET, *Canad. Ent.*, xxvii, 128 (*Siphophyto*); *Revis. Tachin.*, 74.—Cal.
- polita** TOWNSEND, *Trans. Amer. Ent. Soc.*, xviii, 376.—Dixie Landing, Va.  
COQUILLET, *Revis. Tachin.*, 74.—N. H., N. J., Va., Ga.
- robertsonii** TOWNSEND, *Trans. Amer. Ent. Soc.*, xix, 117 (*Siphoclytia*).—S. Fla.  
COQUILLET, *Revis. Tachin.*, 74.—Ga.  
Inverness, Fla.—Johnson.
- setigera** COQUILLET, *Canad. Ent.*, xxvii, 127 (*Siphophyto*); *Revis. Tachin.*, 75.—S. Cal.

## SIPHONA.

- MEIGEN, *Illig. Mag.*, ii, 281, 1803.
- LATREILLE, *Gen. Crust. et Ins.*, iv, 339, 1809 (*Bucentes*).
- VAN DER WULP, *Biologia, Dipt.*, ii, 125, 1890; *Tijdschr. v. Ent.*, xxxix, 188, notes on dist.
- BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, vi, 149, 1893.  
COQUILLET, *Revis. Tachin.*, 75, notes, 1897.
- brevirostris** COQUILLET, *Revis. Tachin.*, 76.—Kirkwood, Mo.
- diluta** VAN DER WULP, *Biologia, Dipt.*, ii, 126.—Vera Cruz, Mex.
- futilis** VAN DER WULP, *Biologia, Dipt.*, ii, 125.—Mexico, several places.
- geniculata** DEGEER, *Hist. Nat. Ins.*, vi, 20, 1776 (*Musca*).—Europe.  
FABRICIUS, *Syst. Antl.*, 282, 1805 (*Stomoxys minuta*).  
LATREILLE, *Gen. Crust. et Ins.*, iv, 339 (*Bucentes cinereus*).  
MEIGEN, *Syst. Besch.*, iv, 154, 156, 157 (*geniculata, cinerea, nigrovittata* and *analís*).
- DESVOIDY, *Myodaires*, 92 (*persilla*); *Annales Soc. Ent. France*, 1850, 203, 205 (*tristis, fuscicornis* and *consimilis*).
- TOWNSEND, *Trans. Amer. Ent. Soc.*, xviii, 368 (*illinoisensis*).—Ill.
- COQUILLET, *Revis. Tachin.*, 75.—Toronto, Canada; N. H., Mass., D. C., N. C., N. Ill., Col., Wash.  
Fla.—Johnson; Beulah, N. M.—Skinner.
- plusiæ** COQUILLET, *Canad. Ent.*, xxvii, 125; *Revis. Tachin.*, 76.—S. Cal.: bred from *Plusia californica* SPEYER.

## GINGLYMYIA.

- TOWNSEND, *Trans. Amer. Ent. Soc.*, xix, 118, 1892.
- BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, vi, 198, 1893.
- acrirostris** TOWNSEND, *Trans. Amer. Ent. Soc.*, xix, 118.—Constantine, Mich.

## HETEROPTERINA.

- MACQUART, *Annales Soc. Ent. France*, 1854, 426.
- SCHINER, *Fauna Austr.*, i, 502.
- BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, iv, 113, 1889; v, 359, 1891; vi, 169, 1893.
- nasoni** COQUILLET, *Ent. News*, vi, 207; *Revis. Tachin.*, 76.—N. Ill.; Col., Cal.
- spinulosa** BIGOT, see *Paraplaga*.

## PLAGIPROSPHERYSA.

- TOWNSEND, *Trans. Amer. Ent. Soc.*, xix, 113, 1892.
- BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, vi, 124, 197, 1893.
- WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 355.
- COQUILLET, *Revis. Tachin.*, 77, 1897.

*floridensis* TOWNSEND, Trans. Amer. Ent. Soc., XIX, 114.—S. Fla.

*Note*.—I examined the types, and concluded that *valida* and *floridensis* are not, as Coquillett thought, the same species.

*parvipalpis* VAN DER WULP, Biologia, Dipt., II, 124 (*Prosphecrusa*).—Guerrero, N. Sonora, and Presidio, Mex.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 113 and 114 (*valida*).—Las Cruces, N. M.

#### METAPLAGIA.

COQUILLET, Jour. N. Y. Ent. Soc., III, 102, 1895.

*occidentalis* COQUILLET, Jour. N. Y. Ent. Soc., III, 103; Revis. Tachin., 77.—S. Cal.

#### PARAPLAGIA.

BRÄUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 354, 1891.

COQUILLET, Revis. Tachin., 77, 1897, notes.

*erucicola* COQUILLET, Revis. Tachin., 78.—Mo.; bred from undet. larva on *Triosteum*.

*spinulosa* BIGOT, Annales, 1888, 362 (*Heteropteryna*).—N. A.

COQUILLET, Ent. News, VI, 207, note; Jour. N. Y. Ent. Soc., III, 101 (*cinerea*); Revis. Tachin., 77.—D. C., N. Ill., Col.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 133, note on genus.

N. J.—Smith Cat.

#### CYRTOPHLEBA.

RONDANI, Dipt. Ital. Prod., I, 68, 1856.

BRÄUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 101, 1889; v, 354, 1891; VI, 147, 1893.

? *horrida* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 40, f. 11.—Mex.

COQUILLET, Revis. Tachin., 78, does not belong to this genus; hence the interrogation.

*horrida* COQUILLET, Jour. N. Y. Ent. Soc., III, 101; Revis. Tachin., 78.—Toronto, Canada; Mass., N. Y., N. Ill.

Montreal—Chagnon; N. J.—Smith Cat.

#### PLAGIA.

MEIGEN, Syst. Besch., VII, 201, 1838.

VAN DER WULP, Biologia, Dipt., II, 101, table of Mexican species, 1890.

BRÄUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 147, 1893.

*americana* VAN DER WULP, Biologia, Dipt., II, 102, pl. III, f. 19.—Mexico, several places.

GIGLIO-TOS, Ditt. del Mess., III, 41.—Mex.

TOWNSEND, Canad. Ent., XXIV, 67 (*aurifrons*).—Pa.

COQUILLET, Revis. Tachin., 78.—N. Ill., Mo., Cal.; Allende and Diaz, Mex.

N. J.—Smith Cat.

*dicta* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 42.—Mex.

*incognita* VAN DER WULP, Biologia, Dipt., II, 103.—Guerrero, Mex.

*mexicana* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 42, f. 13.—Mex.

*rigidirostris* VAN DER WULP, see *Siphoplaga*.

*setifrons* VAN DER WULP, Biologia, Dipt., II, 101.—Guerrero, Mex.

**PLAGIOMIMA.**

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 384, 1891; vi, 138, 1893.

**disparata** BRAUER and BERGENSTAMM, loc. cit.—Mex.

**SIPHOPLAGIA.**

TOWNSEND, *Trans. Amer. Ent. Soc.*, xviii, 349, 1891.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, vi, 140, 1893, note.

COQUILLET, *Revis. Tachin.*, 78, 1897.

**anomala** TOWNSEND, *Trans. Amer. Ent. Soc.*, xviii, 350.—Las Cruces, N. M.

Also oc. in Ill., *Canad. Ent.*, xxiv, 67.

COQUILLET, *Revis. Tachin.*, 78.—Los Angeles Co., Cal.

**rigidirostris** VAN DER WULP, *Biologia. Dipt.*, ii, 102 (*Plagia*).—Guerrero, Mex. N. J.—Smith Cat.

**GONIOCHÆTA.**

TOWNSEND, *Trans. Amer. Ent. Soc.*, xviii, 351, 1891.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, vi, 152, 1893.

**plagioides** TOWNSEND, *Trans. Amer. Ent. Soc.*, xviii, 351.—Las Cruces, N. M.

**PETEINA.**

MEIGEN, *Syst. Besch.*, vii, 214, 1838.

SCHINER, *Fauna Austr.*, i, 439, 1862.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, iv, 138, 1889; v, 387, 1891; vi, 152, 1893.

**stylata** BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 387.—Greenland.

**DISTICHONA.**

VAN DER WULP, *Biologia. Dipt.*, ii, 44, 1890.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 352, 1891 (*Pseudogermaria*).

TOWNSEND, *Trans. Amer. Ent. Soc.*, xix, 114, 1892 (*Olenochata*).

COQUILLET, *Revis. Tachin.*, 79, 1897, syn. and notes.

BRAUER, *Sitzungsbericht k. Akad.*, cvii, 522, important notes.

**georgiæ** BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 352 (*Pseudogermaria*).—Ga.

COQUILLET, *Revis. Tachin.*, 79.—Ga.

**varia** VAN DER WULP, *Biologia. Dipt.*, ii, 44, pl. III, f. 2; p. 480, note.—Mexico, several places.

TOWNSEND, *Trans. Amer. Ent. Soc.*, xix, 115 (*Olenochata kansensis*).—Kans.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 339; vi, 120.

COQUILLET, *Revis. Tachin.*, 79.—D. C., Ga., Miss., Tex., N. M.

BRAUER, *Sitzungsbericht k. Akad.*, cvii, 522, note.—Ga.

N. J.—Smith Cat.

**CHÆTOGLOSSA.**

TOWNSEND, *Trans. Amer. Ent. Soc.*, xix, 125, 1892.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, vi, 200, 1893.

COQUILLET, *Revis. Tachin.*, 79, 1897.

**picticornis** TOWNSEND, *Trans. Amer. Ent. Soc.*, xix, 126.—So. Fla.

COQUILLET, *Revis. Tachin.*, 79.—S. Fla.

Inverness, Fla.—Johnson.

- viola** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 126 (*viola* and *nigripalpis*).—  
Both S. Fla. Inverness, Fla.—Johnson.  
I confirmed the synonymy from the types.

## PACHYOPHTHALMUS.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 117, 1891: VI,  
170, 195, 1893.  
TOWNSEND, Trans. Amer. Ent. Soc., XIX, 100, 1892 (*Sarcomacronychia*).  
COQUILLET, Revis. Tachin., 79, notes, 1897.  
**floridensis** TOWNSEND, Ent. News, III, 80; Trans. Amer. Ent. Soc., XIX, 101  
(*Sarcomacronychia unica*); Canad. Ent., XXIV, 165 (*S. sarcophag-*  
*oides*); Bull. Ohio Ex. Sta., Tech. ser., I, 3 (*S. tryporylonis*).—So.  
Fla.; Las Cruces, N. M.; Las Cruces, N. M.; Ohio. The types of the  
last were reared by Webster from *Tryporylon* sp.—or perhaps it was  
*Pelopæus* instead.  
COQUILLET, Revis. Tachin., 80.—Ga., Fla., Tex., Col., Cal.  
N. J.—Smith Cat.: Fla.—Johnson; Moscow, Ida.—J. M. A. "Also a  
parasite of *Pelopæus cementarius*"—Smith Cat.  
*Notc.*—I compared the types of all Townsend's species; they are the  
same, and *aurifrons* seemed scarcely different.  
**signatus** MEIGEN, Syst. Besch., IV, 303 (*Tachina*).—Europe.  
SCHINER, Fauna Austr., I, 502 (*Macronychia*).  
TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 354 (*aurifrons*).—Carlinville,  
Ill.  
COQUILLET, Rev. Tachin., 79.—N. H., Mass., W. Va., N. C., Fla., Ida.;  
reared from *Pelopæus cementarius* and *Tryporylon* sp. N. J.—Smith  
Cat.

## SENOTAINIA.

- MACQUART, Dipt. Exot., Suppl., I, 167, 1846.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 360, 1891 (*Ar-*  
*rcuopus*).  
COQUILLET, Revis. Tachin., 80, 1897, pt. desc.  
*Notc.*—*Miltogramma* MEIGEN, at least in the sense of Van der Wulp  
and Townsend, seems to belong here.  
**biseta** THOMSON, Eugen. Resa, 524 (*Miltogramma*).—Panama.  
**erythrura** VAN DER WULP, Biologia, Dipt., II, 89 (*Miltogramma*).—Presidio,  
Mex.  
**fasciata** COQUILLET, Revis. Tachin., 81.—Las Cruces, N. M.  
**nana** VAN DER WULP, Tijdschr. v. Ent., XXXV, 195, 1888 (*Miltogramma*); Biolo-  
gia, Dipt., II, 483 (id.).—Guerrero, Mex.  
**nana** COQUILLET, Revis. Tachin., 80, 1897.—Las Cruces, N. M.  
**rubriventris** MACQUART, Dipt. Exot., Suppl., I, 167.—Texas.  
THOMSON, Eugen. Resa, 523 (*Miltogramma erythroccra*).—Cal.  
VAN DER WULP, Biologia, Dipt., II, 89 (*Miltogramma fulvicornis*).—Guer-  
rero, Mex.  
TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 355 (*M. flavicornis*): 357 (*M.*  
*similis*); Canad. Ent., XXIV, 68 (*M. kansensis*); Ent. News, III, 81 (*M.*  
*decisa*).—Carlinville, Ill.; Carlinville, Ill.; Kansas; So. Fla.  
COQUILLET, Revis. Tachin., 80.—Toronto, Canada, to Fla.; Idaho to S.  
Cal.  
*Notc.*—I confirmed the identity of Townsend's species with each other,  
from the types.

- sarcophagina** VAN DER WULP, *Biologia*, Dipt., II, 90 (*Miltogramma*).—Atoyac, Mex.
- trilineata** VAN DER WULP, *Biologia*, Dipt., II, 89 (*Miltogramma*).—Presidio, Mex.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 361 (*Arrenopus americana*).—Ga.
- TOWNSEND, *Trans. Amer. Ent. Soc.*, XVIII, 357 (*Miltogramma argenti-frons*); 358 (*M. cinerascens*).—Both Carlinville, Ill.
- COQUILLET, *Revis. Tachin.*, 81.—Toronto, Canada, to Ga., and west to Wash. and S. Cal.; reared from *Sphæcius speciosus* DRURY.
- Note*.—I confirmed the identity of Townsend's species, from the types.

## PSEUDOTRACTOCERA.

- TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 107, 1892.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 196, 1893.
- calosomæ** COQUILLET MS., see *Biomyia georgia*.
- neomexicana** TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 108.—Las Cruces, N. M.
- COQUILLET, *Revis. Tachin.*, 81.—Same locality.

## BIOMYIA.

- RONDANI, *Dipt. Ital. Prod.*, I, 72, 1856.
- MEIGEN, *Syst. Besch.*, VII, 250 (*Fabricia*, preoc.), 1838.
- RONDANI, *Dipt. Ital. Prod.*, IV, 53, 1861 (*Viviana*).
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 313, 1891 (*Masi-phy*).
- COQUILLET, *Revis. Tachin.*, 81, notes, 1897.
- aurigera** COQUILLET, *Proc. Acad. Nat. Sci. Phil.*, 1895, 309 (*Masi-phy*); *Revis. Tachin.*, 82.—Fla.
- brasiliansa** BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 313 (*Masi-phy*).—Brazil.
- TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 97 (*Tachinomyia floridensis*).—Fla.
- COQUILLET, *Revis. Tachin.*, 82.—D. C., Md., Va., Ga., Fla., S. Cal. St. Augustine, Fla.—Johnson.
- citrina** BIGOT, *Annales*, 1888, 262 (*Viviana*).—Mex.
- genalis** COQUILLET, *Revis. Tachin.*, 82.—Tifton, Ga.
- georgiæ** BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 312 (*Viviana*).—Ga.
- TOWNSEND, *Trans. Amer. Ent. Soc.*, XVIII, 359 (*Masicera sordicolor*).—Carlinville, Ill.
- BURGESS, *Rept. Mass. State Board of Agric.*, 1897, 83 (*Pseudotractocera calosomæ* COQ. MS.).
- COQUILLET, *Revis. Tachin.*, 82.—Mass., S. Cal., Ga.; bred from *Calosoma calidum* FABR., and *C. peregrinator* GUÉR.
- ? **rufopygata** BIGOT, *Annales*, 1888, 262 (? *Viviana*).—Mex.

## COMATACTA.

- COQUILLET, *Canad. Ent.*, XXXIV, 199, 1902.
- pallidula** VAN DER WULP, *Biologia*, Dipt., II, 95 (*Brachycoma*).—Yucatan.
- COQUILLET, *Canad. Ent.*, XXXIV, 200, type of this genus.—San Rafael, Vera Cruz, Mex.



## ATACTA.

SCHINER, Novara, 328, 1868.

**apicalis** COQUILLET, Revis. Tachin., 83.—Tifton, Ga.

**brasiliensis** SCHINER, Novara, 328.—Brazil.

VAN DER WULP, Biologia, Dipt., II, 92 (*Brachycoma laticeps*).—Guerrero and Tabasco, Mex.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 365, syn.; VI, 121.

**nigripalpis** VAN DER WULP, Biologia, Dipt., II, 98 (*Brachycoma*).—Guerrero and Tabasco, Mex.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 365, gen. ref.

## SIPHOSTURMIA.

COQUILLET, Revis. Tachin., 83, 1897.

**rostrata** COQUILLET, Jour. N. Y. Ent. Soc., III, 106 (*Argyrophylax*); Revis. Tachin., 83.—Tifton, Ga.; Fla.

DÆCKE, Ent. News, XIII, 332, oc. in N. J.

## BELVOSIA.

DESVOIDY, Myodaires, 103, 1830; loc. cit., 104 (*Latreillia*).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 97, 1889 (*Willistonina*); VI, 204, 1893, history, etc., important.

VAN DER WULP, Biologia, Dipt., II, 29, 1890 (includes *Blepharipeza*).

WILLISTON, Insect Life, v, 238, 1893, with plate.

**analis** MACQUART, Dipt. Exot., Suppl., I, 100, pl. XIV, f. 4.—Brazil?

GIGLIO-TOS, Ditt. del Mess., III, 29.—Tuxpango, Mex.

**bella** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 30, f. 6.—Mex.

**bifasciata** FABRICIUS, Syst. Ent., 777; Ent. Syst., IV, 325; Syst. Antl., 299 (all *Musca*).—West Indies.

LATREILLE, Dict. d'Hist. Nat., XXIV, 195 (*Ocyptera*).

WIEDEMANN, AUSS. ZW., II, 305 (*Tachina*).—S. A.

DESVOIDY, Myodaires, 103 (*bicincta*); 104 (*Latreillia*).—Carolina and Antilles; Va.

MACQUART, Hist. Nat. Dipt., II, 104 (*Nemoræa*); 112 (*Scnometopia bicincta*); Dipt. Exot., II, 3, 57, pl. VI, f. 2.—Brazil and Philadelphia; bred from *Citheronia (Cerocampa of MACQ.) regalis* FABR.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 302-3 (*bifasciata* and *bicincta*).—Wash. to San Domingo.

VAN DER WULP, Tijdschr. v. Ent., XXVI, 23; Biologia, Dipt., II, 30, pl. II, f. 8.—Guatemala.

RILEY, 5th Mo. Rept., 140, desc. and fig.; bred from *Anisota rubicunda*.—Mo.

RILEY, 4th Rept. U. S. Ent. Comm., App., 110, desc. of larva.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 89, pt. desc. (*bicincta*); Psyche, 1897, 128, oc. in N. M., etc.

COQUILLET, Revis. Tachin., 84.—Mass. to S. Cal. and Mex.; bred from *Citheronia regalis* FABR., *Dryocampa rubicunda* FABR., and *Hemileuca* sp.

N. J.—Smith Cat.; bred from *Eacles imperialis*. Porto Rico—Roeder.

**ferruginosa** TOWNSEND, Trans. Amer. Ent. Soc., XXII, 71.—Jamaica.

**leucophrys** WIEDEMANN, see *Blepharipeza*.

**leucopyga** VAN DER WULP, Notes from the Leyden Mus., IV, 84; Tijdsch. v. Ent., XXVI, 27; Biologia, Dipt., II, 470, oc.—Brazil; Brazil; N. Yucatan.

- luteola* COQUILLET, Proc. U. S. N. M., XXII, 253.—Vieques Id., near Porto Rico.
- slossonæ* COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 312; Revis. Tachin., 84.  
—Charlotte Harbor, Fla.
- unifasciata* DESVOIDY, Myodaires, 105 (*Latrcillia*).  
RILEY, 2d Mo. Rept., 51 (*Exorista flavicauda*); quoted in General Index to Mo. Repts., 88.—Mo.; bred from *Leucania unipuncta*.  
COQUILLET, Revis. Tachin., 84.—N. Y., Ill., Ga., Miss., Mo.; bred from same.  
N. J.—Smith Cat.
- vanderwulpi* WILLISTON, Trans. Amer. Ent. Soc., XIII, 303.—San Domingo.
- weyenberghiana* VAN DER WULP, Tijdsch. v. Ent., XXVI, 26, pl. 1, f. 16; Biologia, Dipt., II, 470, oc.—Argentina, bred from *Saturnia argentina*; Mexico, several places, bred from *Automeris cecrops*.

## MELANOPHRYS.

- WILLISTON, Trans. Amer. Ent. Soc., XIII, 305, 1886.
- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 92, 1892 (*Atropharista*).
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 169, 1893.
- COQUILLET, Revis. Tachin., 85, 1897, notes.
- insolita* WALKER, Dipt. Saund., 277 (*Tachina*).—U. S.  
TOWNSEND, Trans. Amer. Ent. Soc., XIX, 92 (*Atropharista jurinoides*).—Brookings, S. D.  
WILLISTON, Kans. Univ. Quart., III, 172; Psyche, 1893, 409 and 492, notes.  
TOWNSEND, Psyche, 1893, 461, notes.  
COQUILLET, Revis. Tachin., 85.—Grimsby, Canada; N. H., N. Ill., Col. Axton, N. Y.—M. and H.
- flavipennis* WILLISTON, Trans. Amer. Ent. Soc., XIII, 306.—Wyo., Cal.  
COQUILLET, Revis. Tachin., 85.—S. Cal., Idaho.

## APHRIA.

- DESVOIDY, Myodaires, 89, 1830.
- MEIGEN, Syst. Besch., VII, 266, 1838 (*Olivieria*).
- MACQUART, Annales Soc. Ent. France, 1848, 87 (*Rhynchosia*, to replace *Olivieria*, prec.).
- SCHINER, Fauna Austr., I, 432, 1862.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 134, 1889; VI, 138 and 214, 1893.
- COQUILLET, Revis. Tachin., 85, 1897, notes.
- ocypterata* TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 361.—Brookings, S. D., and Minn.  
COQUILLET, Revis. Tachin., 85.—Toronto, Can., to Ga.; Wash. to S. Cal.; bred from *Carneades messoria*.

## MASISTYLUM.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 138, 1893.
- macropogon* BIGOT, Annales, 1888, 259 (*Brachycoma*).—Cal.  
BRAUER, Sitzungsbericht d. K. Akad., CVI, 21, type redesc. and referred here.

## OCYPTERA.

- LATREILLE, Hist. Nat. Crust. et Ins., XIV, 378, 1804.
- DESVOIDY, Myodaires, 231, 1830 (*Parthenia*).
- SCHINER, Fauna Austr., I, 412, 1862.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 143, 1893.

COQUILLET, Revis. Tachin., 86, 1897, notes.

VAN DER WULP, Biologia, Dipt., II, 449, 1903, table of species.

*Note*.—The synonymy of this genus is very uncertain, particularly as to *carolinæ* and *dosiades*. Townsend has dissented from Coquillett's conclusions, which are presented below. Brauer, Sitzungsbericht d. K. Akad., CVII, 1, confirms the generic position of Bigot's species, without expressing any opinion as to the synonymy.

*arcuata* SAY, see *Xanthomelana*.

*argentea* TOWNSEND, Proc. Ent. Soc. Wash., II, 144.—D. C. and Iowa.

COQUILLET, Revis. Tachin., 86.—N. J., Pa., N. Va., Mo.

*atra* ROEDER, Stett. Ent. Zeit., 1885, 344.—Porto Rico. See *dosiades*.

VAN DER WULP, Biologia, Dipt., II, 450, oc.—N. Yucatan.

*carolinæ* DESVOIDY, Myodaires, 232 (*Parthenia*).—Carolina.

WALKER, List, IV, 694 (*dotades* and *cpytus*); 696 (*cuchenor*).—Jamaica; Ga.; Mass. and Newfoundland.

BIGOT, Annales, 1878, 42-44 (*californica*, *fumipennis* and *binotata*).—Cal.; Cal.; Baltimore.

TOWNSEND, Psyche, 1893, 466; Jour. N. Y. Ent. Soc., V, 176; Psyche, 1897, 149; loc. cit., 1898, 212;—notes on syn. and oc.; bred by Forbes from an *Acridiid* and ? *Leucania unipuncta* HAW.

Province of Quebec—Fyles.

*dosiades* WALKER, List, IV, 695.—Nova Scotia.

BIGOT, Annales, 1878, 46, 47 (*soror* and *simplex*).—Both Mexico.

GIGLIO-TOS, Ditt. del Mess., III, 3, includes *binotata*, *atra*, and ? *cuchenor* as synonyms.—Orizaba, Mex.

COQUILLET, Revis. Tachin., 86.—N. H. to Ga.; S. D. to Nev.

VAN DER WULP, Biologia, Dipt., II, 4 (*soror*) and 450, oc. in Mexico, many places.

Montreal—Chagnon.

*liturata* OLIVIER, see *Euantha*.

*minor* ROEDER, Stett. Ent. Zeit., 1885, 344.—Porto Rico.

Guerrero, Mex.—Van der Wulp.

*signatipennis* VAN DER WULP, Tijdschr. v. Ent., XXXV, 187; Biologia, Dipt., II, 450, pl. XIII, f. II.—Guerrero, Mex.

#### STEVENIA.

DESVOIDY, Myodaires, 221, 1830; Dipt. Env. Paris, II, 377, 1863.

RONDANI, Dipt. Ital. Prod., I, 80, 1856.

VAN DER WULP, Biologia, Dipt., II, 455, 1903, note.

*Note*.—Bigot's species probably do not belong to this genus.

*flavocalyprata* BIGOT, Annales, 1888, 255.—Mex.

*pallidiventris* BIGOT, Annales, 1888, 254.—Mex.

*pictipes* BIGOT, see *Xanthomelana arcuata*.

#### LINNÆMYIA.

DESVOIDY, Myodaires, 52-57 (*Linnæmyia*, *Bonuctia*, *Bonnellia*, *Marsh-ania*), 1830.

MACQUART, Hist. Nat. Dipt., II, 80, 1835 (*Micropalpus*).

SCHINER, Fauna Austr., I, 427, 1862 (*Micropalpus*).

COQUILLET, Revis. Tachin., 86, 1897, notes.

*Note*.—Several of the species described as *Micropalpus* will be found under *Epalpus*.

- angustifrons** VAN DER WULP, Tijdschr. v. Ent., xxxv, 193 (*Micropalpus*); Biologia, Dipt., II, 475 (id.).—Tabasco, Mex.
- comta** FALLÉN, Kongl. svenska Vetenskap. Akad. Handl., xxxi, 1810 (*Tachina*); Muscides, 24, 1820 (id.).—Europe.
- MEIGEN, Syst. Besch., IV, 259 (*Tachina fulgens*); VII, 217, refers to *Micropalpus*.
- DESVOIDY, Myodaires, 53-58 (*heraclei, analis, distincta, astivalis, borealis, Marshamia analis* and *nigripes*).—Europe, Philadelphia and Carolina.
- MACQUART, Hist. Nat. Dipt., II, 84 (*Micropalpus piccus*).—Carolina.
- ZETTERSTEDT, Dipt. Scand., III, 1094 (*Tachina*).
- RONDANI, Dipt. Ital. Prod., III, 70 (*Micropalpus*).
- SCHINER, Fauna Austr., I, 428 (*Mic. fulgens*; his *comtus*, p. 429, is a different species).
- GIGLIO-TOS, Ditt. del Mess., III, 11, notes (*Mic. fulgens* and *comtus*).—Mexico, several places.
- VAN DER WULP, Biologia, Dipt., II, 474 (*M. fulgens*), oc.—Guerrero, Mex.
- COQUILLET, Revis. Tachin., 87, syn., etc.—London, Ont.: U. S. generally; bred from *Agrotis ypsilon* ROTT. and *Carnecades messoria* HARR.
- nigrifrons** BIGOT, Annales, 1888, 263 (*Micropalpus*).—Mex.
- picta** MEIGEN, Syst. Besch., IV, 261 (*Tachina*); VII, 217, gen. ref.—Europe.
- SCHINER, Fauna Austr., I, 429.
- COQUILLET, Revis. Tachin., 87; Proc. Wash. Acad. Sci., II, 438, oc. in Alaska.—N. H.: Mass.
- Beulah, N. M.—Skinner.

#### NEMORÆA.

- DESVOIDY, Myodaires, 71, 1830.
- SCHINER, Fauna Austr., I, 447, 1862.
- VAN DER WULP, Biologia, Dipt., II, 47, note, and table of Mexican species, 1890.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 116, 1889; VI, 171, 183, 1893.
- BRAUER, Sitzungsbericht d. K. Akad., CVII, 5.
- clesides** WALKER, see *Phyto*.
- forreri** VAN DER WULP, Biologia, Dipt., II, 49, pl. II, f. 21.—Durango, Guerrero, Tepic and Vera Cruz, Mex.
- GIGLIO-TOS, Ditt. del Mess., III, 13 (*Microtrichomma*).—Guerrero, Mex., and Mexico City.
- Note*.—Giglio-Tos, in Boll. R. Univ. Torino, VIII, No. 158, 1, has proposed a new genus, *Microtrichomma*, for Van der Wulp's *Nemoræa intermedia, forreri*, and *smithi*; but Brauer and Bergenstamm, Zweifl. d. Kaiserl. Mus., VI, 183, mention these, with *obscurilla*, as belonging to their genus *Arthrochata*. Not being able to clear up the situation, I content myself with calling attention to it.
- intermedia** VAN DER WULP, Biologia, Dipt., II, 50.—Guerrero and City of Mexico.
- GIGLIO-TOS, Ditt. del Mess., III, 13.
- intrita** WALKER, Trans. Ent. Soc., n. ser., v, 297.—Mex.
- labis** COQUILLET, Jour. N. Y. Ent. Soc., III, 104; Revis. Tachin., 87.—Wash.
- leucaniæ** KIRKPATRICK, see *Hinthemia quadripustulata*.
- masuria** WALKER, see *Eutrira*.
- minor** MACQUART, see *Panzeria radicum*.
- notata** BIGOT, Annales, 1888, 82 (*Echinomyia*).—Mex.
- BRAUER, Sitzungsbericht d. K. Akad., CVII, 5, refers to *Arthrochata*.

- obscorella* VAN DER WULP, *Biologia, Dipt.*, II, 48.—Guerrero, Mex.  
*pyste* WALKER, see *Exorista*.  
*setigera* COQUILLET, *Proc. U. S. N. M.*, XXV, 111.—Medina, Ohio.  
*smithi* VAN DER WULP, *Biologia, Dipt.*, II, 50.—Atoyac, Mex.  
*trixoides* WALKER, see *Microphthalma disjuncta*.  
*variegata* VAN DER WULP, *Biologia, Dipt.*, II, 48.—Guerrero, Mex.

## PANZERIA.

- DESVOIDY, *Myodaires*, 62-68 (*Ernestia, Fausta, Erigone, Panzeria*), 1830.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 145, 1893.  
 COQUILLET, *Revis. Tachin.*, 88, 1897, notes.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, CVII, 531, 1898.  
*flavicornis* BRAUER, *Sitzungsbericht d. K. Akad.*, CVII, 532.—White Mts., N. H.  
*penitalis* COQUILLET, *Revis. Tachin.*, 89.—Va., Mo.; bred from *Pyrausta penitalis* GROTE.  
*radicum* FABRICIUS, *Syst. Ent.*, 778; *Ent. Syst.*, IV, 326; *Syst. Antl.*, 300 (all *Musca*; the reference to Linnæus in the last is to a different species—ZTT.).—Europe.  
 FALLÉN, *Muscides*, 26 (*Tachina lurida*). [Meig.]  
 MEIGEN, *Syst. Besch.*, IV, 249 (*Tachina*); VII, 221, gen. ref.  
 DESVOIDY, *Myodaires*, 66-68 (*Erigone anthophila, scutellaris, puparum, viridulans* and *dubia*).  
 MACQUART, *Annales Soc. Ent. France*, 1848, 112 (*Nemoræa minor*).  
 WALKER, *List.* IV, 732 (*Tachina ampelus*).—Nova Scotia.  
 TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 91 (*Hystricia aldrichi*).—Brookings, S. D.  
 COQUILLET, *Revis. Tachin.*, 88, syn., etc.—U. S. generally; British Col.; bred from *Hyphantria cuncea* DRURY and *Hyphantria* sp.  
 Hudsonian Zone, N. M.—Cockerell; Alaska—Coquillett; Beulah, N. M.—Skinner.  
*ruficauda* BRAUER, *Sitzungsbericht d. K. Akad.*, CVII, 539 (*Erigone*).—N. A.; attributed to Riley, but it must have been a MS. name of his.

## MACROMEIGENIA.

- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 311, 1891.  
*chrysoprocta* WIEDEMANN, *Auss. Zw.*, II, 309 (*Tachina*).—No locality.  
 WALKER, *Dipt. Saund.*, 295 (*Tachina interrupta*).—Ga.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 311.—S. C.  
 COQUILLET, *Revis. Tachin.*, 89.—Va., Ga. N. J.—Smith Cat.

## BOLOMYIA.

- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 347, 1891.  
*rufata* BIGOT, *Annales*, 1888, 257 (*Exorista*).—Mex.  
 VAN DER WULP, *Biologia, Dipt.*, II, 53 (*Mystacella violacca*).—Mexico, several places; Guatemala.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 347; VI, 122.—Mex., Brazil.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 341, syn.

## GYMNOCHÆTA.

- DESVOIDY, *Myodaires*, 371, 1830.  
*alcedo* LÖEW, *Cent.*, VIII, 61.—U. S.

- COQUILLET, Revis. Tachin., 89 (inclusive of *ruficornis*).—N. J., Col., Kans.
- rheinwardtii* WIEDEMANN, Auss. Zw., II, 315 (*Tachina*).—Brazil.
- VAN DER WULP, Biologia, Dipt., II, 40.—Guatemala. Also p. 479, oc. in Mexico City and Guerrero.
- ruficornis* WILLISTON, Trans. Amer. Ent. Soc., XIII, 302.—Pa., Kans.
- COQUILLET, Revis. Tachin., 89, as a synonym of *alcedo*, with which I disagree, after examining Williston's types and other material.
- subviridis* VAN DER WULP, Tijdschr. v. Ent., XXXV, 194; Biologia, Dipt., II, 480.—Mex.
- vivida* WILLISTON, Trans. Amer. Ent. Soc., XIII, 302.—Pa. Moscow, Ida.—J. M. A.

#### METAPHYTO.

- COQUILLET, Revis. Tachin., 89, 1897.
- genalis* COQUILLET, Revis. Tachin., 89.—Col.

#### EXORISTOIDES.

- COQUILLET, Revis. Tachin., 90, 1897.
- harringtoni* COQUILLET, Proc. U. S. N. M., XXV, 110.—Ottawa, Canada.
- johnsoni* COQUILLET, Revis. Tachin., 91.—N. C. Nev.
- slossonæ* COQUILLET, Revis. Tachin., 90.—Me., N. H., N. J.

#### HYPHANTROPHAGA.

- TOWNSEND, Psyche, 1892, 247.
- hyphantriæ* TOWNSEND, Psyche, 1891, 176 (*Meigenia*).—Las Cruces, N. M.; reared from *Hyphantria cunea* DRURY. Op. cit., 1892, 258, bred from *Eucaterpa variaria* GROTE.
- BAKER, Ent. News, VI, 174, reared from *Vanessa milberti* GODT. at Fort Collins, Col.
- COQUILLET, Revis. Tachin., 91.—Las Cruces, N. M.

#### MYSTACELLA.

- VAN DER WULP, Biologia, Dipt., II, 51, 1890, def. and table of Mexican species.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 233, 1893, refer to this as a mixture of genera.
- adjuncta* VAN DER WULP, Biologia, Dipt., II, 55.—Guerrero, Mex.
- flavifrons* VAN DER WULP, Biologia, Dipt., II, 57.—Tabasco, Mex.
- fuscicostalis* VAN DER WULP, Biologia, Dipt., II, 57, pl. III, f. 5.—Mex.; Costa Rica.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 341 and VI, 122, desc., and type of their genus *Paramesochata*.
- lineata* VAN DER WULP, Biologia, Dipt., II, 54.—Tabasco, Mex.
- lugubris* VAN DER WULP, Biologia, Dipt., II, 53.—Guerrero, Mex.
- postera* VAN DER WULP, Biologia, Dipt., II, 56.—Guerrero, Mex.
- rubriventris* VAN DER WULP, see *Mystacomylia*.
- setulosa* VAN DER WULP, Biologia, Dipt., II, 58.—Guerrero, Mex.
- solita* VAN DER WULP, Biologia, Dipt., II, 55.—Guerrero, Mex.
- subcyanea* VAN DER WULP, Biologia, Dipt., II, 58.—Guerrero, Mex.
- tessellata* VAN DER WULP, Biologia, Dipt., II, 56.—Guerrero and Morelos, Mex.
- violacea* VAN DER WULP, see *Bolomyia rufata*.



## MYSTACOMYIA.

- GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 30, 1894.  
**rubriventris** VAN DER WULP, Biologia, Dipt., II, 52 (*Mystacella*).—Vera Cruz and Tixpango, Mex.  
 GIGLIO-TOS, Ditt. del Mess., III, 37.—Mexico City.

## MEIGENIA.

- DESVOIDY, Myodaires, 198, 1830.  
 RONDANI, Dipt. Ital. Prod., III, III, 1859.  
 VAN DER WULP, Biologia, Dipt., II, 58, 1890, pt. desc., and table of Mexican species.  
**albidula** VAN DER WULP, Biologia, Dipt., II, 59, pl. III, f. 6.—Tabasco, Mex.  
**albifacies** VAN DER WULP, Tijdsch. v. Ent., XXXV, 194; Biologia, Dipt., II, 481.—Guerrero, Mex.  
**flaviventris** VAN DER WULP, Biologia, Dipt., II, 59; p. 481, note.—Orizaba, Mex.; Guerrero.  
**gratiosa** VAN DER WULP, Biologia, Dipt., II, 60.—Guerrero, Mex.  
**hyphantriæ** TOWNSEND, see *Hyphantrophaga*.  
**promiscua** TOWNSEND, see *Frontina frenchii*.  
**websteri** TOWNSEND, see *Frontina frenchii*.

## EXORISTA.

- MEIGEN, Illig. Mag., II, 280, 1803; Syst. Besch., VII, 255, 1838.  
 DESVOIDY, Myodaires, 142, 143, 158, 176, 184 (*Lydeella*, *Phryno*, *Phryxe*, *Carcelia*, *Aplomya*), 1830; Annales Soc. Ent. France, 1847, 601 (*Hübneria*).  
 MACQUART, Hist. Nat. Dipt., II, 115 (*Eurygaster*), 1835.  
 RONDANI, Dipt. Ital. Prod., I, 66 (*Nemorilla* and *Blepharidea*); III, 90 (*Aporomyia*), 1856 and 1859.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 87, 1889 (*Parxorista*); 163 (*Sisyropa*); V, 331, 1891 (*Myxororista*); VI, 123, 1893 (*Masipoda*).  
 TOWNSEND, Psyche, 1896, 329, table of U. S. species.  
 COQUILLETT, Revis. Tachin., 91, syn. and notes, 1897.  
**ærata** COQUILLETT, Revis. Tachin., 100.—N. III.  
**affinis** FALLÉN, Kongl. Vetensk. Akad. Handl., XXXI (*Tachina*); Muscides, 28 (id.).—Europe.  
 MEIGEN, Syst. Besch., IV, 327 (*Tachina*); VII, 255, gen. ref.  
 ZETTERSTEDT, Dipt. Scand., III, 1106 (*Tachina*).  
 MACQUART, Hist. Nat. Dipt., II, 106 (*Scnomctopia*); Annales Soc. Ent. France, 1849, 380 (*polychata*).  
 WALKER, List, IV, 786 (*Tachina epicydes*).—Martin Falls, Canada.  
 SCHINER, Fauna Austr., I, 463 (*polychata*); 465 (*affinis*). See Coquillett, footnote.  
 COQUILLETT, Revis. Tachin., 94.—Toronto, Canada; Franconia, N. H.; Col.  
**amplexa** COQUILLETT, Revis. Tachin., 98.—White Mts., N. H.; Frankford, Pa.  
**angustata** VAN DER WULP, Biologia, Dipt., II, 70.—Guerrero, Mex.  
 COQUILLETT, Revis. Tachin., 90.—Texas.  
**areos** WALKER, see *Polidca*.

- blanda** OSTEN SACKEN, *Canad. Ent.*, XIX, 162.—U. S. (no locality), bred by RILEY from *Pyramis cardui* LINN.  
 WILLISTON, in Scudder's *Butterflies of New England*, p. 1918, quotes desc.; bred from *Nisoniades brizo* BD.-LEC.  
 COQUILLET, *Revis. Tachin.*, 92.—N. H., Philadelphia, N. Ill., Kans., Col.; bred from *Eulca cippus* CRAM.
- blandita** COQUILLET, *Revis. Tachin.*, 96.—Franconia, N. H.
- boarmia** COQUILLET, *Revis. Tachin.*, 95.—Mass., D. C., Ark.; bred from *Boarmia pampinaria* GUEN. and *Lorostege similalis* GUEN.  
 N. J.—Smith Cat.; infests *Cacacia fervidana*.
- brevis** VAN DER WULP, *Biologia, Dipt.*, II, 64.—Guerrero, Mex.
- cæruleiventris** VAN DER WULP, *Biologia, Dipt.*, II, 64.—Tabasco, Mex.
- cecropiæ** RILEY MS., see *Winthemia quadripustulata*.
- ceratomia** COQUILLET, *Revis. Tachin.*, 101.—Mo., Kans., Texas; bred from *Ceratomia undulosa* WALK., *Omphalocera cariosa* LED., *Pempelia* sp., and an undetermined Pyralid.
- ? **cessatrix** WALKER, *Trans. Ent. Soc., n. ser.*, v, 305 (sep. 38) (*Lydella*).—Mex. Query by J. M. A.
- chelonix** RONDANI, *Dipt. Ital. Prod.*, III, 120.—Europe.  
 COQUILLET, *Revis. Tachin.*, 92.—N. H. to Cal.; bred from *Arachnis picta* PACK., and *Arctia docta* WLK.
- chrysophani** TOWNSEND, see *confinis*.
- ciliata** TOWNSEND, see *Winthemia quadripustulata*.
- commetans** WALKER, *Trans. Ent. Soc., n. ser.*, v, 300 (*Eurigaster*).—Mex.
- confinis** FALLÉN, *Muscides*, 32 (*Tachina*).—Europe.  
 MEIGEN, *Syst. Besch.*, IV, 396 (*Tachina*); VII, 261, gen. ref.  
 DESVOIDY, *Myodaires*, 159 (*Phyre zonata*, *servillei*, and *sabulosa*).  
 ZETTERSTEDT, *Ins. Lapp.*, 644; *Dipt. Scand.*, III, 1140 (*Tachina*).  
 RONDANI, *Dipt. Ital. Prod.*, III, 458.  
 SCUDDER, *Canad. Ent.*, XIX, 166 (*Tachina theclarum*).—Ontario? Bred by Wm. Saunders from *Thecla inornata* (*Thecla calanus* HUEB.).  
 WILLISTON, in Scudder's *Butterflies of New England*, p. 1920, pl. LXXXIX, f. 17, 19 (*theclarum*); bred from *Lycæna pseudargiolus* BD.-LEC.  
 TOWNSEND, *Ent. News*, II, 197 (*chrysophani*).—Iowa; bred from *Chrysophanus dione* (*C. xanthoides* BOISD.).  
 COQUILLET, *Revis. Tachin.*, 97.—N. H., La., Ida., Cal., etc.; bred from *Dendrobis howardi* DYAR and *Lycæna exilis* BOISD.
- consobrina** VAN DER WULP, *Biologia, Dipt.*, II, 68.—Tabasco, Mex.
- curriei** COQUILLET, *Revis. Tachin.*, 94.—University, N. D.
- datanæ** TOWNSEND, see *Winthemia quadripustulata*.
- desita** WALKER, *Trans. Ent. Soc., n. ser.*, v, 299 (*Eurigaster*).—Mex.
- dorsalis** COQUILLET, *Canad. Ent.*, XXX, 236.—Pa., Ga.
- doryphoræ** RILEY, see *Phorocera*.
- dubia** FALLÉN, *Kongl. svenska Vetensk. Akad. Handl.*, XXXI (*Tachina*); *Muscides*, 29 (id.).—Europe.  
 MEIGEN, *Syst. Besch.*, IV, 360 (*Tachina*); VII, 256, gen. ref.  
 DESVOIDY, *Myodaires*, 141 (*Lypha*); 142 (*L. sylvatica*); 113 (*Lydella agrestis*, *nitida*, and *dubia*). [Schiner.]  
 ZETTERSTEDT, *Ins. Lapp.*, 643; *Dipt. Scand.*, III, 1111 (both *Tachina*).  
 RONDANI, *Dipt. Ital. Prod.*, III, 90, footnote (*Aporomyia*, n. gen.).  
 SCHINER, *Fauna Austr.*, I, 460.  
 COQUILLET, *Revis. Tachin.*, 95.—Colorado.
- elongata** VAN DER WULP, *Biologia, Dipt.*, II, 65, pl. III, f. 8.—Costa Rica.

- epicydes** WALKER, see *affinis*.
- eudryadis** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 287.—N. Y. (*eudryæ*); bred from *Eudryas* sp.
- COQUILLET, Revis. Tachin., 100.—Canada; N. H., Mass., N. J., D. C., Md., Va., Ohio, Mo.; bred from nine species of Lepidoptera.
- Axton, N. Y.—M. and H.
- exilis** VAN DER WULP, Biologia, Dipt., II, 71.—Guerrero, Mex.
- fertoria** WALKER, Trans. Ent. Soc., n. ser., v, 300 (*Eurigaster*).—Mex.
- flavicans** VAN DER WULP, Biologia, Dipt., II, 74.—Orizaba, Mex.
- flavicauda** RILEY, see *Belvosia unifasciata*.
- flavirostris** VAN DER WULP, Biologia, Dipt., II, 69, pl. III, f. 7.—Orizaba and Tabasco, Mex.
- COQUILLET, Revis. Tachin., 100.—D. C., Va., Fla., Miss.; bred from *Lagoa opercularis* S. and A., several times.
- fronto** COQUILLET, Revis. Tachin., 96.—Mt. Washington, N. H.
- futilis** OSTEN SACKEN, Canad. Ent., XIX, 161.—No locality, presumably Mass.; bred by T. W. Harris and S. H. Scudder from *Vanessa atalanta*.
- WILLISTON, in Scudder's Butterflies of New England, p. 1917, quotes desc.—Conn.
- COQUILLET, Revis. Tachin., 98.—Mass., N. Ill., Cal., Ore., Mich.; bred from *Chisiocampa thoracica* STRETCH and *Hadena apaniformis* GROTE.
- glabricula** VAN DER WULP, Biologia, Dipt., II, 73.—Guerrero, Mex.
- griseomicans** VAN DER WULP, Biologia, Dipt., II, 74.—Guerrero and Tabasco, Mex.; Costa Rica.
- COQUILLET, Revis. Tachin., 98.—D. C.; reared from *Orgyia leucostigma* SM. and ABBOTT. N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- habilis** WALKER, Trans. Ent. Soc., n. ser., v, 301 (*Eurigaster*).—Mex.
- helvina** COQUILLET, Revis. Tachin., 96.—White Mts., N. H.
- N. J.—Smith Cat.
- hirsuta** OSTEN SACKEN, see *vulgaris*.
- hispidia** VAN DER WULP, Biologia, Dipt., II, 65.—Orizaba and Guerrero, Mex.
- humilis** VAN DER WULP, Biologia, Dipt., II, 72.—Guerrero, Mex.
- hybreas** WALKER, see *Tachina*.
- ignobilis** VAN DER WULP, Biologia, Dipt., II, 71.—Guerrero, Mex.
- ? **indita** WALKER, Trans. Ent. Soc., n. ser., v, 306 (*Lydcella*).—Mex.
- infesta** WILLISTON, see *Winthemia quadripustulata*.
- intersticta** VAN DER WULP, Biologia, Dipt., II, 69.—Guerrero, Mex.
- irrequieta** WALKER, see *Frontina*.
- isæ** COQUILLET, Revis. Tachin., 96.—D. C.; bred from *Isa inornata* G. and R.
- lagœ** TOWNSEND, Ent. News, II, 159.—Guanajuato, Mex.; bred from *Lagoa opercularis*.
- latevittata** VAN DER WULP, Biologia, Dipt., II, 66.—Guerrero, Vera Cruz, Tabasco, and Orizaba, Mex.
- latimanus** VAN DER WULP, see *rufilatera*.
- lepada** DESVOIDY, Myodaires, 153 (*Zenillia*).—Cuba.
- leucaniæ** KIRKPATRICK, see *Winthemia quadripustulata*.
- leuconota** VAN DER WULP, Tijdschr. v. Ent., XXXV, 195; Biologia, Dipt., II, 482.—Guerrero, Mex.
- lobeliæ** COQUILLET, Revis. Tachin., 97.—Md., D. C., W. Va.; bred from *Acronycta hamamelis* GUEN., *A. lobeliæ* GUEN., *A. sp.*, and *Orgyia leucostigma* S. and A.
- maura** VAN DER WULP, Biologia, Dipt., II, 72.—Guerrero, Mex.
- mella** WALKER, see *Tachina*.
- modesta** BIGOT, in Sagra's Cuba, 812 (*Eurigaster*).—Cuba.

- nigricauda** VAN DER WULP, *Biologia*, Dipt., II, 70.—Vera Cruz, Mex.  
 ? **nigrifacies** BIGOT, *Annales*, 1888, 258 (*Chatolyga*).—Rocky Mts.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 22, refers to *Paraxorista*, with a doubt.
- nigripalpis** TOWNSEND, *Psyche*, 1896, 330.—III?  
 COQUILLET, *Revis. Tachin.*, 93.—Toronto, N. H., D. C., III., S. Cal.
- nigriventris** BIGOT, *Annales*, 1888, 257 (*Chatolyga*).—Mex.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 21, notes on type, refers to *Sisyropa*.
- nitidiventris** BIGOT, *Annales*, 1888, 258 (*Chatolyga*).—Mex.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 23, notes on type; refers to *Sisyropa*.
- nobilis** WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 354, pl. XI, f. 92.—St. Vincent, W. I.
- obscura** BIGOT, in Sagra's *Cuba*, 812 (*Eurigaster*).—Cuba. See also *tessellata*.
- obscurata** VAN DER WULP, *Biologia*, Dipt., II, 62.—Vera Cruz and Tabasco, Mex.
- occidentalis** BIGOT, *Annales*, 1888, 258 (*Chatolyga*).—Mex.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 23, notes on type; refers to *Paraxorista*.
- ochracea** VAN DER WULP, *Biologia*, Dipt., II, 63.—Mexico, several places; Costa Rica.
- ordinaria** VAN DER WULP, *Biologia*, Dipt., II, 64.—Guerrero and Tabasco, Mex.  
 COQUILLET, *Revis. Tachin.*, 94.—N. H., Mo., Ga., Texas.
- osten-sackenii** KIRKPATRICK, see *Winthemia quadripustulata*.
- panætius** WALKER, see *Tachina mella*.
- pansa** WALKER, see *Tachina mella*.
- parva** COQUILLET, *Revis. Tachin.*, 100.—Col.
- petiolata** COQUILLET, *Revis. Tachin.*, 98.—Va.; bred from *Lophyrus* sp.
- phycitæ** LEBARON, see *pyste*.
- platysamiæ** TOWNSEND, see *Winthemia quadripustulata*.
- polita** COQUILLET, *Revis. Tachin.*, 99.—Tifton, Ga.
- postica** WALKER, *Trans. Ent. Soc.*, n. ser., v, 301 (*Eurigaster*).—Mex.
- pyste** WALKER, *List*, IV, 754 (*Tachina*).—Nova Scotia.  
 LEBARON, 2d Ill. Report, 123 (*phycitæ*).—Ill.; bred from *Phycita nebule*.  
 RILEY, 4th Mo. Rept., 40 (*phycitæ*).  
 WILLISTON, *Scudder's Butterflies of New England*, III, 1921, pl. LXXXIX, f. 20 (*scudderi*).—Texas; bred by Belfrage from *Thecla autolyceus* EDW.  
 FORBES, *Ill. Ent. Rept. for 1889-90*, appendix, 22 (*phycitæ*).  
 COQUILLET, *Revis. Tachin.*, 93.—E. and S. States; Mo., Tex.; Allende, Mex.; bred from *Hyponomeuta multipunctella* CLEM., *Mincola indiginella* ZELL., a Pyralid, and a Tortricid.
- rubrella** DESVOIDY, *Myodaires*, 179 (*Carceclia*); *Dipt. Env. Paris*, I, 241 (id.).—San Domingo.
- rubricornis** VAN DER WULP, *Biologia*, Dipt., II, 66.—Vera Cruz and N. Yucatan, Mex.
- rufata** BIGOT, see *Bolomyia*.
- rufilatera** RONDANI, *Nuovi Ann. Sci. Nat. Bologna*, 1850, 9.—Venezuela.  
 ? BIGOT, *Annales*, 1888, 257 (*Chatolyga crythropyga*).—Mex. [Brauer, *Sitzb.*, CVI, 20, with doubt.]  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 162; V, 402, 430 (*Masipoda geminata*).—Orizaba, Mex.  
 VAN DER WULP, *Biologia*, Dipt., II, 67, pl. III, f. 10 (*latimana*); p. 482, notes.—Mexico, several places.

- GIGLIO-TOS, Ditt. del Mess., III, 37, syn. and desc.—Mex.
- ? *rufipalpis* BIGOT, Annales, 1888, 256.—Mex.
- BRAUER, Sitzungsbericht d. K. Akad., CVI, 13, desc.; thinks forms a new genus, hence the query.
- saginata* WALKER, Trans. Ent. Soc., n. ser., v, 298 (*Eurigaster*).—Mex.
- sororcula* VAN DER WULP, Biologia, Dipt., II, 68.—Morelos, Mex.
- spinipennis* COQUILLET, Revis. Tachin., 95.—Tifton, Ga.
- tenuipalpis* VAN DER WULP, Biologia, Dipt., II, 73.—Guerrero, Mex.
- tessellata* ROEDER, Stett. Ent. Zeit., 1885, 345.—Porto Rico.
- Perhaps the same as *obscurus* BIGOT, from Cuba,—Roeder.
- theciarum* SCUDDER, see *confinis*.
- tricolor* VAN DER WULP, Biologia, Dipt., II, 67, pl. III, f. 9.—Mexico, several places; Costa Rica.
- trisetosa* COQUILLET, Proc. U. S. N. M., XXV, 110.—Moscow and Lewiston, Ida.
- trivittata* WIEDEMANN, Auss. Zw., II, 300 (*Tachina*).—St. Thomas, W. I.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 328 (*Nemorilla*).
- trivittata* VAN DER WULP, Biologia, Dipt., II, 70.—Orizaba, Vera Cruz and Tabasco, Mex.
- GIGLIO-TOS, Ditt. del Mess., III, 38.—Orizaba.
- unicolor* VAN DER WULP, Biologia, Dipt., II, 63.—Morelos, Jalisco and Guerrero, Mex.
- violenta* WALKER, see *Frontina*.
- vorax* WIEDEMANN, Auss. Zw., II, 315 (*Tachina*).—Brazil.
- BIGOT, Annales, 1888, 258 (*Chetolyga flavolimbata*).—Mex.
- BRAUER, Sitzungsbericht d. K. Akad., CVI, 23, note on type, and syn.
- vulgaris* FALLÉN, Kongl. svenska Vetensk. Akad. Handl., XXXI: Muscides, 20 (both *Tachina*).—Europe.
- MEIGEN, Syst. Besch., IV, 391 (*Tachina*); VII, 255, gen. ref.
- DESVOIDY, Myodaires, 115 (*Lydella scutellaris*).
- MACQUART, Hist. Nat. Dipt., II, 118 (*Eurigaster*); Annales Soc. Ent. France, 1849, 387 (*distans*); 388 (*audax*); 409 (*florida*).
- ZETTERSTEDT, Dipt. Scand., III, 1139.
- RONDANI, Dipt. Ital. Prod., III, 140.
- SCHINER, Fauna Austr., I, 458.
- OSTEN SACKEN, Canad. Ent., XIX, 163 (*hirsuta*).—No locality; bred by Lintner from *Picris rapa*.
- WILLISTON, in Scudder's Butterflies of New England, p. 1919, pl. LXXXIX, f. 13-15 (*hirsuta*).
- COQUILLET, Revis. Tachin., 93.—White Mts. and Franconia, N. H.; Olympia, Wash.
- TOWNSEND, Psyche, 1893, 467, bred by Forbes from *Pyrausta penitialis* GROTE.
- Province of Quebec—Fyles.

## EUPHOROCERA.

- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 112, 1892.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 197, 1893.
- COQUILLET, Revis. Tachin., 101, 1897, notes.
- cinerea* VAN DER WULP, Biologia, Dipt., II, 81 (*Phorocera*).—Guerrero, Mex.
- COQUILLET, Revis. Tachin., 102.—Franconia, N. H.
- claripennis* MACQUART, Dipt. Exot., Suppl. III, 209, pl. v, f. 8 (*Phorocera*).—N. A.
- WALKER, in Lord's Naturalist in Vancouver Id., II, 339 (*Eurygaster septentrionalis*).—Vancouver Id.

- WILLISTON, Scudder's Butterflies of New England, III, 1921, pl. LXXXIX, f. 52 (*Phorocera edwardsii*).—No locality; bred from butterflies by Dimmock and Riley.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 351 (*Podotachina vibrisata*).—New York.
- TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 366 (*Phorocera edwardsii*).—Fla. and Ill.
- COQUILLETT, Revis. Tachin., 102; Proc. U. S. N. M., XXII, 253.—United States generally; reared from 26 hosts, mostly Lepidoptera, a few Coleoptera.
- HOWARD, Bull. Div. Ent., v, Tech. ser., 43, note on habit.
- MORGAN, Bull. 30, n. ser., Div. of Ent., 25, bred from *Melanoplus differentialis*.—Miss.
- gelida** COQUILLETT, Revis. Tachin., 101.—Pt. Barrows, Alaska.
- tachinomoides** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 112.—Las Cruces, N. M.  
*Note*.—Coquillett has placed this as a synonym of *claripennis* in his Revision; from the appearance of the type it seemed best to me to recognize it as a separate species.

## PHOROCERA.

- DESVOIDY, Myodaires, 1830, 131 (*Phorocera*); 122 (*Blondelia*); 123 (*Rhinomyia*); 154 (*Pales*).
- VAN DER WULP, Biologia, Dipt., II, 75, desc. and table of Mexican spp.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 93, 1889; v, 333, 400, 1891; VI, 118, 1893.
- ænea** BIGOT, Annales, 1888, 259 (*Chatolyga*).—Mex.  
 ? BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 209 (*Paradoria nigra*).—Venezuela.
- BRAUER, Sitzungsbericht d. K. Akad., CVI, 22, type of Bigot redesc.; syn. with a query.
- ? **antennata** WALKER, Dipt. Saund., 298 (*Tachina*).—U. S.  
 COQUILLETT, Revis. Tachin., 105, not seen; gen. ref. with a doubt.
- appendiculata** VAN DER WULP, Biologia, Dipt., II, 85.—Guerrero, Mex.
- atriceps** VAN DER WULP, see *Mctadonia barbata*.
- barbata** BIGOT, see *Mctadonia*.
- botyvora** DESVOIDY, Myodaires, 138.—Cuba; bred from chrysalis of a *Botys*.
- carbonaria** VAN DER WULP, Biologia, Dipt., II, 78.—Guerrero, Mex.
- cinerea** VAN DER WULP, see *Euphorocera*.
- claripennis** MACQUART, see *Euphorocera*.
- comstocki** WILLISTON, in Scudder's Butterflies of New England, III, 1922.—No locality; reared by Riley from *Megathymus yuccæ*.  
 TOWNSEND, Psyche, 1893, 467, bred by Forbes from *Lophyrus* sp. and *Pyranta penitatis* GROTE.
- COQUILLETT, Revis. Tachin., 104.—D. C., S. C., Mo. N. J.—Smith Cat.
- cylindrata** VAN DER WULP, Biologia, Dipt., II, 82.—Guerrero, Mex.
- demylus** WALKER, see *Admontia*.
- doryphoræ** RILEY, 1st Mo. Rept., 111 (*Lydella*).—Mo.; reared from *Doryphora decemlineata* SAY.  
 PETTIT, Bull. 186, Mich. Expt. Sta., and Rept. Mich. Bd. of Agric. for 1901, 189, reared from same beetle in Northern Mich.; good fig.  
 COQUILLETT, Revis. Tachin., 104.—N. Ill., Mo., Col., N. M.; bred by Riley from *Vanessa antiopa* L.



- edwardsii* WILLISTON, see *Euphorocera claripennis*.
- erecta* COQUILLET, Proc. U. S. N. M., xxv, 112; Revis. Tachin., 103 (*parva* BIGOT).—Ark., S. Cal.; bred from *Tortrix citrana* FERN.
- facialis* COQUILLET, Revis. Tachin., 105.—San Diego, Texas.
- flavicauda* VAN DER WULP, Biologia, Dipt., II, 83.—Guerrero and Mexico City, Mex.
- fulviceps* VAN DER WULP, Biologia, Dipt., II, 80.—Guerrero and Orizaba, Mex.
- immaculata* VAN DER WULP, Biologia, Dipt., II, 82.—Guerrero, Mex.
- leucaniæ* COQUILLET, Revis. Tachin., 104.—D. C., Ky., Tenn.; bred from *Leucania unipuncta* HAW. and *Loxostege similalis* GUES.
- linearis* VAN DER WULP, Biologia, Dipt., II, 86.—Guerrero, Mex.
- lophyri* TOWNSEND, Trans. Amer. Ent. Soc., XIX, 28).—Ottawa, Canada; reared from *Lophyrus abietis*.
- Note*.—Coquillett has made this a synonym of *Euphorocera claripennis*, but from an examination of the type I think it should stand.
- macra* VAN DER WULP, Biologia, Dipt., II, 84.—Tabasco, Mex.  
COQUILLET, Revis. Tachin., 103.—Utica, Miss.
- melanoceps* BIGOT, see *Mctadoria barbata*.
- ? *melobosis* WALKER, List, IV, 743 (*Tachina*); Dipt. Saund., 290 (*T. addita*).—Fla.; U. S.
- Note*.—COQUILLET, Revis. Tachin., 105, syn.: not seen, but perhaps a *Phorocera*.
- muscaria* VAN DER WULP, Biologia, Dipt., II, 83.—Tabasco, Mex.
- nigrifrons* VAN DER WULP, Biologia, Dipt., II, 81.—Guerrero, Mex.
- nigrita* VAN DER WULP, Biologia, Dipt., II, 77, pl. III, f. 11.—Costa Rica.
- parva* BIGOT, Annales, 1888, 260.—Rocky Mts.  
BRAUER, Sitzungsbericht d. K. Akad., CVI, 19, refers to *Paradoria*, from type.
- Note*.—For the *parva* of Coquillett's Revision, see *erecta*.
- parvula* VAN DER WULP, Biologia, Dipt., II, 78.—Orizaba, Mex.  
GIGLIO-TOS, Ditt. del Mess., III, 41, notes.—Mex.
- prisca* WALKER, see *Cryptomeigenia theutis*.
- promiscua* TOWNSEND, see *Frontina frenchii*.
- puer* WILLISTON, Trans. Ent. Soc. Lond., 1896, 354, pl. XI, f. 91.—St. Vincent, W. I.
- rufilabrum* VAN DER WULP, Biologia, Dipt., II, 79.—Guerrero, Mex.  
COQUILLET, Revis. Tachin., 103.—Newark, N. J.  
N. J.—Smith Cat.; Battle Creek, Mich.—J. M. A.
- saundersii* WILLISTON, in Scudder's Butterflies of New England, III, 1922.—No locality; bred by Riley from chrysalis of *Argynnis cybele*.  
COQUILLET, Revis. Tachin., 104.—Alameda Co., Cal.
- scutellaris* VAN DER WULP, Biologia, Dipt., II, 85.—Guerrero, Mex.
- setigera* VAN DER WULP, Biologia, Dipt., II, 84.—Vera Cruz and Tabasco, Mex.
- sobrina* VAN DER WULP, Biologia, Dipt., II, 84.—Tabasco, Mex.
- sternalis* COQUILLET, Proc. U. S. N. M., xxv, 112.—N. H., Me., Idaho.
- tenebricosa* VAN DER WULP, Biologia, Dipt., II, 77.—Guerrero and Tuxpango, Mex.
- tenuiseta* MACQUART, Dipt. Exot., Suppl. I, 166.—Cayenne, S. A.  
VAN DER WULP, Biologia, Dipt., II, 483, notes and oc.—Guerrero, Mex.
- theutis* WALKER, see *Cryptomeigenia*.
- tortricis* COQUILLET, Revis. Tachin., 103.—Mich., Mo.; bred by Gillette from a Tortricid.
- xanthura* VAN DER WULP, Biologia, Dipt., II, 80 and 483.—Guerrero, Mex.

## CHÆTOGENA.

RONDANI, Dipt. Ital. Prod., III, 175, 1859.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 94, 1889 (emended into *Scutigena*); VI, 119, 1893 (*Scutigena*).

**carbonaria** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 31, f. 19.—Orizaba, Mex.

**cincta** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 32.—Orizaba, Mex.

**gracilis** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 33, f. 7.—Mex.

## MYIOPHARUS.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 161, 1889; V, 340, 1891.

**metopia** BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 161; V, 340; VI, 120.—Tacubaya and Merida, Mex.

VAN DER WULP, Biologia, Dipt., II, 158 (*Didyma mæsta*).—Several places in Guerrero, Mex. [B. B.]

## HYPERTROPHOCERA.

TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 360, 1891.

**parvipes** TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 360; Canad. Ent., XXIV, 166, oc. and note.—Las Cruces, N. M.

## FRONTINA.

MEIGEN, Syst. Besch., VII, 247, 1838.

RONDANI, Dipt. Ital. Prod., IV, 36, 1861.

SCHINER, Fauna Austr., I, 496, 1862.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 334, 1891 (*Achætoncra*); 340 (*Thysanomyia*); VI, 115, 1893 (*Parafrontina*).

COQUILLET, Revis. Tachin., 105, 1897, notes and syn.

**acroglossoides** TOWNSEND, see *Chatogadia analis*.

**aletiæ** RILEY, Canad. Ent., XI, 162 (*Tachina*). Bred from *Aletia argillacea* HUEB.

COMSTOCK, Rept. Commr. of Agric., 1879, 303 (*Tachina fraterna*).—Ala.; bred from *Aletia argillacea* HUEB.; the description is quoted by Riley, 4th Rept. U. S. Ent. Comm., Appendix, p. 109.

COQUILLET, Revis. Tachin., 107.—Toronto, Canada; Mass. to Fla. and S. Cal.; reared from *Cerura* sp., *Dasylopha anguina* S. and A., *Halisidota maculata* HARR., *H. tessellata* S. and A., *Lagoa opercularis* S. and A., and *Orgyia leucostigma* S. and A.

**americana** BIGOT, Annales, 1888, 260 (*Prosopea*).—Mex.

VAN DER WULP, Biologia, Dipt., II, 120 (*Prosphecrusa contigua*); 210, syn.—Morelos, Mex.

**ancilla** WALKER, Dipt. Saund., 299 (*Tachina*).—U. S.

COQUILLET, Revis. Tachin., 106.—Conn. Ga.

N. J.—Smith Cat.

**apicalis** BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 115 (*Parafrontina*).—N. A.

**archippivora** WILLISTON, in Scudder's Butterflies of New England, III, 1923, pl. LXXXIX, f. 18 (*Masicera*).—Greeley, Col.; bred from *Danaïs archippus*.

COQUILLET, Revis. Tachin., 106.—Mich., Mo., Tex., Cal., Wash.; bred from *Agrotis ypsilon* ROTT., *Clisiocampa constricta* STRETCH, *C. pluvialis*

DYAR, *Danaïs archippus* FAER., *Laphygma flavimaculata* HARV., *Pyramis cardui* L., and *P. carye* HUEB.

I reared this also from *Vanessa antiopa* at Moscow, Ida.—J. M. A. Beulah, N. M.—Skinner.

**armigera** COQUILLET, Insect Life, I, 332 (*Masicera*); Revis. Tachin., 106.—Los Angeles, Cal.; Allende, Mex. Bred from *Heliothis armiger* HUEB.

VAN DER WULP, Biologia, Dipt., II, 119 (*Prospherysa comosa*).—Teapa, Mex.

Ormond, Fla.—Johnson.

[**chrysopygata** BIGOT, Annales, 1888, 84.—Mex.

BRAUER, Sitzungsbericht d. K. Akad., CVI, 28, the types are a mixture of two species, of which the one corresponding to the description has no locality label.]

**dubia** WILLISTON, in Scudder's Butterflies of New England, III, 1924 (*Masicera*).—No locality; bred by Riley from *Vanessa antiopa* L.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 286 (*Masicera sphingivora*).—Morgantown, W. Va.; bred by Hopkins from a Sphingid larva.

COQUILLET, Revis. Tachin., 108, makes this a synonym of *violenta* WALKER, which seems to me uncommonly doubtful, so I do not follow it.—D. C.; bred from *Philampclus vitis* L.

? **dydas** WALKER, List, IV, 748 (*Tachina*).—Martin Falls, Canada.

COQUILLET, gen. ref. from Walker's desc., with a doubt.

**frenchii** WILLISTON, in Scudder's Butterflies of New England, III, 1923, pl. LXXXIX, f. 23 (*Masicera*).—Moosehead L., Maine; bred from *Papilio glaucus*.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 334 (*Achatoncura hesperus*).—N. A.

TOWNSEND, Psyche, VI, 84 (*Phorocera promiscua*); Canad. Ent., XXIII, 206 (*Meigenia websteri*); Psyche, VI, 187 (*Masicera schizura*); Trans. Amer. Ent. Soc., XIX, 287 (*Masicera datanarum*).—Orono, Maine, from *Clisiocampa sylvatica*; Lafayette, Ind.; Manhattan, Kans., from *Schizura unicornis*; N. Y., Canada and Minn., bred from *Datana* sp. and *Attacus polyphemus*.

RILEY, 5th Mo. Rept., 139; 7th Rept., 178; 8th Rept., 179 (*Tachina anonyma*, without description).—Mo. and Kans.; bred from *Anisota rubicunda*, *Caloptenus spretus*, and *Megathymus yucca*.

RILEY, PACKARD, and THOMAS, 1st Rept. U. S. Ent. Comm., 319, parasitic on Rocky Mt., Locust (*Tachina anonyma*).

COQUILLET, Revis. Tachin., 107.—Canada; U. S. generally; list of *twenty-nine* hosts.

*Note*.—I examined types of *datanarum* and *schizura*; they seem to be the same.

**fulvipalpis** BIGOT, Annales, 1888, 263 (*Masicera*).—Rocky Mts.

BRAUER, Sitzungsbericht d. K. Akad., CVI, 12, gen. ref. from type.

**insularis** WIEDEMANN . . . (*Tachina*).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 334.—St. Thomas, W. I.

Perhaps a manuscript name of Wiedemann's.

**irrequieta** WALKER, List, IV, 789 (*Tachina*).—Nova Scotia. See note to *rileyi*.

**rileyi** WILLISTON, in Scudder's Butterflies of New England, III, 1924, pl. LXXXIX, f. 22, 24 (*Masicera*).—No locality; bred by Riley from *Papilio cresphontes*.

- COQUILLET, Revis. Tachin., 108 (as *Tachina irrequieta* WALKER, which I do not consider recognizable).—Jacksonville, Fla.; bred from *Papilio thoas* L.
- rubentis** COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 310 (*Achatoncura*); Revis. Tachin., 106.—Tifton, Ga.; Jacksonville and L. Worth, Fla.
- ruffrons** ROEDER, Stett. Ent. Zeit., 1885, 346.—Porto Rico.
- rufostylata** BIGOT, see *Prospherysa*.
- setipes** COQUILLET, Proc. U. S. N. M., xxv, 112.—Brookings, S. D.
- tenthredinidarum** TOWNSEND, Trans. Amer. Ent. Soc., xix, 285 (*Masicera*).—Ottawa, Can.; from sawfly.
- COQUILLET, in the errata attached to the revised index to Revis. Tachin., p. 156, refers here. See *Masicera exilis*.
- violenta** WALKER, List, iv, 788 (*Tachina*).—Nova Scotia. See note to *dubia*.

## STURMIA.

- DESVOIDY, Myodaires, 171, 1830.
- RODANI, Dipt. Ital. Prod., i, 71, 1856 (*Blepharipa*).
- KOWARZ, Verh. Zool.-Bot. Ges., xxii, 460, 1873 (*Ctenocnemis*).
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 96, 1889 (*Blepharipoda*); 163 (*Argyrophylax*).
- COQUILLET, Revis. Tachin., 108, 1897, syn. and notes.
- albifrons** WALKER, Dipt. Saund., 283 (*Tachina*); 296 (*T. obconica*).—Both U. S. COQUILLET, Revis. Tachin., 109.—Mass. to Fla. and S. Cal.; bred from *Ecpantheria scribonia* STOLL. and *Leucarctia acraea* DRURY.
- albincisa** WIEDEMANN, Auss. Zweifl., ii, 334 (*Tachina*).—St. Thomas, W. I. BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 163; v, 343, pt. desc. and ref. to *Argyrophylax*.
- VAN DER WULP, Biologia, Dipt., ii, 485, pl. xiii, f. 19.—Guerrero, Mex.
- australis** COQUILLET, Revis. Tachin., 110.—Jacksonville, Fla.
- austrina** COQUILLET, Proc. U. S. N. M., xxv, 113.—Nassau, Bahamas.
- bakeri** COQUILLET, Revis. Tachin., 112.—Col.
- discalis** COQUILLET, Proc. U. S. N. M., xxv, 114.—Wis.
- distincta** WIEDEMANN, Auss. Zweifl., ii, 334 (*Tachina*).—W. I. TOWNSEND, Jour. Jamaica Inst., i, 70 (*Masicera protoparcis*).—Jamaica; bred from *Protoparce jamaicensis* BUTLER.
- COQUILLET, Revis. Tachin., 111.—Va., Ga., Miss., Tex., Ill., Cal.; bred from *Protoparce celeus* and "a Sphingid."
- dubia** BIGOT, Annales, 1888, 257 (*Chatolyga*).—Mex. BRAUER, Sitzungsbericht d. K. Akad., cvi, 21, pt. desc. of type; ref. to *Argyrophylax*, but related to *Atacta*.
- fraudulenta** VAN DER WULP, Biologia, Dipt., ii, 110 (*Masicera*).—Guerrero and Vera Cruz, Mex. COQUILLET, Revis. Tachin., 112.—Mass., Ill., Fla.
- harrisinae** COQUILLET, Revis. Tachin., 110.—U. S.; bred from *Harrisina americana*.
- inquinata** VAN DER WULP, Biologia, Dipt., ii, 107 (*Masicera*).—Morelos, Mex. COQUILLET, Revis. Tachin., 111.—D. C., Ill., Mo., Ga., Miss., La., Col.; bred from eight lepidopterous hosts. N. J.—Smith Cat.; from *Eacles imperialis*.
- limata** COQUILLET, Proc. U. S. N. M., xxv, 113.—Opelousas, La.: Ohio.
- mexicana** GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158, 1893; Dipt. del Mess., iii, 33, f. 18 (*Blepharipoda*).—Tehuacan, Mex.

- nigrita** TOWNSEND, Trans. Amer. Ent. Soc., XVIII. 358 (*Masicera*).—Carlinville, Ill.  
 COQUILLET, Revis. Tachin., III.—Col. Idaho—J. M. A.  
**occidentalis** COQUILLET, Revis. Tachin., 110.—Seattle, Wash. Idaho—J. M. A.  
**phyciodis** COQUILLET, Revis. Tachin., 109.—Cape Cod, Mass., and Piney Point, Md.; bred from *Phyciodis* sp.  
**pilatei** COQUILLET, Revis. Tachin., 111.—Tifton, Ga.  
**rostrata** COQUILLET, see *Siphosturmia*.  
**schizuræ** COQUILLET, Revis. Tachin., 112.—Pullman, Wash.; bred by Piper from *Schizura ipomææ* DOUBLEDAY.  
**sternalis** COQUILLET, Revis. Tachin., 108.—Mo.  
**strigata** VAN DER WULP, Biologia, Dipt., II. 105 (*Masicera*).—Guerrero, Morelos, Vera Cruz and Tabasco, Mex.  
 GIGLIO-TOS, Ditt. del Mess., III. 45 (id.), oc. in Mex.  
 COQUILLET, Revis. Tachin., 110.—Jacksonville, Fla.

### MASICERA.

- MACQUART, Hist. Nat. Dipt., II. 118. 1835.  
 MEIGEN, Syst. Besch., VII. 178. 1838.  
 RONDANI, Dipt. Ital. Prod., I. 71 (*Cromasia*). 1856.  
 SCHINER, Fauna Austr., I. 481. 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV. 87. 1889 (*Derodes* and *Hemimasicera*).  
 VAN DER WULP, Biologia, Dipt., II. 103, def. and table of Mexican species, 1890.  
 COQUILLET, Revis. Tachin., 113. 1897, notes.  
**abbreviata** BIGOT, see *Hypostena*.  
**abdominalis** VAN DER WULP, Biologia, Dipt., II. 106.—Yucatan, Mex.  
**archippivora** WILLISTON, see *Frontina*.  
**armigera** COQUILLET, see *Frontina*.  
**aurifrons** COQUILLET, Revis. Tachin., 114.—White Mts., N. H.  
**bilineata** VAN DER WULP, Biologia, Dipt., II. 112.—Yucatan, Mex.  
 GIGLIO-TOS, Ditt. del Mess., III. 43, notes.—Mex.  
**bistrigata** VAN DER WULP, Biologia, Dipt., II. 109.—Tabasco, Mex.  
**calcarata** VAN DER WULP, Biologia, Dipt., II. 114.—Cuernavaca, Mex.  
**castanifrons** BIGOT, see *Prosphegysa*.  
**celer** COQUILLET, Revis. Tachin., 114, footnote.—N. J., Va., La.  
**chætoneura** COQUILLET, Revis. Tachin., 115.—White Mts., N. H.  
 ? **chrysocephala** BIGOT, Annales, 1888. 261 (*Cromasia*).—Mex.  
 BRAUER, Sitzungsbericht d. K. Akad., CVI. 15, redesc. type; it will form a new genus.  
**cubæcola** JÆNNICKE, Neue Exot. Dipt., 74. pl. II, f. 6 (*Tachina*).—Cuba.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI. 209, refer to *Hemimasicera*.  
 BRAUER, Sitzungsbericht d. K. Akad., CVI. 14, same ref., from type.  
 ? **cubensis** MACQUART, Dipt. Exot., Suppl. III. 46. pl. V, f. 5.—Cuba.  
 BIGOT, in Sagra's Cuba, 813. I should think the generic reference doubtful.  
**curta** VAN DER WULP, Biologia, Dipt., II. 112.—Tabasco, Mex.  
**datanarum** TOWNSEND, see *Frontina frenchii*.  
**dejecta** VAN DER WULP, Biologia, Dipt., II. 113.—Guerrero, Mex.  
**disputans** WALKER, Trans. Ent. Soc., n. ser., V. 303.—Mex. Unrecognizable—Wulp.

*dubia* WILLISTON, see *Frontina*.

*eucerata* BIGOT, see *Leskia*.

*eufitchiæ* TOWNSEND, Trans. Amer. Ent. Soc., XIX, 286.—Fort Collins, Col.; bred by Gillette from *Eufitchia ribcaria*.

BAKER, Ent. News, VI, 174, a common parasite of *Thamnonoma flavicaria* and *T. quadrilincaria* at Fort Collins, Col.

COQUILLETT, Revis. Tachin., 115.—Grimsby, Canada; N. H., Md., D. C., Ill., Cal.

N. J.—Smith Cat.; bred from *Hyphantria cunea*.

*exilis* COQUILLETT, Revis. Tachin., 114 (*tenthredinidarum* TOWNSEND); revised index to same, 156.—Mass. and Col.

*expergita* WALKER, Trans. Ent. Soc., n. ser., v, 304.—Mex. Unrecognizable—Wulp.

*festinans* MEIGEN, Syst. Besch., IV, 382 and 384 (*Tachina rutila* and *festinans*).—Europe.

MACQUART, Annales Soc. Ent. France, 1850, 460 (*florum*).

SCHINER, Fauna Austr., I, 484 (*rutila* Mg.).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 330.

COQUILLETT, Revis. Tachin., 114.—N. H.

*flavescens* VAN DER WULP, Biologia. Dipt., II, 112.—Cuernavaca, Mex.

*flavifacies* BIGOT, Annales, 1888, 263.—Mex.

BRAUER, Sitzungsbericht d. K. Akad., CVI, 12, notes on generic position.

*fraudulenta* VAN DER WULP, see *Sturmia*.

*frenchii* WILLISTON, see *Frontina*.

*fulvipalpis* BIGOT, see *Frontina*.

*gentica* WALKER, Trans. Ent. Soc., n. ser., v, 302.—Mex. Unrecognizable—Wulp.

*glauca* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 46.—Mex.

*impedita* VAN DER WULP, Biologia, Dipt., II, 107.—Cuernavaca, Mex.

*inquinata* VAN DER WULP, see *Sturmia*.

*luctuosa* VAN DER WULP, Biologia, Dipt., II, 105.—Guerrero, Vera Cruz and Tabasco, Mex. White Mts., N. H.—Slosson.

*myoidæa* DESVOIDY, Myodaires, 114 (*Lydella*); Dipt. Env. Paris, I, 856 (id.).—Europe.

MACQUART, Annales Soc. Ent. France, 1850, 468 (*Masicra*).

COQUILLETT, Revis. Tachin., 114.—Canada, Mass., Ill.; bred from *Arzama obliquata* G. and R. and *Hydræcia nitela* GUEN.

*necopina* WALKER, Trans. Ent. Soc., n. ser., v, 303.—Mex. Unrecognizable—Wulp.

*nigrita* TOWNSEND, see *Sturmia*.

*normula* VAN DER WULP, Biologia, Dipt., II, 109.—Guerrero, Vera Cruz and Orizaba.

*pauciseta* COQUILLETT, Revis. Tachin., 113.—Ga., S. Cal.

*picta* VAN DER WULP, Biologia, Dipt., II, 108, pl. III, f. 13.—Mexico, several places.

*pictigaster* BIGOT, see *Hypostena*.

*piliseta* VAN DER WULP, Biologia, Dipt., II, 110.—Yucatan, Mex.

*polita* COQUILLETT, Proc. U. S. N. M., XXV, 114.—White Mts., N. H., 8,000 ft.

*protoparcis* TOWNSEND, see *Sturmia distincta*.

*pulverea* COQUILLETT, Revis. Tachin., 114.—Tifton, Ga., and Fla.

*pumila* VAN DER WULP, Biologia, Dipt., II, 108.—Guerrero, Mex.

*quadrivittata* BIGOT, see *Hypostena*.



- rileyi* WILLISTON, see *Frontina*.  
*schizuræ* TOWNSEND, see *Frontina frenchii*.  
*sesquiple* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 43.—Mex.  
*sodalis* VAN DER WULP, Biologia, Dipt., II, 106.—Guerrero and Tabasco, Mex. Ormond, Fla.—Johnson.  
*sordicolor* TOWNSEND, see *Biomya georgia*.  
*sordida* VAN DER WULP, Biologia, Dipt., II, 113.—Guerrero, Vera Cruz and Tabasco, Mex.  
*sphingivora* TOWNSEND, see *Frontina dubia*.  
*spinipes* BIGOT, see *Hypostena*.  
*strigata* VAN DER WULP, see *Sturmia*.  
*subpilosa* VAN DER WULP, Biologia, Dipt., II, 110.—Vera Cruz, Mex.  
*tantilla* VAN DER WULP, Biologia, Dipt., II, 106.—Tabasco, Mex.  
*tenthredinidarum* TOWNSEND, see *Frontina*.  
*trichoneura* VAN DER WULP, Biologia, Dipt., II, 111.—Guerrero, Mex.  
*usta* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 44.—Mex.  
*vittata* WALKER, Dipt. Saund., 301 (not p. 273) (*Tachina*).—S. A. GIGLIO-TOS, Ditt. del Mess., III, 45.—Mex.  
*zonata* BIGOT, see *Chetona*.

## ACEMYIA.

- DESVOIDY, Myodaires, 202, 1830.  
 MACQUART, Annales Soc. Ent. France, 1855, 24 (*Agculocera*).  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 128, 1889; VI, 160, 1893.  
 COQUILLET, Revision Tachin., 116, 1897, notes.  
*dentata* COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 311.—Georgetown, Fla., Mobile, Ala.; Los Angeles Co., Cal. Also Revis. Tachin., 116.—Mass., Conn., Ga., Fla., Ala., Miss., Mo., Cal.; bred from *Chortophaga viridifasciata* DEG.  
 MORGAN, Bull. 30, n. ser., Div. of Ent., 25, reared from *Melanoplus differentialis*.—Miss.  
*tibialis* COQUILLET, Revis. Tachin., 116.—Santa Cruz Mts., Cal.

## MYOTHYRIA.

- VAN DER WULP, Biologia, Dipt., II, 208, 1890, def. and table of Mexican species.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 358, 1891; VI, 160, 1893.  
*degeerioides* VAN DER WULP, Biologia, Dipt., II, 209.—Vera Cruz, Mex.  
*majorina* VAN DER WULP, Biologia, Dipt., II, 209, pl. IV, f. 19.—Guerrero and Tabasco, Mex.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 358, note.  
*trichosoma* VAN DER WULP, Biologia, Dipt., II, 208.—Vera Cruz, Mex.  
 GIGLIO-TOS, Ditt. del Mess., III, 54, note.  
*vanderwulpi* TOWNSEND, see *Hypostena*.

## PSEUDOCHÆTA.

- COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 309; Revis. Tachin., 116, 1897, notes.  
*argentifrons* COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 310; Revis. Tachin., 116.—Charlotte Harbor, Fla., and Los Angeles, Cal.; Ill., Ga.; bred from a Bombycid. N. J.—Smith Cat.

pyralidis COQUILLET, Revis. Tachin., 117.—D. C.; bred from a Pyralid larva on oak.

### PROSPHERYSA.

- VAN DER WULP, *Biologia*, Dipt., II, 116, 1890, def. and table of Mexican species.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 374, 1891; VI, 336, 1893, call this a "Mischgattung."
- æmulans* VAN DER WULP, *Biologia*, Dipt., II, 117, pl. III, f. 14.—Vera Cruz and Tabasco, Mex.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 374; VI, 128, would make this the type of the new genus *Dcxiophana*.
- GIGLIO-TOS, *Ditt. del Mess.*, III, 51, note.—Mex.
- COQUILLET, *Revis. Tachin.*, 117.—Anglesea, N. J.
- albifacies* VAN DER WULP, *Biologia*, Dipt., II, 121.—Jalisco, Mex.
- apicalis* VAN DER WULP, *Biologia*, Dipt., II, 122.—Guerrero, Mex.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 334 and 401, would refer this to *Achatoneura*.
- balteata* VAN DER WULP, *Biologia*, Dipt., II, 124.—Guerrero, Mex.
- ? *castanifrons* BIGOT, *Annales*, 1888, 261 (*Cromasia*).—Mex.
- BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 14, notes on type; perhaps a new genus.
- comosa* VAN DER WULP, see *Frontina armigera*.
- contigua* VAN DER WULP, see *Frontina americana*.
- crebra* VAN DER WULP, see *Chatogadia*.
- ingloria* VAN DER WULP, *Biologia*, Dipt., II, 119.—Guerrero, Mex.
- macilenta* VAN DER WULP, *Biologia*, Dipt., II, 122.—Orizaba, Mex.
- minuta* VAN DER WULP, *Biologia*, Dipt., II, 123, pl. III, f. 16.—Cuernavaca, Mex.
- ochricauda* VAN DER WULP, *Biologia*, Dipt., II, 118.—Guerrero, Mex.
- parvipalpis* VAN DER WULP, see *Plagiprospherysa*.
- plagioides* VAN DER WULP, *Biologia*, Dipt., II, 125.—Guerrero and Morelos, Mex.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 401, refer this to *Prosopodes*.
- rectinervis* VAN DER WULP, *Biologia*, Dipt., II, 123.—Guerrero, Mex.
- ruffrons* VAN DER WULP, see *Chatogadia*.
- rufostylata* BIGOT, *Bull. Soc. Ent. France*, 1887, cxli; *Annales*, 1888, 83 (*Frontina*).—Mex.
- BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 27, notes on type and gen. ref.
- serotina* VAN DER WULP, *Biologia*, Dipt., II, 124.—Mexico City.
- similis* WILLISTON, see *Tachina robusta*.
- trifasciata* VAN DER WULP, *Biologia*, Dipt., II, 118.—Guerrero, Mex.
- vilis* VAN DER WULP, see *Chatogadia*.

### VANDERWULPIA.

- TOWNSEND, *Trans. Amer. Ent. Soc.*, XVIII, 381, 1891.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 128, 1893.
- COQUILLET, *Revis. Tachin.*, 117, 1897, notes.
- atrophopodoides* TOWNSEND, *Trans. Amer. Ent. Soc.*, XVIII, 381.—Las Cruces, N. M.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 128, brief desc.
- COQUILLET, *Revis. Tachin.*, 117.—Las Cruces, N. M.
- sequens* TOWNSEND, *Canad. Ent.*, XXIV, 172.—Las Cruces, N. M.
- COQUILLET, *Revis. Tachin.*, 117.—Texas.

## WULPIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 128, 1892.  
*aperta* BRAUER and BERGENSTAMM, loc. cit. and p. 188.—Orizaba, Mex.

## EUTHERA.

LOEW, Cent., VII, 85, 1866.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 140, 1889; VI, 152, 1893.  
*bicolor* COQUILLET, Proc. U. S. N. M., XXV, 114.—Texas.  
*tentatrix* LOEW, Cent., VII, 85.—N. Y.  
 COQUILLET, Revis. Tachin., 120.—Pottstown, Pa., and Tifton, Ga.

## HOUGHIA.

COQUILLET, Revis. Tachin., 118, 1897.  
*setipennis* COQUILLET, Revis. Tachin., 118.—Tifton, Ga

## TRICHOLYGA.

RONDANI, Dipt. Ital. Prod., III, 184, 1859.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 98, 1889, emended;  
 VI, 124, 1893.  
*caloptera* BIGOT, see *Macquartia*.  
*fulvidapex* BIGOT, see *Winthemia*.  
*gracilens* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 39, f. 16.—Mex.  
*insita* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 39.—Mex.

## TACHINA.

MEIGEN, Illig. Mag., II, 280, 1803; Syst. Besch., IV, 234, 1824; restricted  
 in VII, 174, 189, 1838.  
 FALLÉN, Muscides, 2, 1820.  
 MACQUART, Hist. Nat. Dipt., II, 139, 1835.  
 RONDANI, Prod. Dipt. Ital., III, 193, 1859.  
 SCHINER, Fauna Austr., I, 472, 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 98, 1889 (*Eutachina*  
*tachina* and *Chatotachina*); VI, 145, 1893.  
 TOWNSEND, Trans. Amer. Ent. Soc., XIX, 96, 1892 (*Tachinomyia*).  
 COQUILLET, Revis. Tachin., 118, 1897.  
*addita* WALKER, see ? *Phorocera melobosis*.  
*albifrons* WALKER, see *Sturmia*.  
*albincisa* WIEDEMANN, see *Sturmia*.  
*aletiæ* RILEY, see *Frontina*.  
*ampelus* WALKER, see *Panzeria radicum*.  
*ancilla* WALKER, see *Frontina*.  
*anonyma* RILEY, see *Frontina frenchii*.  
*antennata* WALKER, see *Phorocera*.  
*armata* WIEDEMANN, see *Dejcania*.  
*atra* WALKER, see *Archytas aterrima*.  
 ? *breviventris* WIEDEMANN, Auss. Zw., II, 297.—Brazil.  
 WALKER, List, IV, 712, oc. in Jamaica.  
 Walker's identification is very doubtful, hence the query.  
*clisiocampæ* TOWNSEND, see *mella*.  
*convecta* WALKER, see *Schizotachina*.

- corythus* WALKER, see *Xanthomclana arcuata*.  
*crudelis* WIEDEMANN, see *Amobia*.  
*cubæcola* JENNICKE, see *Masiccra*.  
*degenera* WALKER, see *Echinomyia algens*.  
*deilephilæ* OSTEN SACKEN, see *Winthemia quadripustulata*.  
*distincta* WIEDEMANN, see *Sturmia*.  
*elegans* BIGOT, see *Winthemia*.  
*demylus* WALKER, see *Admontia*.  
*disjuncta* WIEDEMANN, see *Microphthalma*.  
 ? *distincta* WIEDEMANN, *Analecta Ent.*, 45; *Auss. Zw.*, II, 334.—West Indies.  
     MACQUART, *Dipt. Exot.*, II, 3, 59, refers to *Masiccra*.  
     Query by J. M. A.  
*dydas* WALKER, see *Frontina*.  
*epicydes* WALKER, see *Exorista affinis*.  
*exul* WALKER, see *Schizotachina convexa*.  
*finitima* WALKER, see *Bombyliomyia abrupta*.  
*fraterna* COMSTOCK, see *Frontina alcticæ*.  
 ? *hirta* DRURY, *Illustrations of Nat. Hist.*, 109, pl. XLV, f. 4 (*Musca*).—Jamaica.  
     Gen. ref. uncertain.—J. M. A.  
*hirta* CURTIS, see *Peleteria ænea*.  
 ? *hybreas* WALKER, *List*, IV, 785 (*Aplomyia*).—Martin Falls, Canada.  
     COQUILLET, *Revis. Tachin.*, 119, ref. with a query; not recognized.  
*insolita* WALKER, see *Melanophrys*.  
*interrupta* WALKER, see *Macromeigenia chrysoprocta*.  
*mella* WALKER, *List*, IV, 767 (*mella* and *paneticus*): op. cit., 787 (*pana*).—All  
     Nova Scotia.  
     LEBARON, 1st *Ill. Rept.*, 16 (*orgyia*).—*Ill.*: bred from *Orgyia leucostigma*.  
     WILLISTON, in Forbush and Fernald's "The Gypsy Moth," 387 (*Achæ-  
     toncurea fernaldi*).—Mass.; bred from *Porthetria dispar* L.  
     TOWNSEND, *Psyche*, VI, 83 (*clisiocampæ*); *Trans. Amer. Ent. Soc.*, XIX,  
     284 (*orgyia*, n. sp.).—Orono, Maine; Morgantown, W. Va.; bred from  
     *Clisiocampa distria* HUEB. and *Orgyia leucostigma* S. and A.  
     BAKER, *Ent. News*, VI, 174, reared from *Clisiocampa fragilis* at Fort Col-  
     lins, Col.  
     BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, v, 351 (*Podotachina  
     americana*).—New York.  
     COQUILLET, *Revis. Tachin.*, 119.—Toronto, Canada; U. S. generally;  
     bred from *Acronycta populi* RILEY, *Arctia phyllira* DRURY, *Clisiocampa  
     thoracica* STRETCH, *Clis. sp.*, *Leucarectia acraea* DRURY, *Orgyia leucos-  
     tigma* S. and A., and *Pyrharchtia isabella* S. and A.  
*melobosis* WALKER, see *Phorocera*.  
*obconica* WALKER, see *Sturmia albifrons*.  
 ? *occidentalis* WIEDEMANN, *Auss. Zw.*, II, 335.—St. Thomas, W. I. Type in  
     Hornbeck's Coll. in Copenhagen. Query by J. M. A.  
*orgyia* LEBARON, see *mella*.  
*orgyia* TOWNSEND, see *mella*.  
*phycitæ* LEBARON, see *Exorista pyste*.  
*potens* WIEDEMANN, see *Lcptoda*.  
*pusilla* WIEDEMANN, see *Sarcophilodes*.  
*robusta* TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 96 (*Tachinomyia*).—Mich.,  
     S. D.  
     WILLISTON, *Death Valley Exped.*, 256 (*Prospheysa similis*).—Sonoma  
     Co., Cal.

- COQUILLET, Revis. Tachin., 118.—Toronto, Canada; U. S. generally: bred from *Agrotis ypsilon* ROTT. and *Clisiocampa* sp.
- rufostomata* BIGOT, Annales, 1888, 260.—Rocky Mts.
- BRAUER, Sitzungsbericht d. K. Akad., CVI, 22, note on type; said to have been first described as *rufostoma*.
- rustica* FALLÉN, Acta Holmiæ, 1810; Muscides, 5.—Europe.
- MEIGEN, Syst. Besch., IV, 305 (*larvarum* L.), 306 (*simulans*), 309 (*lucosoria*): VII, 193.
- MACQUART, Annales Soc. Ent. France, 1854, 377-390 (*vittata*, *flavipalpis*, *ludibunda*, *rectinervis*, *audens*, *flavifrons*, *pumila*, *albifrons*, *alacerr*).
- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 285 (*tenthredinivora*); XVII, 353 (*spinulosa*).—Ottawa, Canada; Carlinville, Ill.; bred from a Tenthredinid.
- COQUILLET, Revis. Tachin., 119.—Ottawa, Canada; White Mts., N. H.; Col., S. D., Idaho, Wash., S. Cal.
- Montreal—Chagnon; Axton, N. Y.—M. and H.
- ? *saltatrix* WIEDEMANN, Auss. Zw., II, 300.—W. I. Query by J. M. A.
- signifera* WALKER, see *Epalpus*.
- speculifera* WALKER, see *Trichophora*.
- ? *subvaria* WALKER, Dipt. Saund., 299.—W. I. Genus doubtful—J. M. A.
- theclarum* SCUDDER, see *Exorista confinis*.
- trivittata* WIEDEMANN, see *Exorista*.
- trixoides* WALKER, see *Microphthalma disjuncta*.
- unifasciata* DESVOIDY, see *Belcosia*.
- vivida* HARRIS, see *Bombyliomyia abrupta*.

## TETRAGRAPHA.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 351, 1891; VI, 124, 1893.
- tessellata* BRAUER and BERGENSTAMM, operis citatis.—Cuba.

## TACHINOPSIS.

- COQUILLET, Revis. Tachin., 120, 1897.
- mentalis* COQUILLET, Revis. Tachin., 120.—Wash.

## DÆOCHÆTA.

- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 97, 1892.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 113, 194, 1893.
- harveyi* TOWNSEND, Trans. Amer. Ent. Soc., XIX, 98.—Orono, Me.

## NEOTRACTOCERA.

- TOWNSEND, Trans. Amer. Ent. Soc., XIX, 105, 1892.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 196, 1893.
- anomala* TOWNSEND, Trans. Amer. Ent. Soc., XIX, 105.—Las Cruces, N. M.

## DEMOTICUS.

- MACQUART, Annales Soc. Ent. France, 1854, 442.
- SCHINER, Fauna Austr., I, 433, 1862.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 134, 1889; VI, 137, 1893.
- melitææ* COQUILLET, Revis. Tachin., 121.—Siskiyou Co., Cal.; bred from *Melitæa palla*.

- pallidus* COQUILLET, Revis. Tachin., 121.—Denver, Col.  
*piperi* COQUILLET, Revis. Tachin., 121.—Blue Mts., Wash.  
*venatoris* COQUILLET, Canad. Ent., XXVII, 127 (*Drepanoglossa*); Revis. Tachin., 120.—Wash.; Phil., Cal., Col.

## PARAPHYTO.

- COQUILLET, Jour. N. Y. Ent. Soc., III, 105, 1895.  
*borealis* COQUILLET, Proc. Wash. Acad. Sci., II, 439.—Fox Point, Alaska.  
*chittendeni* COQUILLET, Jour. N. Y. Ent. Soc., III, 105; Rev. Tachin., 122.—Ithaca, N. Y.; Agricultural College, Mich.  
*gillettei* TOWNSEND, Canad. Ent., XXIV, 68 (*Triva*).—Col.  
 COQUILLET, Revis. Tachin., 122.—Laggan, Canada. N. Ida.—J. M. A.  
*opaca* COQUILLET, Revis. Tachin., 122.—Col. and Mesilla Park, N. M.  
*sarcophagina* COQUILLET, Proc. U. S. N. M., XXV, 118.—Carlville, Ill.

## BLEPHARIPEZA.

- MACQUART, Dipt. Exot., II, 3, 211, 1843.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 121, 1893 (*Rileya*, preoc.).  
 TOWNSEND, Ent. News, IV, 277, 1893, proposes *Rileymyia* for *Rileya*.  
 COQUILLET, Revis. Tachin., 123, 1897 (*Blepharipeza* and *Parachata*).  
*adusta* LOEW, Cent., X, 67.—Cal.; bred from *Leucarctia acraea* DRURY.  
 BIGOT, Annales, 1888, 92 (*fulvipes*).—Wash.  
 TOWNSEND, Canad. Ent., XXIV, 64 (*crul*); Trans. Amer. Ent. Soc., XIX, 90 (*rufescens*).—N. H.; Md? Puparium desc. in Amer. Naturalist, April, 1893.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 121, 204 (*Rileya americana*).—"Sonoma."  
 WILLISTON, Dipt. of Death Valley Exped., 256, note.—Sonoma Co., Cal.  
 COQUILLET, Revis. Tachin., 124.—Toronto, Canada; N. Y., Col., Cal.; bred from *Arachnis picta* PACK., *Clisiocampa constricta* and *thoracica* STRETCH, and *Halisidota edwardsii* PACK.  
 BRAUER, Sitzungsbericht d. K. Akad., CVI, 20, syn. of *fulvipes* BIGOT and adds *B. albifacies* BIGOT, Annales, 1888, 92, from Brazil; from types.  
 Note.—I confirmed the identity of Townsend's two species, from the types.  
*bicolor* MACQUART, see *leucophrys*.  
*cyaniventris* MACQUART, see *Paragædia*.  
*exul* TOWNSEND, see *adusta*.  
*inermis* BIGOT, Annales, 1888, 91.—N. A.  
 COQUILLET, Revis. Tachin., 123 (*Parachata bicolor* MACQ.).—Ithaca and New York, N. Y.  
 White Mts., N. H.—Stosson (*Thysanomyia*).  
*jurinioides* TOWNSEND, Trans. Amer. Ent. Soc., XXII, 71.—Jamaica.  
*leucophrys* WIEDEMANN, Auss. Zw., II, 308 (*Tachina*).—Brazil.  
 MACQUART, Dipt. Exot., II, 3, 55 (*rufipalpis*); Suppl. I, 158 (*bicolor*).—Mex. and Cuba; Texas.  
 WALKER, Dipt. Saund., 284 (*Tachina latifrons* and *nigrorufa*).—S. A.; Colombia.  
 SCHINER, Novara, 336.  
 BIGOT, Sagra's Cuba, 343 (*rufipalpis*).—Cuba.  
 WILLISTON, Trans. Amer. Ent. Soc., XIII, 304, oc. in Conn., Pa., San Domingo, and S. A.



VAN DER WULP, Tijdschr. v. Ent., xxvi, 25; Biologia, Dipt., II, 30, pl. II, f. 9 (*Belvosia*).—Mexico, several places: Costa Rica, etc.

TOWNSEND, Canad. Ent., xxiv, 64, oc. in Va. (*bicolor*).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 120.—S. A.

GIGLIO-TOS, Ditt. del Mess., III, 28.—Mex.

COQUILLET, Revis. Tachin., 124.—Franconia, N. H., and Wash.

BRAUER, Sitzungsbericht d. K. Akad., cvii, 30, syn. of *bicolor* MACQ.

Note.—For the *bicolor* of Coquillett's Revision, see *inermis* BIGOT.

*monticola* BIGOT, see *Chatogædia*.

*nigrisquamis* TOWNSEND, Ent. News, III, 80.—Jamaica.

*rufipalpis* MACQUART, Dipt. Exot., II, 3, 55. see *leucophrys*

*trichopus* BIGOT, Bull. Soc. Ent. France, 1887, cxi.—Mex.

#### PARAGÆDIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 350, 1891.

*cyaniventris* MACQUART, Dipt. Exot., Suppl. I, 157, pl. XIII, f. 11; 158 (*rufipalpis*).—Brazil; Guiana. For Macquart's other *B. rufipalpis*, see *B. leucophrys*.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 350 (*hedemanni*).—Mex.

BRAUER, Sitzungsbericht d. K. Akad., cvI, 20, syn.; notes on type; gives Macquart's type locality as Mexico.

#### WINTHEMIA.

DESVOIDY, Myodaires, 173, 1830.

RONDANI, Dipt. Ital. Prod., I, 66, 1856 (*Chatoliga*).

COQUILLET, Revis. Tachin., 124, 1897, notes.

*ænea* BIGOT, see *Phorocæra*.

*albopicta* BIGOT, see *Hypostena*.

*antennalis* COQUILLET, Proc. U. S. N. M., xxv, 115; Revis. Tachin., 125 (*nigrifacies* BIGOT).—Los Angeles Co., Cal.

*dubia* BIGOT, Annales, see *Sturmia*.

*elegans* BIGOT, in Sagra's Cuba, 810, pl. xx, f. 7 (*Tachina*).—Cuba.

BRAUER, Sitzungsbericht d. K. Akad., cvI, 13, gen. ref. to *Chatolyga*.

*erythrogyga* BIGOT, see *Exorista rufilætra*.

*flavolimbata* BIGOT, see *Exorista vorax*.

[*fulvidapex* BIGOT, Annales, 1888, 265 (*Tricholygi*).—Mex.? or Celebes?

BRAUER, Sitzungsbericht d. K. Akad., cvI, 24, gen. ref., to *Chatolyga*.]

*illinoisensis* ROBERTSON, see *quadripustulata*.

*nigrifacies* BIGOT, see *Exorista*; for Coquillett's *nigrifacies* BIGOT, Revis. Tachin., 125, see *antennalis*.

*nigripalpis* BIGOT, see *Hypostena*.

*nigriventris* BIGOT, see *Exorista*.

*nitidiventris* BIGOT, see *Exorista*.

*obscura* COQUILLET, Revis. Tachin., 124.—Md.

*occidentalis* BIGOT, see *Exorista*.

*quadripustulata* FABRICIUS, Ent. Syst., IV, 324 (*Musca*); Syst. Antl., 303 (*Tachina*).—Europe.

FALLÉN, Acta Holmiæ, 1810 (*Tachina æstuans*); Muscides, 30 (id.).

MEIGEN, Syst. Besch., IV, 255 (*Tachina*); VII, 221, refers to *Nemoræa*.

MACQUART, Hist. Nat. Dipt., II, 103 (*Nemoræa*).

ZETTERSTEDT, Ins. Lapp., 643; Dipt. Scand., III, 1103 (*Tachina*).

DESVOIDY, Annales Soc. Ent. France, 1847, 270 (*cinerea*).

KIRKPATRICK, Ohio Agric. Rept. for 1860, 757 (*Exorista leucania* and *ostensackenii*).—Ohio; bred from *Leucania unipuncta*.

SCHINER, Fauna Austr., I, 453 (*Nemoræa*).

RILEY, 2d Mo. Rept., 51 (*leucania*).—Mo. General Index Mo. Repts., 60, note on "var. *cecropia*."

WALSH, Trans. Ill. State Agric. Soc., iv, 367 (*Scenometopia militaris*).—Ill.

RILEY, PACKARD, and THOMAS, 3d Rept. U. S. Ent. Comm., 126, pl. I, f. 7, note on habits;—attacks the Army Worm.

WILLISTON, Ill. Ent. Rept., 65, 1885 (*Exorista infesta*).

OSTEN SACKEN, Canad. Ent., XIX, 164 (*Tachina deilephila*).—No locality; bred from *Deilephila lineata*.

TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 363 (*Exorista ciliata*); XIX, 283 (*Exorista platysamia* and *datana*).—Carlinville, Ill.; Ithaca, N. Y.; Ithaca, N. Y. Bred from *Attacus cecropia* and *Datana* sp.

COQUILLET, Revis. Tachin., 125.—London, Ont.: U. S. generally, very common; bred from 14 host species.

ROBERTSON, Canad. Ent., XXXIII, 286 (*illinoisensis*).—Ill.

STEDMAN, 34th Rept. State Bd. of Agric. of Mo., 105, 1902, fig. and notes.

**rufonotata** BIGOT, Annales, 1888, 257 (*Chatolyga*).—Rocky Mts.

BRAUER, Sitzungsbericht d. K. Akad., CVI, 21, note on type; gen. ref.

**rufopicta** BIGOT, Annales, 259, 1888 (*Chatolyga*).—Rocky Mts.

BRAUER, Sitzungsbericht d. K. Akad., CVI, 21, note on type; gen. ref.

#### MUSCOPTERYX.

TOWNSEND, Canad. Ent., XXIV, 170, 1892.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 186, 1893, notes.

**chaetosula** TOWNSEND, Canad. Ent., XXIV, 171.—Chihuahua, Mex.

COQUILLET, Revis. Tachin., 125.—Mo.

**obscura** COQUILLET, Proc. U. S. N. M., XXV, 116.—St. Paul Id., Alaska.

**tibialis** COQUILLET, Proc. U. S. N. M., XXV, 115.—Moscow and Juliatta, Idaho.

#### PARADIDYMA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 382, 1891; VI, 184, 1893, additional desc.

TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 373, 1891 (*Atrophopoda*); XIX, 103, 1892 (*Lachnomma*); XXII, 77, note.

WILLISTON, Trans. Ent. Soc. Lond., 1896, 356, table of species (*Atrophopoda*).

COQUILLET, Revis. Tachin., 126, 1897, syn. and notes.

**braueri** WILLISTON, Trans. Ent. Soc. Lond., 1896, 357, pl. XI, f. 94 (*Atrophopoda*).—St. Vincent, W. I.

**singularis** TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 374 (*Atrophopoda*); XIX, 104 (*Lachnomma magnicornis*); XXII, 77, note.—Carlinville, Ill.; Las Cruces, N. M.

COQUILLET, Revis. Tachin., 126.—U. S. generally.

**townsendi** WILLISTON, Trans. Ent. Soc. Lond., 1896, 356, pl. XI, f. 93 (*Atrophopoda*).—St. Vincent, W. I.

**validinervis** VAN DER WULP, Biologia, Dipt., II, 164 (*Didyma*).—Guerrero, Mex.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 404, gen. ref.; VI, 127, desc.

## ATROPHOPALPUS.

TOWNSEND, Ent. News, III, 130, 1892.

**angusticornis** TOWNSEND, Ent. News, III, 130.—S. Fla.

COQUILLET, Revis. Tachin., 126.—Lake Worth, Fla.

Inverness, Fla.—Johnson.

## METACHÆTA.

COQUILLET, Jour. N. Y. Ent. Soc., III, 98, 1895.

**helymus** WALKER, List, IV, 795 (*Tachina*).—Maine.

COQUILLET, Jour. N. Y. Ent. Soc., III, 99 (*atra*): Revision Tachin., 126.—

Franconia, N. H., and N. Ill.; Toronto, Can., Col., and Santa Cruz  
Mts., Cal.

N. J.—Smith Cat.; Montreal—Chagnon.

## PENTHOSIA.

VAN DER WULP, Tijdschr. v. Ent., XXXV, 189, 1892.

TOWNSEND, Canad. Ent., XXV, 167, 1893, notes.

VAN DER WULP, Biologia, Dipt., II, 457, 1903.

**satanica** BIGOT, Annales, 1888, 254 (*Scopolia*).—Mex.

VAN DER WULP, Tijdschr. v. Ent., XXXV, 190, gen. ref.

GIGLIO-TOS, Ditt. del Mess., III, 7, f. 1.—Orizaba, Mex.

TOWNSEND, Annals and Mag. Nat. Hist., XIX, 32.—San Rafael, near Vera  
Cruz, Mex.

VAN DER WULP, Biologia, Dipt., II, 458, pl. XIII, f. 18.—Guerrero, Tabasco  
and Jalisco, Mex.

## PHORICHÆTA.

RONDANI, Dipt. Ital. Prod., IV, 8, 1861.

DESVOIDY, Myodaires, 268, 1830 (*Scopolia*, preoc.).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 106, 1889; V, 356,  
1891; VI, 148, 1893.

**cinerosa** COQUILLET, Proc. U. S. N. M., XXV, 116.—Flagstaff, Ariz.

? **lateralis** MACQUART, Dipt. Exot., II, 3, 71, pl. VIII, f. 3 (*Scopolia*).—America—  
may be *S. A.*

COQUILLET, Rev. Tachin., 127, gen. ref. with a query.

**nigra** BIGOT, in Sagra's Cuba, 814, pl. XX, f. 8 (*Scopolia*).—Cuba.

**satanica** BIGOT, see *Penthosia*.

**sequax** WILLISTON, in Cook's Notes on Injurious Insects (Mich.), p. 5, 1884  
(*Scopolia*).—Lansing, Mich.; bred from *Noctua fennica* TAUSCH.

COQUILLET, Revis. Tachin., 126.—N. H. to British Columbia and Cal.;  
bred from a Noctuid. N. J.—Smith Cat.

## CESTONIA.

RONDANI, Dipt. Ital. Prod., IV, 105, 1861.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 228, 1893, may  
be same as *Erynnia* DESV.

**nigra** BIGOT, Annales, 1888, 259.—Mex.

## CHÆTOPLAGIA.

COQUILLET, Jour. N. Y. Ent. Soc., III, 98, 1895.

**atripennis** COQUILLET, Jour. N. Y. Ent. Soc., III, 98; Revis. Tachin., 127.—  
Westville, N. J., and D. C.; S. Ill.

## METOPIA.

- MEIGEN, Illig. Mag., II, 280, 1803.  
 DESVOIDY, Myodaires, 120, 1830 (*Ophelia*).  
 SCHINER, Fauna Austr., I, 498, 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 114, 1889; VI, 168, 1893.  
 VAN DER WULP, Biologia. Dipt., II, 114, pt. desc., 1890.  
**leucocephala** ROSSI, Fauna Etrusca, II, 1501 (*Musca*).—Europe.  
 FABRICIUS, Ent. Syst., IV, 329 (*Musca labiata*); Syst. Antl., 304 (id.).  
 LATREILLE, Dict. d'Hist. Nat., 24, 195 (id.).  
 DESVOIDY, Myodaires, 130 (*Araba squamipallens*); 131 (*A. grisca*).  
 ? MACQUART, Dipt. Exot., Suppl. III, 208, pl. v, f. 6 (*Doggeria lateralis*).—N. A. [Coquillett, but I question it.]  
 ZETTERSTEDT, Ins. Lapp., 635 (*Tachina argyrocephala*); Dipt. Scand., III, 1026 (*Tachina*).  
 SCHINER, Fauna Austr., I, 499.  
 ? WALKER, List, IV, 770 (*Ophelia xychnus*).—Jamaica. [J. M. A.]  
 TOWNSEND, Canad. Ent., XXIV, 69 (*luggeri*).—Minn.  
 COQUILLET, Revis. Tachin., 127.—N. H. to Texas; Wash., Cal.  
 RIEDEL, Allg. Zeitsch. f. Ent., VI, 152, parasitic on *Halictus scircinctus* FAB. in Pomerania.  
 BIGNELL, Ent. Mag., XXXIII, 221, says it is viviparous.  
 MELANDER and BRUES, Biol. Bull., V, 20, is parasitic in nests of *Halictus priunus* REBNS. at Woods Hole, Mass.  
 ANTON, N. Y.—M. and H.  
**perpendicularis** VAN DER WULP, Biologia, Dipt., II, 115, pl. III, f. 18.—Guerrero and Morelos, Mex.  
 GIGLIO-TOS, Ditt. del Mess., III, 43.—Solco, Mex.

## ARABA.

- DESVOIDY, Myodaires, 127, 1830.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 114, 1889 (*Eumc-topia*); V, 359, 1891; VI, 168, 1893.  
**nebulosa** COQUILLET, Canad. Ent., XXXIV, 200.—Sierra Madre, Chihuahua, Mex.  
**tergata** COQUILLET, Jour. N. Y. Ent. Soc., III, 103; Revis. Tachin., 127.—Ill., Col., Los Angeles Co., Cal. N. J.—Smith Cat.

## OPSIDIA.

- COQUILLET, Jour. N. Y. Ent. Soc., III, 102, 1895.  
**gonioides** COQUILLET, loc. cit.; Revis. Tachin., 128.—Atlantic City, N. J.; Mass. and Ia.

## HILARELLA.

- RONDANI, Dipt. Ital. Prod., I, 70, 1856.  
 SCHINER, Fauna Austr., I, 504, 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 114, 1889; VI, 168, 1893.  
 TOWNSEND, Trans. Amer. Ent. Soc., XIX, 98 and 108, 1892 (*Eumacro-nychia* and *Gymnoprosope*).  
 COQUILLET, Revis. Tachin., 128, 1897, notes and syn.  
**aristalis** COQUILLET, Revis. Tachin., 129.—S. Ill. and Cal.  
**decens** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 33 (*Eumacro-nychia*).—Las Cruces, N. M., and Cal.

- COQUILLET, Revis. Tachin., 128.—N. M. and Los Angeles Co., Cal.  
N. J.—Smith Cat.
- elita** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 109; XXII, 74, notes (both *Eumacronychia*).—Las Cruces, N. M.  
COQUILLET, Rev. Tachin., 129, gen. ref.; not seen.
- fulvicornis** COQUILLET, Jour. N. Y. Ent. Soc., III, 106 (*Gymnoprosope*); Rev. Tach., 128.—N. J. and N. Ill.; N. H., Mass.; from a puparium found among locust eggs.
- polita** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 109 (*Gymnoprosope polita, argentifrons*, and *clarifrons*).—S. Fla.: S. Fla.; Carlville, Ill.  
COQUILLET, Revis. Tachin., 128.—Ill., Ga., Fla.  
*Note*.—I confirmed the identity of Townsend's species with each other, from the types.  
N. J.—Smith Cat.; Enterprise, Fla.—Castle and Laurent; Inverness, Fla.—Johnson.
- rufiventris** COQUILLET, Revis. Tachin., 129.—Holly Springs, Miss.
- siphonina** ZETTERSTEDT, Dipt. Scand., III, 1213 (*Miltogramma*).—Europe.  
DESVOIDY, Myodaires, 95 (*Megara dira*). [Schiner: the prior name if synonymy is sufficiently secure.]  
SCHINER, Fauna Austr., I, 504.  
COQUILLET, Revis. Tachin., 129.—N. J., Ga., Col., Cal.

## TRICHOGENA.

- RONDANI, Dipt. Ital. Prod., I, 88, 1856 (*Trichogena*).  
EGGER, Verh. Zool.-Bot. Ges., xv, 297, 1865 (*Frauefeldia*).  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., vi, 238, 1893.
- costalis** COQUILLET, Revis. Tachin., 130.—Col.
- setipennis** COQUILLET, Revis. Tachin., 130.—Franconia, N. H.

## BRACHYCOMA.

- RONDANI, Dipt. Ital. Prod., I, 69, 1856; III, 203, 1859.  
VAN DER WULP, Biologia, Dipt., II, 90, 1890, pt. desc. and table of Mexican species.  
TOWNSEND, Trans. Amer. Ent. Soc., XVIII, 1895 (*Laccoprosope*); XIX, 110, 1892 (*Sarcotachinella*).  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., vi, 161 and 197, 1893.  
COQUILLET, Revis. Tachin., 131, 1897, notes, etc.  
GIRSCHNER, Wien. Ent. Zeit., XVII, 153, 1898.
- afra** VAN DER WULP, Biologia, Dipt., II, 92.—Tabasco, Mex.
- apicalis** COQUILLET, Revis. Tachin., 131.—Conn. and Va.
- barbatula** VAN DER WULP, Biologia, Dipt., II, 98.—Guerrero, Mex.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 334 and 401, notes.
- biseriata** VAN DER WULP, Biologia, Dipt., II, 95.—Guerrero, Vera Cruz and Tabasco, Mex.
- chihuahuensis** TOWNSEND, Canad. Ent., XXIV, 165.—Chihuahua, Mex.
- cinerea** VAN DER WULP, Biologia, Dipt., II, 100.—Vera Cruz, Mex.
- davidsoni** COQUILLET, Ent. News, v, 172.—Los Angeles Co., Cal.: bred from larvæ of *Bombus fervidus* FABR.  
COQUILLET, Revis. Tachin., 131.—S. Cal.
- fimbriata** VAN DER WULP, Biologia, Dipt., II, 97.—Guerrero and Vera Cruz, Mex.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 365, would put this in *Thysanomyia*.

- foveata* VAN DER WULP, *Biologia*, Dipt., II, 93, pl. III, f. 12.—Tabasco, Mex.  
*incompta* VAN DER WULP, *Biologia*, Dipt., II, 99.—Guerrero, Mex.  
*intermedia* TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 111 (*Sarcotachinella*).—  
 Carlinville, Ill.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 197, note on  
 position.  
 COQUILLET, *Revis. Tachin.*, 132.—N. J., Va., Ga., Fla.  
 Charlotte Harb., Fla.—Johnson.  
*irregularis* VAN DER WULP, *Biologia*, Dipt., II, 98.—Tabasco, Mex.  
*laticeps* VAN DER WULP, see *Atacta brasiliensis*.  
*longicornis* VAN DER WULP, *Biologia*, Dipt., II, 99.—Vera Cruz, Mex.  
*macropogon* BIGOT, see *Masistylum*.  
*nigripalpis* VAN DER WULP, see *Atacta*.  
*pallidula* VAN DER WULP, see *Comatacta*.  
*pubicornis* COQUILLET, *Proc. U. S. N. M.*, XXV, 116.—Harrison, Idaho.  
*pulverea* COQUILLET, *Revis. Tachin.*, 131.—San Diego, Texas.  
*pygmæa* VAN DER WULP, *Biologia*, Dipt., II, 95.—Guerrero, Mex.  
*robusta* VAN DER WULP, *Biologia*, Dipt., II, 92.—Guerrero and Vera Cruz, Mex.  
*ruficauda* VAN DER WULP, *Biologia*, Dipt., II, 94.—Vera Cruz, Mex.  
*sarcophagina* TOWNSEND, *Trans. Amer. Ent. Soc.*, XVIII, 366 (*Laccoprosopa*).—  
 Carlinville, Ill.  
 COQUILLET, *Revis. Tachin.*, 132.—N. J., S. Ill.  
*setosa* COQUILLET, *Proc. U. S. N. M.*, XXV, 117.—Beulah, N. M.  
*sheldoni* COQUILLET, *Canad. Ent.*, XXX, 236.—Oswego, N. Y.  
*spuria* VAN DER WULP, *Biologia*, Dipt., II, 101.—Guerrero, Mex.  
*striatella* VAN DER WULP, *Biologia*, Dipt., II, 100.—Guerrero and Tabasco, Mex.  
*sublucens* VAN DER WULP, *Biologia*, Dipt., II, 96.—Mexico City.  
*subtilipalpis* VAN DER WULP, *Biologia*, Dipt., II, 96.—Guerrero and Vera Cruz,  
 Mex.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 365, would refer  
 this to *Argyrophylax*.  
*trifida* VAN DER WULP, *Biologia*, Dipt., II, 96.—Guerrero, Mex.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 365, would place  
 this in *Argyrophylax*.

#### EUTHYPROSOPA.

- TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 106, 1892.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 196, 1893.  
*petiolata* TOWNSEND, *loc. cit.*—Las Cruces, N. M.  
 COQUILLET, *Revis. Tachin.*, 132.—Las Cruces, N. M.

#### GONIA.

- MEIGEN, *Illig. Mag.*, II, 280, 1803; *Syst. Besch.*, V, I, 1826.  
 DESVOIDY, *Myodaires*, 1830, 74 (*Rhedia*); 79 (*Rcaumuria*); *Annales Soc.*  
*Ent. France*, 1851, 315 (*Isomera*); 318 (*Pissemys*).  
 SCHINER, *Fauna Austr.*, I, 441, 1862.  
 WILLISTON, *Canad. Ent.*, XIX, 6, 1887, desc. and table of species.  
 SNOW, *Kans. Univ. Quart.*, III, 180.  
 COQUILLET, *Revis. Tachin.*, 132, 1897.  
 ? *auriceps* MEIGEN, *Syst. Besch.*, V, 5.—Europe.  
 WALKER, *List*, IV, 798, oc. in Ga.—very doubtful.  
*capitata* DEGEER, *Mém. Hist. Nat. Ins.*, VI, 12, pl. I, f. 3 (*Musca*).—Europe.



- FALLÉN, Muscides, 11 (*Tachina*).
- MEIGEN, Syst. Besch., v, 3.
- SAY, Jour. Acad. Sci. Phil., VI, 175; Compl. Works, II, 365 (*frontosa*).—Upper Missouri R., U. S.
- MACQUART, Dipt. Exot., II, 3, 208 (*philadelphica*).—Pa.
- WALKER, List, IV, 798 (*albifrons*).—Martin Falls, Canada.
- SCHINER, Fauna Austr., I, 443.
- WILLISTON, Canad. Ent., XIX, 11 and 12 (*crul* and *sequax*).—Conn., Mass., N. Y.; Cal. I follow Coquillett in making these synonymous, but Williston does not accept this disposition of the species.
- COQUILLET, Revis. Tachin., 133.—Toronto, Canada; U. S. generally, very common; bred from *Hadena devastatrix* BRACE, *Laphygma frugiperda* S. and A., and *Peridroma saucia* HUEB.
- BRAUER, Sitzungsbericht d. K. Akad., CVI, 24, notes on type of Macquart. Beulah, N. M.—Skinner; Province of Quebec—Fyles.
- chilensis** MACQUART, see *pallens*.
- crassicornis** FABRICIUS, Syst. Antl., 301 (*Musca*).—W. I.
- WIEDEMANN, Auss. Zw., II, 345.—W. I.
- exul** WILLISTON, see *capitata*.
- frontosa** SAY, see *capitata*.
- mexicana** VAN DER WULP, Biologia, Dipt., II, 40, pl. 19, 20; p. 479, oc.—Ciudad in Durango and Guerrero, Mex.
- pallens** WIEDEMANN, Auss. Zw., II, 346.—Brazil.
- MACQUART, Dipt. Exot., II, 3, 50 (*pallens* and *chilensis*); 51 (*angusta*); Suppl. IV, 2, 178 (*lineata*).—Brazil; Chili and Cuba; unknown; Patagonia.
- BLANCHARD, in Gay's Hist. fis. etc. Chile, VII, 242, Atlas, pl. IV, f. 20 (*chilensis*).—Chili.
- WALKER, List, IV, 798 (*angusta*), oc. in Jamaica.
- VAN DER WULP, Tijdschr. v. Ent., XXVI, 23; Biologia, Dipt., II, 39, syn., etc.—N. M.; Durango, Mex.
- LYNCH ARRIBALZAGA, An. Soc. Cient. Argent., X, p. viii.
- WILLISTON, Trans. Ent. Soc. Lond., 1896, 353, pl. XI, f. 90, syn. and desc.—St. Vincent, W. I. Porto Rico—Roeder.
- porca** WILLISTON, Canad. Ent., XIX, 10.—Ore., Mt. Hood.
- sagax** TOWNSEND, see *senilis*.
- senilis** WILLISTON, Canad. Ent., XIX, 10.—W. Kans.
- TOWNSEND, Canad. Ent., XXIV, 65 (*sagax*).—Ames, Ia.
- COQUILLET, Revis. Tachin., 133.—Md., Mo., Ga. N. J.—Smith Cat.
- sequax** WILLISTON, see *capitata*.
- turgida** COQUILLET, Revis. Tachin., 133.—Los Angeles Co., Cal.

### SPALLANZANIA.

- DESVOIDY, Myodaires, 78, 1830.
- RONDANI, Dipt. Ital. Prod., I, 62, 1856 (*Cnephalia*).
- WILLISTON, Scudder's Butterflies of New England, III, 1916, 1889 (*Acroglossa*).
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 100, 1889 (*Pseudogonia*); VI, 214, 1893.
- SNOW, Kans. Univ. Quart., III, 181, 1895 (*Cnephalia*).
- GIGLIO-TOS, Ditt. del Mess., III, 34, 1894.
- COQUILLET, Psyche, 1895, 261, syn.; Revis. Tachin., 134, 1897.

- antennalis* COQUILLET, Revis. Tachin., 135.—Alameda Co., Cal.
- finitima* SNOW, Kans. Univ. Quart., III, 184 (*Cnephalia*).—N. M.
- hebes* FALLÉN, Muscides, II (*Tachina*).—Europe.  
 DESVOIDY, Myodaires, 79 (*gallica*); Annales Soc. Ent. France, 1851, 315 (*Isomera parisiaca*).  
 MACQUART, Dipt. du Nord de la France, v, 179 (*Gonia nudifacies*).  
 RONDANI, Dipt. Ital. Prod., III, 38 (*Gonia cognata*); IV, 155 (*alpestris*).  
 SNOW, Kans. Univ. Quart., III, 182 (*Cnephalia pansa*).—N. M., 9,500 ft.  
 KOWARZ, Wien. Ent. Zeit., VII, 6, syn.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 125.  
 COQUILLET, Revis. Tachin., 135.—N. C., Ga., Fla.
- hesperidarum* WILLISTON, in Scudder's Butterflies of New England, 1917 (*Acroglossa*).—N. H.; bred from *Eudamus tityrus* FABR.  
 TOWNSEND, Canad. Ent., XXIV, 66 (*Pseudogonia ruficauda* and *obsoleta*).—Brookings, S. D.; N. Y.  
 SNOW, Kans. Univ. Quart., III, 183 (*Cnephalia ruficauda*).—Ill., Kans., N. H., Mass., N. C., N. Y., S. D.  
 COQUILLET, Psyche, 1895, 261, syn.; Revis. Tachin., 134.—N. H. to S. D. and Ga. Montreal—Chagnon; Inverness, Fla.—Johnson.
- obesula* VAN DER WULP, Biologia, Dipt., II, 46, pl. III, f. 3 (*Cnephalia*).—Tabasco, Mex.
- obsoleta* TOWNSEND, see *hesperidarum*.
- ochriceps* VAN DER WULP, Tijdschr. v. Ent., XXXV, 194 (*Cnephalia*); Biologia, Dipt., II, 481.—Jalisco and Guerrero, Mex.
- ochriventris* VAN DER WULP, Biologia, Dipt., II, 47 (*Cnephalia*).—Guerrero, Mex.
- onusta* VAN DER WULP, Biologia, Dipt., II, 46, pl. III, f. 4 (*Cnephalia*).—Atoyac in Vera Cruz, Mex.
- ruficauda* TOWNSEND, see *hesperidarum*.
- tessellata* GIGLIO-TOS, see *Chatogadia vilis*.

### EUCNEPHALIA.

- TOWNSEND, Canad. Ent., XXIV, 166, 1892.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 186, 1893, notes.  
 SNOW, Kans. Univ. Quart., III, 185, 1895, important notes on the type.
- gonoides* TOWNSEND, Canad. Ent., XXIV, 167.—Dona Ana Co., N. M.  
 SNOW, Kans. Univ. Quart., III, 185.

### GÆDIOPSIS.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 336, 1891; VI, 190, 1893.  
 COQUILLET, Revis. Tachin., 136, 1897, note.
- cockerelli* COQUILLET, Proc. U. S. N. M., XXV, 117.—White Mts., N. H., 8,000 ft.
- facialis* COQUILLET, Proc. U. S. N. M., XXV, 117.—Ga.
- flavipes* COQUILLET, Jour. N. Y. Ent. Soc., III, 100; Revis. Tachin., 136.—Ga., Ala.
- mexicana* BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 336; VI, 190.—Mex.  
 COQUILLET, Revis. Tachin., 136.—Philadelphia.
- monticola* TOWNSEND, Psyche, 1898, 269.—Organ Mts., N. M., 8,500 ft.
- ocellaris* COQUILLET, Proc. U. S. N. M., XXV, 118.—Ohio.
- setosa* COQUILLET, Revis. Tachin., 136.—Siskiyou Co., Cal.; from chrysalis of a Noctuid.

## CHÆTOGÆDIA.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 336, 1891.  
 COQUILLETT, Revis. Tachin., 137, 1897, note.
- analis** VAN DER WULP, Tijdschr. v. Ent., x, 148, pl. iv, f. 21-23 (*Baumhauceria*).  
 —Wis.  
 TOWNSEND, Trans. Amer. Ent. Soc., xviii, 367 (*Frontina acroglossoides*).  
 —Carlinville, Ill.  
 COQUILLETT, Revis. Tachin., 137.—D. C. and Mescalero, N. M.
- crebra** VAN DER WULP, Biologia, Dipt., II, 120 (*Prosphecrisa*).—Guerrero, Mex.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 336, refer here.  
 COQUILLETT, Revis. Tachin., 137.—Las Cruces, N. M., and Cal.; bred from  
*Agrotis* sp. and *Taniocampa rufula* GROTE.  
 Beulah, N. M.—Skinner.
- monticola** BIGOT, Annales, 1888, 91 (*Blepharipexa*).—Rocky Mts.  
 COQUILLETT, Revis. Tachin., 137.—Cal. and Hawaii; bred from *Carnadeis*  
 sp. in Hawaii, in Cal. from *Peridroma saucia* HUEB. and *Pyrameis car-*  
*dui* LINN.
- rufifrons** VAN DER WULP, Biologia, Dipt., II, 121 (*Prosphecrisa*).—Chilpancingo,  
 Mex.  
 COQUILLETT, Revis. Tachin., 137.—Santa Fe, N. M.
- vilis** VAN DER WULP, Biologia, Dipt., II, 121 (*Prosphecrisa*).—Guerrero, Mex.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 336, gen. ref.; vi,  
 116, desc.  
 GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess.,  
 III, 35 (*Acroglossa tessellata*).—Oaxaca, Mex. [Coq.]

## BAUMHAUERIA.

- MEIGEN, Syst. Besch., VII, 251, 1838.  
 SCHINER, Fauna Austr., I, 494, 1862.  
 VAN DER WULP, Biologia, Dipt., II, 115, 1890, pt. desc.
- analis** VAN DER WULP, see *Chatogadia*.
- discrepans** VAN DER WULP, Biologia, Dipt., II, 115, pl. III, f. 17.—Cuernavaca,  
 Mex.

## DICHOCERA.

- WILLISTON, Ent. News, VI, 31, 1895.  
 MIK, Wien. Ent. Zeit., 1896, 54.  
 BRAUER, Sitzungsbericht d. K. Akad., CVII, 521, notes on position of the  
 genus, 1898.  
*Note.*—Mik's published conclusions about the relationships of the genus  
 were written before he had seen the species; he wrote me afterward that  
 they were erroneous.
- WILLISTON, Kans. Univ. Quart., IV, 171, has an article on "Fissicorn  
 Tachinidæ," describing several cases from other parts of the world.
- lyrata** WILLISTON, Ent. News, VI, 29.—Moscow, Idaho.  
 COQUILLETT, Revis. Tachin., 137.—Wash.  
 Wyoming—Wheeler; S. Dak.—J. M. A. See also the article by Brauer,  
 cited as a generic reference.
- orientalis** COQUILLETT, Revis. Tachin., 137.—Beverly, Mass.

## MICROPHTHALMA.

- MACQUART, Dipt. Exot., II, 3, 84, 1843.  
**calogaster** BIGOT, see *Macromctopia*.

- disjuncta** WIEDEMANN, *Analecta Ent.*, 45 (*Tachina*); *Auss. Zw.*, II, 295 (id.).—N. A.  
 SAY, *Jour. Acad. Sci. Phil.*, VI, 174; *Compl. Works*, II, 363 (*Miltogramma trifasciata*).—Ind.  
 MACQUART, *Dipt. Exot.*, II, 3, 242, pl. x, f. 2 (*nigra*).—N. A.  
 WALKER, *List*, IV, 760 (*Tachina trixoides*).—Ga.  
 TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 111 (*Megaprosopus michiganensis*).—Mich.  
 COQUILLETT, *Jour. N. Y. Ent. Soc.*, VII, 218, syn.; *Revis. Tachin.*, 138.—N. H. to Ga. and Cal.; S. D.; bred from *Lachnosterna arcuata* SMITH.  
 WILLISTON, *Trans. Amer. Ent. Soc.*, XIII, 306 (*nigra*).—Pa., New England, Kans.
- pruinosa** COQUILLETT, *Canad. Ent.*, 1902, 200.—White Mts., New Mexico; Chihuahua, Mex.
- sordida** GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 158, 1893; *Ditt. del Mess.*, III, 63.—Toluca, Mex.

#### AMOBIA.

- DESVOIDY, *Myodaires*, 96, 1830.  
 RONDANI, *Dipt. Ital. Prod.*, III, 229, 1859 (*Macronychia*).  
 TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 102, 1892 (*Triroclista*).  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, VI, 226, 1893 (*Amobia*, *preoc.*); IV, 163, 1889 (*Angiorhina*).  
 COQUILLETT, *Revis. Tachin.*, 138, 1897, notes.
- aurata** COQUILLETT, *Proc. U. S. N. M.*, XXV, 119.—N. H., Wis., N. Ida.
- californica** COQUILLETT, *Jour. N. Y. Ent. Soc.*, III, 100; *Revis. Tachin.*, 139.—Los Angeles Co., Cal.
- crudelis** WIEDEMANN, *Auss. Zw.*, II, 300 (*Tachina*).—W. I.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, V, 362, refer to *Angiorhina*.
- distincta** TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 103 (*Triroclista*).—Carlinville, Ill.  
 COQUILLETT, *Revis. Tachin.*, 138.—London, Ont., N. H., Col., Wash.; bred from *Acronycta dactylina* GROTE.

#### GYMNOMMA.

- VAN DER WULP, *Biologia, Dipt.*, II, 38, 1888.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, V, 383, 1891; VI, 136, 214, 1893.
- discors** VAN DER WULP, *Tijdschr. v. Ent.*, XXV, 193; *Biologia, Dipt.*, II, 477.—Guerrero, Mex.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, V, 406, *oc. in Col.*
- nitidiventris** VAN DER WULP, *Biologia, Dipt.*, II, 38, pl. v, f. 17.—Ciudad in Durango, Mex.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, V, 406; VI, 136, *pt. desc.*—Brazil.
- nova** GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 158, 1893; *Ditt. del Mess.*, III, 12, f. 2.—Mex.
- quadrisetosa** COQUILLETT, *Proc. U. S. N. M.*, XXV, 120.—Sierra Madre Mts., Mex., 7,300 ft.

#### TROCHILODES.

- COQUILLETT, *Trans. Amer. Ent. Soc.*, XXIX, 102, 1903.  
 skinneri COQUILLETT, *loc. cit.*—Beulah, N. M.

## TRICHOPHORA.

- MACQUART, Dipt. Exot., Suppl. iv. 2, 62, 1847.  
 RONDANI, Nuovi Ann. Sc. Nat. Bologna, II, 169, 1850 (*Elachipalpus*).  
 VAN DER WULP, Biologia, Dipt., II, 35, 1888, def. and table of species in Mexico; p. 475, 1903, second table of species.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 137 and 214, 1893.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 73, 1895.  
 COQUILLET, Revis. Tachin., 139, 1897.
- analis** SCHINER, Novara, 330.—S. A.  
 BIGOT, Bull. Soc. Ent. France, Jan. 14, 1885, p. 2 (*Siphoniomyia mcias*).—Mex.  
 BRAUER, Sitzungsbericht d. K. Akad., CVI, 31, syn.  
 VAN DER WULP, Biologia, Dipt., II, 475 (*mcias* Big.).—Mex.; from Bigot's type.
- convexinervis** VAN DER WULP, Tijdschr. v. Ent., XXXV, 193; Biologia, Dipt., II, 476.—Guerrero, Mex.
- fucata** VAN DER WULP, see *Cuphocera*.
- macrocera** WIEDEMANN, Auss. Zw., II, 290 (*Tachina*).—Brazil.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 352, pl. XI, f. 99, oc. in St. Vincent, W. I. (*Elachipalpus*).  
 Jamaica—Johnson (id.).
- miscelli** COQUILLET, Revis. Tachin., 139.—Los Angeles Co., Cal.; bred from *Adisophanes miscellus* GROTE.
- nigrifrons** BIGOT, Bull. Soc. Ent. France, 1887, cxli (*Elachipalpus*).—Mex.
- nitidifrons** VAN DER WULP, Biologia, Dipt., II, 37 and 477, note.—Mexico, several places.
- ruficauda** VAN DER WULP, Tijdschr. v. Ent., X, 146 (*Schinceria*).—Wis.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 406 (*Elachipalpus undulata* SAY-WD.—a manuscript name, explained in Coquillett's Revis., p. 139).—S. C.; no desc.  
 WILLISTON, Trans. Amer. Ent. Soc., XIII, 305 (*Cuphocera*), oc. in E. States.  
 COQUILLET, Revis. Tachin., 139.—Pa. to Fla.; S. D. to Texas.
- rufina** VAN DER WULP, Biologia, Dipt., II, 36, pl. II, f. 15; p. 475, oc.—Guatemala; Costa Rica: Vera Cruz, Mex.
- ? **speculifera** WALKER, List, IV, 731 (*Cuphocera*).—N. A. Query by J. M. A.
- trisetosa** VAN DER WULP, Biologia, Dipt., II, 36, pl. II, f. 16; p. 476, oc. and notes.—Costa Rica; Tampico and Atoyac, Mex.

## CUPHOCERA.

- MACQUART, Annales Soc. Ent. France, 1845, 267.  
 RONDANI, Annali Nat. Napoli, 1845 (*Palpibraca*); Dipt. Ital. Prod., I, 63, 1856; III, 60, 1859.  
 SCHINER, Fauna Austr., I, 427, 1862.  
 COQUILLET, Revis. Tachin., 140, 1897, notes.  
 Note.—See Van der Wulp, Biologia, Dipt., II, 35, for discussion of relations of this genus and *Trichophora*.
- californiensis** MACQUART, Dipt. Exot., Suppl. iv. 2, 148 (*Micropalpus*).—Cal.  
 COQUILLET, Revis. Tachin., 140.—Lake Worth, Fla., and Cal.  
 BRAUER, Sitzungsbericht d. K. Akad., CVII, 11, confirms gen. ref.; notes.  
 Beulah, N. M.—Skinner.
- fucata** VAN DER WULP, Tijdschr. v. Ent., XXXV, 193 (*Trichophora*); Biologia, Dipt., II, 476 (id.).—Vera Cruz and Tabasco, Mex.

COQUILLET, Revis. Tachin., 140.—N. H., Mass., N. J., N. Ill.  
Montreal—Chagnon.

**ruficauda** VAN DER WULP, see *Trichophora*.

### GÆDIOPHANA

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 201, 1893.

**atra** BRAUER and BERGENSTAMM, loc. cit.—Mex.

### PELETERIA.

DESVOIDY, Myodaires, 39, 1830.

BIGOT, Bull. Soc. Ent. France, 1883, 108 (*Sphyromyia*).

MIK, Wien. Ent. Zeit., XIII, 100, 1894 (*Chatoplecteria*).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VII, 611, 1894 (*Tetrachata*).

COQUILLET, Revis. Tachin., 140, 1897. notes.

**ænea** STEGER, in Zetterstedt's Dipt. Scand., VIII, 3217 (*Echinomyia*).—Greenland.

GERSTÆCKER, Zweite Nordpolfahrt, 1874 (id.).—East Greenland.

CURTIS, in Ross's Voyage to Arctic Regions, 79 (? *Tachina hirta*).

COQUILLET, Revis. Tachin., 140.—Wyo., Col., Ida.

Hudsonian Zone, N. M.—Cockerell.

**cora** BIGOT, Annales, 1888, 81 (*Echinomyia*).—Mex.

BRAUER, Sitzungsbericht d. K. Akad., CVII, 5. gen. ref.

**iterans** WALKER, see *Archytas*.

**macrocera** BIGOT, Bull. Soc. Ent. France, 1887, cx1; Annales, 1888, 81 (both *Echinomyia*).—Mex.

GIGLIO-TOS, Ditt. del Mess., III, 10 (*Echinomyia*).—Oaxaca, Mex.

BRAUER, Sitzungsbericht d. K. Akad., CVII, 6. gen. ref.

**robusta** WIEDEMANN, Auss. Zw., II, 290 (*Tachina*).—S. A.

MACQUART, Dipt. Exot., Suppl. I, 144, pl. XII, f. 3 (*Echinomyia analis*).—Colombia.

WALKER, List, IV, 726 (*Tachina anaxias*).—Nova Scotia.

RONDANI, Archivio Zool., III, 15 (*Echinomyia filipalpis*).—S. A.

THOMSON, Eugen. Resa, 517 (*Echinomyia filipalpis*).—Cal.

VAN DER WULP, Tijdschr. v. Ent., X, 145, pl. IV, f. 13-16 (*Echinomyia hamorrhou*).—Wis.; XXVI, sep. 17, oc. in Argentina.

BIGOT, Bull. Soc. Ent. France, 1883, 109 (*Sphyromyia malleola*); Annales, 1888, 256 (*Ech. cincrascens*).—Mex. See also note to *Rhynchodexia rubricauda*.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 301 (*Ech. thomsoni* for *filipalpis* of Thomson, and *hamorrhou*).—N. H., Wash., Cal., N. M.

TOWNSEND, Trans. Amer. Ent. Soc., XXII, 71, 72 (*Echinomyia hamorrhou* and *thomsoni*), notes.—Ariz.

GIGLIO-TOS, Ditt. del Mess., III, 9, notes (*Ech. robusta*, *filipalpis* and *cincrascens*).—Mexico, several places.

COQUILLET, Revis. Tachin., 140.—Toronto, Canada; N. H. to Ga., Tex., Ida., and Wyo.

BRAUER, Sitzungsbericht d. K. Akad., CVI, 29; CVII, 5, notes on Bigot's types, etc. Intimates that *robusta* is not a *Peleteria*.

VAN DER WULP, Biologia, Dipt., II, 471 (*Ech. robusta* and *cincrascens*), oc.—Orizaba and Guerrero, Mex.

Porto Rico—Roeder; Montreal—Chagnon; Beulah, N. M.—Skinner; Axton, N. Y.—M. and H.



- rubrifrons** BIGOT, Annales, 1888, 85 (*Echinomyia*).—Mex.  
 BRAUER, Sitzungsbericht d. K. Akad., cvii, 6, gen. ref., from type.
- tessellata** FABRICIUS, Ent. Syst., iv, 324 (*Musca*); Syst. Antl., 309 (*Tachina*).  
 —Europe.  
 MEIGEN, Syst. Besch., iv, 242 (*Tachina*).  
 DESVOIDY, Myodaires, 45 (*Echinomyia nigricornis*).  
 WALKER, List, iv, 728 (*Tachina punctifera*).—Massachusetts.  
 VAN DER WULP, Biologia, Dipt., II, 32, pl. II, f. 11 (*Echinomyia flaviventris*).—Durango, Mex.  
 TOWNSEND, Annals and Mag. Nat. Hist., xix, 148 (*Echinomyia neglecta*).  
 —Rio Tularosa, N. M.  
 COQUILLETT, Revis. Tachin., 141.—Georgetown, Canada; N. H., Mass., Mich., Ill., Col., Wash., S. D.  
 Montreal—Chagnon; Hudsonian Zone, N. M.—Cockerell; Beulah, N. M.  
 —Skinner; Axton, N. Y.—M. and H.
- thomsoni** WILLISTON, see *robusta*.

## ARCHYTAS.

- JENNICKE, Neue Exot. Dipt., 392, 1867.  
 VAN DER WULP, Biologia, Dipt., II, 38, 1888 (*Nemocheta*); p. 478, 1903 (id.), table of Mex. sp.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 133, 1889 (*Tachinodes*); vi, 146, 1893, syn.; vii, 612, 1894 (*Parafabricia*).  
 COQUILLETT, Revis. Tachin., 141, 1897.
- ? **aberrans** GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158; Ditt. del Mess., III, 18, f. 9 (both ? *Nemocheta*).—Metztilan, Mex.
- analis** FABRICIUS, Syst. Antl., 311 (*Tachina*).—S. A.  
 MACQUART, Dipt. Exot., II, 3, 42, pl. III, f. 7 (*Jurinia amethystina*); Suppl. I, 147 (id.).—Ga.; Colombia and Venezuela.  
 WALKER, List, iv, 718 (*Tachina apicifera*); Dipt. Saund., 270 (*Tach. californica*).—N. A.; Cal.  
 WILLISTON, Trans. Amer. Ent. Soc., xiii, 309 (*Jurinia apicifera*); Trans. Ent. Soc. Lond., 1896, 353, pl. xi, f. 89 (id.).—U. S., common, and San Domingo; St. Vincent, W. I.  
 TOWNSEND, Jour. N. Y. Ent. Soc., v, 177 (*Jurinia apicifera*); Annals and Mag. Nat. Hist., xix, 145 (id.).—Brownsville, Texas; Rio Bonito, N. M.  
 BAKER, Ent. News, vi, 174, reared from *Clisiocampa fragilis* at Fort Collins, Col.  
 COQUILLETT, Revis. Tachin., 142.—Toronto, Canada; U. S. generally; Jamaica.  
 Montreal—Chagnon; Jamaica—Johnson; Beulah, N. M.—Skinner.
- aterrima** DESVOIDY, Myodaires, 35 and 37 (*Jurinia aterrima* and *leucostoma*).—U. S.  
 MACQUART, Dipt. Exot., II, 3, 196, pl. III, f. 6 (*Jur. smaragdina*).—Brazil?  
 WALKER, Dipt. Saund., 273 (*Tachina atra*).—Ga.  
 COQUILLETT, Revis. Tachin., 143.—N. H., Mass., N. Y., D. C., Va., N. C., Fla., Ga., Miss., Mo., Ia., Pa., Ind.; reared from *Acronycta occidentalis* G. and R., *Ac. ovata* Gr., *Cerura* sp., and *Lagoa crispata*.  
 St. Augustine, Fla.—Johnson.
- basifulva** WALKER, List, iv, 725 (*Echinomyia*).—Jamaica.  
 COQUILLETT, Proc. U. S. N. M., xxii, 253, oc. in Porto Rico.
- bicolor** WIEDEMANN, Auss. Zw., II, 282 (*Tachina*).—Brazil.

- SCHINER, Novara, 331 (*Fabricia daemon* Wd.).—Brazil. [Brauer.]  
 BIGOT, Bull. Soc. Ent. France, 1887, cxli; Annales, 1888, 85 (both *Fabricia infumata*).—Mex.
- BRAUER, Sitzungsbericht d. K. Akad., CVII, 495, 1898, syn. of Bigot.  
*Notc.*—For Coquillett's *infumata*, Revis. Tachin., 144, see *palpalis*.
- chryseipes** DESVOIDY, Myodaires, 37 (*Jurinia*).—Brazil.
- JÆNNICKE, Neue Exot. Dipt., 82 (*Jurinia flavifrons*).—Mex.  
 GIGLIO-TOS, Ditt. del Mess., III, 17 (*Nemochata*).—Mex.; syn.
- crucia** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893 (*Nemochata*); Ditt. del Mess., III, 16 (id.).—Tuxpango and Huastec, Mex.
- dissimilis** VAN DER WULP, Biologia, Dipt., II, 39, pl. v. f. 18 (*Nemochata*); p. 478, oc. (id.).—Costa Rica; Atoyac, Teapa and N. Yucatan, Mex.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 383, would refer to *Tachinodes*.  
 GIGLIO-TOS, Ditt. del Mess., III, 14, oc. in Mex. (*Nemochata*).
- dubia** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 15, f. 8 (both *Nemochata*).—Mex.
- frontalis** VAN DER WULP, Tijdschr. v. Ent., XXXV, 194 (*Nemochata*); Biologia, Dipt., II, 478 (id.).—Atoyac, Mex.
- hystrix** FABRICIUS, Syst. Ent., 777 (*Musca*); Ent. Syst., IV, 325 (id.); Syst. Antl., 310 (*Tachina*).—America.  
 OLIVIER, Encycl. Méthodique, VIII, 22 (*Musca*).  
 WIEDEMANN, Auss. Zw., II, 283 (*Tachina*).—N. A.  
 DESVOIDY, Myodaires, 35, 36 (*Jurinia metallica* and *boscii*).—U. S.  
 DRURY, Illustrations, I, pl. XLV, f. 7 (*Musca pilosa*). [Wied.]  
 MACQUART, Hist. Nat. Dipt., II, 79 (*Echinomyia hystrix* and *georgia*); Dipt. Exot., Suppl. IV, 2, 144 (*Jurinia virginicensis*).—N. A.; Ga.; Va.  
 JÆNNICKE, Neue Exot. Dipt., 83 (*Jurinia fuscipennis*).—N. A.  
 WILLISTON, Trans. Amer. Ent. Soc., XIII, 299 and 300 (the latter *hystricoides*).—U. S. generally.  
 COQUILLET, Revis. Tachin., 142.—U. S. generally, common.
- incerta** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 14, f. 3 (both *Nemochata*).—Oaxaca, Mex.
- infuscata** VAN DER WULP, Tijdschr. v. Ent., XXXV, 194 (*Nemochata*); Biologia, Dipt., II, 479 (id.).—Teapa, Mex.
- ? **innovata** WALKER, Trans. Ent. Soc., n. ser., v, 296 (*Jurinia*).—Mex. Query by J. M. A.
- jurinoides** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 18, f. 5 (both *Nemochata*).—Oaxaca, Mex.
- lateralis** MACQUART, Dipt. Exot., II, 3, 42, pl. III, f. 10 (*Echinomyia*).—Mex.  
 WALKER, List, IV, 720, 727 (*Tachina candens* and *iterans*).—Both Nova Scotia.  
 JÆNNICKE, Neue Exot. Dipt., 82 (*Jurinia apicalis*).—Mex.  
 BIGOT, Annales, 1878, 78 (*Jurinia gonoides*); Bull. Soc. Ent. France, 1888, Jul. II, syn.—Mex.  
 WILLISTON, Trans. Amer. Ent. Soc., XIII, 300 (*lateralis* and *iterans*), oc. and notes.—New England to New Mex.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 71 (*Echinomyia iterans*); Psyche, 1897, 150, oc. in N. M.; Annals and Mag. Nat. Hist., XIX, 148 (*Echinomyia victoria*); XXII, 72 (id.).—Rio Tularosa, N. M. (*victoria*).  
 COQUILLET, Revis. Tachin., 1897, 143.—Mass., N. C., Ga., Fla., Col.  
 Beulah, N. M.—Skinner.
- leschenaldi** DESVOIDY, Myodaires, 42 (*Pelceteria*); Dipt. Env. Paris, I, 658.—N.

A.; in the later work the same specimens are referred to South America.

BRAUER, Sitzungsbericht d. K. Akad., cvii, 5, mentions a Mexican specimen in Bigot's collection; gen. ref.

**nitida** VAN DER WULP, see *Echinomyia algens*.

**pernox** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 16 (both *Nemochæta*).—Orizaba, Mex.

**piliventris** VAN DER WULP, Tijdschr. v. Ent., xxvi, 22 (*Echinomyia*); Biologia, Dipt., II, 474 (id.), notes and oc.—Argentina; Guerrero and Vera Cruz, Mex.

COQUILLET, Revis. Tachin., 142.—Waco, Texas, and Jamaica.

**seminigra** WIEDEMANN, Auss. Zw., II, 296 (*Tachina*).—Brazil.

MACQUART, Dipt. Exot., II, 3, 39, pl. III, f. 8 (*Jurinia*).—Brazil and Mex.

WALKER, Dipt. Saund., 270 (*Tachina divisa*).—Para, S. A.

SCHINER, Novara, 331, oc. in Chili and Colombia (*Echinomyia*).

ROEDER, Stett. Ent. Zeit., 1885, 345, notes and oc. in Porto Rico (*Jur. analis* Mcq.).

GIGLIO-TOS, Ditt. del Mess., III, 14, bibliog., etc.—Orizaba and Oaxaca, Mex.

#### ECHINOMYIA.

DUMÉRIL, Expos. d'une Méthod p. Class. Ins., 1801; Consid. génér. Classe Ins., 231, 1823.

DESVOIDY, Myodaires, 42, 1830 (*Fabricia*).

KOWARZ, Wien. Ent. Zeit., IV, 51, 1885 (*Mikia*).

VAN DER WULP, Biologia, Dipt., II, 31, pt. desc. and table of Mexican species, 1888.

WACHTL, Wien. Ent. Zeit., XIII, 140, 1894 (*Parandora* and *Nowickia*).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VII, 614, 1894 (*Pararchytas*).

COQUILLET, Revis. Tachin., 143, 1897.

**ænea** ZETTERSTEDT, see *Pelictaria*.

**algens** WIEDEMANN, Auss. Zw., II, 285 (*Tachina*).—N. A.

DESVOIDY, Myodaires, 44 (*picca* and *lapilæi*).—Nova Scotia; America.

WALKER, List, IV, 732 (*Tachina degenera*).—Martin Falls, Canada.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 298, notes (*Jurinia*).—New England to Ore.

VAN DER WULP, Notes from the Leyden Museum, IV, 82 (*Jurinia nitida*); Tijdschr. v. Ent., xxvi, sep. 18 (id.); 20 (*Jurinia picca* and *nitida*).—Arizona; Quebec.

TOWNSEND, Trans. Amer. Ent. Soc., xxii, 70, bred from *Hadena lignicolor* by Gillette in Col. (*Jurinia*).

COQUILLET, Revis. Tachin., 144.—Toronto, Canada; N. H., Vt., Mass., N. Y., Col., Mont., Br. Col., Wash., Ore., Cal., S. D. (Also in Alaska, Proc. Wash. Acad. Sci., II, 439.)

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 409, place *nitida* V. d. W., under *Tachinodes*, which they afterward unite with *Archytas*.

BRAUER, Sitzungsbericht d. K. Akad., cvii, 5, confirms synonymy of *picca* R. D., from Bigot's specimen, and alleges that it is the prior name, with reasons.

TOWNSEND, Annals and Mag. Nat. Hist., XIX, 145, oc. at Rio Tularosa, N. M. (*Jurinia*).

VAN DER WULP, Biologia, Dipt., II, 474, 479 (*picca* and *nitida*).—Guerrero, Vera Cruz and Morelos, Mex.

Beulah, N. M.—Skinner; Axton, N. Y.—M. and H.

- analis** FABRICIUS, Syst. Antl., 311 (*Tachina*).—S. A.  
 WIEDEMANN, Auss. Zw., II, 288 (id.).—Brazil.  
 SCHINER, Novara, 331, brief note.—S. A.  
 VAN DER WULP, Biologia, Dipt., II, 33, pl. II, f. 12; p. 473, oc.—Mexico,  
 several places; Nicaragua, Costa Rica.
- anaxias** WALKER, see *Pelceteria robusta*.
- basifulva** WALKER, see *Archytas*.
- californiæ** WALKER, see *Archytas analis*.
- cinerascens** BIGOT, see *Pelceteria robusta*.
- compascua** VAN DER WULP, Tijdschr. v. Ent., xxxv, 192; Biologia, Dipt., II,  
 473.—Guerrero, Mex.
- cora** BIGOT, Annales, see *Pelceteria*.
- dakotensis** TOWNSEND, Trans. Amer. Ent. Soc., XIX, 94.—Brookings, S. D.  
 COQUILLET, Revis. Tachin., 144.—N. H., N. C., Col., Cal.  
 N. J.—Smith Cat.
- decisa** WALKER, List, IV, 715 (*Tachina*).—Martin Falls and Nova Scotia, Canada.  
 THOMSON, Eugenes Resa, 516 (*Jurinia cchinata*).—Cal.  
 WILLISTON, Trans. Amer. Ent. Soc., XIII, 301, notes and oc. in N. H.,  
 Conn., Va., Col., N. M. (*Jurinia*).  
 COQUILLET, Revis. Tachin., 143.—Toronto, Canada; N. H., N. J., Col.,  
 S. Cal., S. D.  
 N. J.—Smith Cat; Beulah, N. M.—Skinner.
- diaphana** FABRICIUS, Syst. Antl., 308 (*Tachina*).—S. A.  
 WIEDEMANN, Auss. Zweifl., II, 281 (id.).—S. A.  
 VAN DER WULP, Tijdsch. v. Ent., xxvi, 21 (*vittata*); Biologia, Dipt., II,  
 473, syn. and oc.—Argentina; Guerrero, Mex.
- dispar** VAN DER WULP, Biologia, Dipt., II, 34, pl. II, f. 14.—N. Sonora, Mex.
- filipalpis** THOMSON, see *Pelceteria robusta*.
- filipalpis** RONDANI, see *Pelceteria robusta*.
- flaviventris** VAN DER WULP, see *Pelceteria tessellata*.
- florum** WALKER, List, IV, 722 (*Tachina*).—Martin Falls and Nova Scotia, Can-  
 ada.  
 COQUILLET, Revis. Tachin., 144.—Canada, N. H., Mass., N. J., N. C.,  
 S. D.  
 White Mts., N. H.—Stosson; Axton, N. Y.—M. and H.; Province of  
 Quebec—Fyles.
- generosa** VAN DER WULP, Tijdschr. v. Ent., xxxv, 192; Biologia, Dipt., II, 472.—  
 Guerrero, Mex.
- hæmorrhœa** VAN DER WULP, see *Pelceteria robusta*.
- lystricosa** WILLISTON, Trans. Amer. Ent. Soc., XIII, 297 (*Dejeania*).—Wash.,  
 N. M., Ariz.  
 COQUILLET, Revis. Tachin., 144.—Col., Wash. Psyche, 1901, 150, "occurs  
 from N. M. and Ariz. northwardly to Ida. and Wash."  
 TOWNSEND, Annals and Mag. Nat. Hist., XIX, 145, oc. Rio Tularosa, N.  
 M. (*Dejeania*).  
 Beulah, N. M.—Skinner.
- immaculata** MACQUART, Dipt. Exot., Suppl. IV, 2, 169, pl. xv, f. 8.—Brazil.  
 VAN DER WULP, Notes from the Leyden Museum, IV, 83; Tijdschr. v. Ent.,  
 xxv, sep. 19, oc. in Ariz.
- infumata** BIGOT, see *Archytas bicolor*.
- iterans** WALKER, see *Archytas lateralis*.
- leschenaldi** DESVOIDY, see *Archytas*.
- macrocera** BIGOT, see *Pelceteria*.

- neglecta** TOWNSEND, see *Peleteria tessellata*.  
**nigrocalypterata** VAN DER WULP, *Biologia*, Dipt., II, 33 and 473.—Mexico, several places.  
**notata** BIGOT, see *Nemorca*.  
**palpalis** COQUILLET, Proc. U. S. N. M., XXV, 120; Revis. Tachin., 144 (*infumata* BIGOT).—Los Angeles Co., Cal.  
**piliventris** VAN DER WULP, see *Archytas*.  
**punctifera** WALKER, see *Peleteria tessellata*.  
**robusta** WIEDEMANN, see *Peleteria*.  
**rubrifrons** BIGOT, see *Peleteria*.  
**thomsoni** WILLISTON, Trans. Amer. Ent. Soc., XIII, 301, see *Peleteria robusta*.  
**victoria** TOWNSEND, see *Archytas lateralis*.

## EPALPUS.

- RONDANI, *Nuovi Annali Sc. Nat. Bologna*, II, 170, 1850.  
 SCHINER, *Novara*, 333, 1868 (*Saundersia*).  
 VAN DER WULP, *Biologia*, Dipt., II, 18, 1888, table of Mexican species (id.); p. 462 (id.), second table of species, 1903.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 132, 1889; VI, 146, 1893.  
 COQUILLET, Revis. Tachin., 145, 1897, note.  
**albomaculatus** JENNICKE, *Neue Exot. Dipt.*, 80 (*Micropalpus*).—Mex.  
 VAN DER WULP, *Biologia*, Dipt., II, 21, pl. I, f. 17 (*Saundersia*); p. 464, oc. (id.).—Mexico, several places; Guatemala.  
 GIGLIO-TOS, *Ditt. del Mess.*, III, 24, notes (id.).—Oaxaca, Mex.  
**aureus** GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 158, 1893; *Ditt. del Mess.*, III, f. 4 (both *Saundersia*).—Angang, Mex.  
**bicolor** WILLISTON, *Trans. Amer. Ent. Soc.*, XIII, 304 (*Saundersia*).—N. M., Ariz., Cal., Wash.  
 TOWNSEND, *Trans. Amer. Ent. Soc.*, XXII, 69 (id.).—Ariz.  
 GIGLIO-TOS, *Ditt. del Mess.*, III, 23, note (id.).—Mex.  
 Beulah, N. M.—Skinner.  
**bipartitus** VAN DER WULP, *Biologia*, Dipt., II, 25, pl. II, f. 3; p. 465, oc. (*Saundersia*).—Mexico, several places; Costa Rica.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, V, 409, oc. in Col. (id.).  
 GIGLIO-TOS, *Ditt. del Mess.*, III, 23, note (id.).  
**canus** VAN DER WULP, *Biologia*, Dipt., II, 25, pl. II, f. 2 (*Saundersia*).—Costa Rica.  
**consanguineus** VAN DER WULP, *Tijdschr. v. Ent.*, XXXV, 191 (*Saundersia*); *Biologia*, Dipt., II, 465 (id.).—Guerrero, Mex., and Guatemala.  
**femoratus** VAN DER WULP, *Tijdschr. v. Ent.*, XXXV, 191 (*Saundersia*); *Biologia*, Dipt., II, 464 (id.).—Guerrero, Mex.  
**flavitarsis** MACQUART, *Dipt. Exot.*, II, 3, 47, pl. V, f. 3; *Suppl. I*, 152, pl. XIII, f. 13; *Suppl. III*, 45 (all *Micropalpus*).—Mex.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, CVII, 10, examined type and refers to *Epalpus*: the species referred to by Schiner, *Novara*, 334, from S. A. is not the same.  
 WILLISTON, *Trans. Amer. Ent. Soc.*, XIII, 303 (*Saundersia*).—U. S.; oc. only.  
**jennickei** GIGLIO-TOS, *Ditt. del Mess.*, III, 22, change of name.  
 JENNICKE, *Neue Exot. Dipt.*, 79 (*Micropalpus rufipes*; *rufipes* is preoc. in *Epalpus*).—Panama.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., vi, 209, gen. ref., to *Saundersia*.
- lætus** VAN DER WULP, Tijdschr. v. Ent., xxxv, 191 (*Saundersia*); *Biologia*, Dipt., II, 465 (id.).—Guerrero, Mex.
- laticornis** VAN DER WULP, *Biologia*, Dipt., II, 20, pl. I, f. 15 (*Saundersia*).—Costa Rica.
- macula** MACQUART, Dipt. Exot., II, 3, 46, pl. v, f. 2 (*Micropalpus*).—S. A. SCHINER, Novara, 334, note (*Saundersia*).  
VAN DER WULP, *Biologia*, Dipt., II, 21, pl. I, f. 16 (id.).—Costa Rica.  
GIGLIO-TOS, Ditt. del Mess., III, 24, note.—Mex., S. A.
- maculatus** WILLISTON, Trans. Amer. Ent. Soc., XIII, 304 (*Saundersia*).—N. M.
- montivagus** VAN DER WULP, Tijdschr. v. Ent., xxxv, 190 (*Saundersia*); *Biologia*, Dipt., II, 463 (id.).—Guerrero, Mex.
- nigripilosus** VAN DER WULP, *Biologia*, Dipt., II, 23 (*Saundersia*); p. 464, oc. (id.).—Cordova and Guerrero, Mex.; Costa Rica.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., vi, 209, probably the same as *jännicki*.  
*Note*.—For Coquillett's *nigripilosus*, Revis. Tachin., 145, see *Parepalpus flavidus*.
- nigriventris** MACQUART, Dipt. Exot., II, 3, 44, pl. IV, f. 3 (*Hystriicia*); Suppl. I, 150 (*Micropalpus*).—Bogota.  
SCHINER, Novara, 334, refers to *Saundersia*.—S. A.  
RONDANI, Arch. Zool., III, 1865, 18 (*Cryptopalpus hystrix*).  
ROEDER, Stett. Ent. Zeit., XLVII, sep. 10, oc. in Colombia (*Saundersia*).  
VAN DER WULP, *Biologia*, Dipt., II, 24 (*Saundersia rufitibia*).—Orizaba, Mex.  
GIGLIO-TOS, Ditt. del Mess., III, 25, bibliog., etc. (*Saundersia*).—Mex.
- nitidus** MACQUART, Dipt. Exot., Suppl. IV, 2, 174, pl. xv, f. 14 (*Micropalpus*).—S. A.  
BRAUER, Sitzungsbericht d. K. Akad., CVI, 41, notes on type, which he states is from Mexico.
- ochripes** VAN DER WULP, *Biologia*, Dipt., II, 19, pl. I, f. 14 (*Saundersia*).—Costa Rica.
- ornatus** MACQUART, Dipt. Exot., II, 3, 47, pl. IV, f. 6 (*Micropalpus*).—Mex., Colombia.  
SCHINER, Novara, 333 (type of *Saundersia*).—Colombia.
- picea** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 25, f. 10 (both *Saundersia*).—Mex.
- rufipes** MACQUART, Dipt. Exot., Suppl. IV, 2, 172, pl. xv, f. 11 (*Hystriicia*).—Brazil.  
VAN DER WULP, *Biologia*, Dipt., II, 27, note on genus.  
GIGLIO-TOS, Ditt. del Mess., III, 24 (*Saundersia*).—Mex.
- rufipes** JÄNNICKE, see *jännicki*.
- rufitibia** VAN DER WULP, *Biologia*, Dipt., II, 24 and 464 (*Saundersia*).—Orizaba and Guerrero, Mex.
- rufopilosus** VAN DER WULP, *Biologia*, Dipt., II, 23 and 464 (*Saundersia*).—Costa Rica; Guatemala; Pueblo and Guerrero, Mex.  
TOWNSEND, Annals and Mag. Nat. Hist., XIX, 32, pt. desc. (*Saundersia*).
- signiferus** WALKER, List, IV, 708 (*Tachina*).—Nova Scotia.  
WILLISTON, Trans. Amer. Ent. Soc., XIII, 303, refers to *Saundersia*.  
VAN DER WULP, *Biologia*, Dipt., II, 22, note on position.  
COQUILLET, Revis. Tachin., 145.—N. H., Mass., Md., N. C., Col., Wash., Cal.; Vancouver, Br. Col.  
N. J.—Smith Cat.; Montreal—Chagnon; Axton, N. Y.—M. and H.



- testaceus** VAN DER WULP, *Biologia*, Dipt., II, 24, pl. II, f. 1 (*Saundersia*); p. 465 (id.), oc. and notes.—Costa Rica: Guerrero, Mex.
- truncaticornis** VAN DER WULP, *Biologia*, Dipt., II, 26, pl. II, f. 4 (*Saundersia*).—Panama.
- unicolor** VAN DER WULP, *Biologia*, Dipt., II, 23 and 464 (*Saundersia*).—Orizaba and Xucumanatlan, Mex.

## PAREPALPUS.

COQUILLET, Proc. U. S. N. M., XXV, 120, 1902.

- flavidus** COQUILLET, loc. cit.; Revis. Tachin., 145 (*Epalpus nigripilosa* V. d. W.).—Col.  
Beulah, N. M.—Skimmer.

## CRYPTOPALPUS.

RONDANI, *Nuovi Annali Sci. Nat. Bologna*, II, 171, 1850.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 132, 1889; VI, 146, 1893.

- ? **flaviceps** BIGOT, *Bull. Soc. Ent. France*, 1887, 141; *Annales*, 1888, 93.—Rocky Mts.  
BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 42, notes on type; does not belong to this genus;—perhaps a new genus; near *Rhinometopia*.

**melanopygatus** BIGOT, *Bull. Soc. Ent. France*, 1887, 141.—Wash.

## BOMBYLIOMYIA.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 131, 1889; VI, 147, 1893.

- abrupta** WIEDEMANN, *Auss. Zw.*, II, 293 (*Tachina*).—N. A.  
HARRIS, *Ins. Inj. to Vegetation*, 3d ed., 612 (*Tachina vivida*).—Mass.  
MACQUART, *Dipt. Exot.*, II, 3, 44, pl. IV, f. 4 (*Hystricia testacea*).—Mex. and N. A.  
WALKER, *List*, IV, 707 (*Tachina finitima*).—Nova Scotia and U. S.  
GLOVER, *Rept. U. S. Entomologist*, 1866, 44, reared *T. vivida* from *Eacles imperialis*.  
WILLISTON, *Trans. Amer. Ent. Soc.*, XIII, 298, oc. in New England and Wash. (*Hystricia*).  
BIGOT, *Bull. Soc. Ent. France*, 1888, CVI; *Annales*, 1888, 79 (both *Hystricia fulvida*).—N. A.  
VAN DER WULP, *Tijdschr. v. Ent.*, XXVI, sep. 17, oc. at Quebec (*H. vivida*); *Biologia*, Dipt., II, 461 (*Hystricia*), oc. in Rinconada, Mex.  
COQUILLET, *Revis. Tachin.*, 145.—Toronto, Canada; N. H., Mass., N. J., Pa., N. Y., Ohio, Col., Wash., Br. Col.  
Montreal—Chagnon.

## HYSTRICIA.

MACQUART, *Dipt. Exot.*, II, 3, 43, 1843.

VAN DER WULP, *Biologia*, Dipt., II, 11, 1888, table of Mexican species.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 147, 1893.

- abrupta** WIEDEMANN, see *Bombyliomyia*.  
**albiceps** VAN DER WULP, *Biologia*, Dipt., II, 12, pl. 1, f. 6.—Costa Rica.  
**albosignata** VAN DER WULP, *Tijdschr. v. Ent.*, XXXV, 190; *Biologia*, Dipt., II, 461.—Guerrero, Mex.  
**aldrichi** TOWNSEND, see *Panzzeria radicum*.  
**ambigua** MACQUART, see *Jurinella*.

- amœna* MACQUART, Dipt. Exot., II, 3, 44.—Mex.  
 VAN DER WULP, Biologia, Dipt., II, 16, pl. I, f. 11; p. 461, note.—Costa Rica.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 131, f. 230; VI, 147.—Cent. Amer.  
 GIGLIO-TOS, Ditt. del Mess., III, 27, note.—Coscom, Mex.
- cyaneiventris* VAN DER WULP, Compt. Rend., Soc. Ent. Belg., XXXVIII, p. cxcxi; Biologia, Dipt., II, 13, transl. orig. desc.—Guanajuato, Mex.
- dorsalis* VAN DER WULP, Biologia, Dipt., II, 17, pl. I, f. 13; p. 461, oc.—Guatemala, Costa Rica, Panama; Guerrero, Mex.
- fulvida* BIGOT, see *Bombyliomyia abrupta*.
- infusca* VAN DER WULP, Biologia, Dipt., II, 12 and 460, note.—Vera Cruz, Mex.
- micans* VAN DER WULP, Biologia, Dipt., II, 16, pl. I, f. 12; p. 461, oc.—Costa Rica; Guerrero and Tuxpango, Mex.  
 GIGLIO-TOS, Ditt. del Mess., III, 27.—Oaxaca, Mex.
- pollinosa* VAN DER WULP, Biologia, Dipt., II, 14, pl. I, f. 8; p. 461, oc.—Guatemala, Costa Rica; Mexico, several places.  
 GIGLIO-TOS, Ditt. del Mess., III, 26, note.—Metztillan, Mex.
- pyrrhaspis* WIEDEMANN, see *Tropidopsis*.
- soror* WILLISTON, see *Jurinella*.
- testacea* MACQUART, see *Bombyliomyia abrupta*.
- testaceiventris* VAN DER WULP, Tijdschr. v. Ent., XXXV, 190; Biologia, Dipt., II, 460.—Guerrero, Mex.
- velutina* VAN DER WULP, Biologia, Dipt., II, 15, pl. I, f. 10.—Costa Rica.

#### DEJEANIA.

- DESVOIDY, Myodaires, 33, 1830.  
 VAN DER WULP, Biologia, Dipt., II, 7, 1888, table of Mexican species.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 146, 1893.
- analis* MACQUART, Dipt. Exot., II, 3, 34, pl. III, f. 3 (*Echinomyia*).—Mex.  
 BIGOT, in Sagra's Cuba, 80) (id.).—Cuba.
- armata* WIEDEMANN, AUSS. ZW., II, 287 (*Tachina*).—Cuba.  
 MACQUART, Dipt. Exot., Suppl. IV, 2, 168, pl. XV, f. 7.—Brazil.  
 SCHINER, Novara, 337, oc. in Brazil.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 409, gen. ref. and oc. in Cuba and Brazil.
- atrata* VAN DER WULP, Biologia, Dipt., II, 8, pl. I, f. 2.—Costa Rica.
- aurea* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., III, 20.—Solco, Mex.
- corpulenta* WIEDEMANN, AUSS. ZW., II, 280 (*Tachina*).—Mex.  
 MACQUART, Dipt. Exot., II, 3, 35, pl. III, f. 1 (*rufipalpis*).—Mex.  
 VAN DER WULP, Tijdschr. v. Ent., XXV, 17, oc. in Bogota; XXIX, p. XXXI; Biologia, Dipt., II, 9, pl. I, f. 4.—Bogota; same; Costa Rica and Panama.  
 GIGLIO-TOS, Ditt. del Mess., III, 20, notes.—Oaxaca and Solco, Mex.  
 TOWNSEND, Psyche, 1897, 40, oc. in N. M. and notes; Annals and Mag. Nat. Hist., XIX, 145, more of same.  
 VAN DER WULP, Biologia, Dipt., II, 459, notes and oc.—Mexico, several places.
- hystricosa* WILLISTON, see *Echinomyia*.
- montana* VAN DER WULP, Tijdschr. v. Ent., XXXV, 190; Biologia, Dipt., II, 459.—Guerrero, Mex.
- pallipes* MACQUART, Dipt. Exot., II, 34, pl. II, f. 9.—Colombia.  
 SCHINER, Novara, 337, oc. and note.—S. A.

- VAN DER WULP, *Biologia*, Dipt., II, 8, pl. I, f. 1.—Costa Rica and Panama.
- plumitarsis** VAN DER WULP, *Tijdschr. v. Ent.*, XXIX, p. XXXI, change of name.—Mex.
- MACQUART, *Hist. Nat. Dipt.*, II, 77 (*Echinomyia corpulenta* Wb.); *Dipt. Exot.*, II, 3, 35 (*Dejeania corpulenta* Wb.); *Suppl.*, I, 143, pl. XII, f. 2 (id.).—S. A.
- SCHINER, *Novara*, 337, note and oc. (id.).—S. A.
- VAN DER WULP, *Biologia*, Dipt., II, 10, pl. I, f. 5.—Guatemala and Costa Rica.
- rutilioides** JENNICKE, see *Paradejeania*.
- vexatrix** OSTEN SACKEN, *West. Dipt.*, 343; *Cat.*, 256.—Georgetown, Col.
- COQUILLETT, *Revis. Tachin.*, 146, footnote.—Col.
- Beulah, N. M.—Skinner.

## PARADEJEANIA.

- BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, VI, 147 and 184, 1893.
- rutilioides** JENNICKE, *Neue Exot. Dipt.*, 86 (*Dejeania*).—Mex.
- OSTEN SACKEN, *West. Dipt.*, 354, oc.; *Cat.*, 256, note (both *Dejeania*).
- WILLISTON, *Trans. Amer. Ent. Soc.*, XIII, 297, notes (id.).—N. M., Col., Cal.
- VAN DER WULP, *Tijdschr. v. Ent.*, XXV, 17; *Biologia*, Dipt., II, 9, pl. I, f. 3, and p. 459 (id.).—Costa Rica; Guerrero, Mex.
- COQUILLETT, *Revis. Tachin.*, 146.—N. M., Col., Cal., Mex.
- TOWNSEND, *Annals and Mag. Nat. Hist.*, XIX, 144, oc. at Rio Tularosa, N. M., etc.

## JURINIA.

- DESVOIDY, *Myodaires*, 34, 1830.
- VAN DER WULP, *Biologia*, Dipt., II, 27, table of Mexican species, 1888; p. 466, 1903, table of his own species.
- adusta** VAN DER WULP, *Biologia*, Dipt., II, 28, pl. II, f. 7.—Durango, Mex.; Guatemala.
- COQUILLETT, *Revis. Tachin.*, 147 (*metallica* DESV.); *Proc. U. S. N. M.*, XXV, 120, correction.—W. Va., Ky., Ga., Fla., Tex., Col.; bred from *Epantheria scribonia* STOLL.
- VAN DER WULP, *Biologia*, Dipt., II, 467, oc. in Mexico, several places.
- N. J.—Smith *Cat.* (*metallica*).
- algens** WIEDEMANN, see *Echinomyia*.
- amethystina** MACQUART, see *Archyta analis*.
- analis** MACQUART, see *Nemochata seminigra*.
- apicalis** JENNICKE, see *Archytas lateralis*.
- apicifera** WALKER, see *Archytas analis*.
- assimilis** VAN DER WULP, *Tijdschr. v. Ent.*, XXXV, 192; *Biologia*, Dipt., II, 469.—Guerrero and Yucatan, Mex.
- aterrima** DESVOIDY, see *Archytas*.
- badiiventris** VAN DER WULP, *Biologia*, Dipt., II, 28, pl. II, f. 6.—Costa Rica.
- barbata** BIGOT, *Annales*, 1888, 78.—Mex.
- BRAUER, *Sitzungsbericht d. K. Akad.*, CVII, 8, confirms the generic position.
- basalis** WALKER, *List*, IV, 713.—Jamaica.
- GIGLIO-TOS, *Ditt. del Mess.*, III, 19.—Huastec, Mex.
- boscii** DESVOIDY, see *Archytas hystrix*.
- candens** WALKER, see *Archytas lateralis*.

- congruens** VAN DER WULP, Tijdschr. v. Ent., xxxv, 192; *Biologia*, Dipt., II, 469.—N. Yucatan.
- ? **contraria** WALKER, List, IV, 116 (*Tachina*).—Mex. Query by J. M. A.
- debitrix** WALKER, Trans. Ent. Soc., n. ser., v, 296.—Mex.
- decisa** WALKER, see *Echinomyia*.
- dichroma** VAN DER WULP, *Biologia*, Dipt., II, 27, pl. II, f. 5.—Durango, Mex.; Costa Rica. Also p. 467, oc. in Misantla, Mex.
- GIGLIO-TOS, Ditt. del Mess., III, 19, notes.—Cuernavaca, Mex.
- echinata** THOMSON, see *Echinomyia decisa*.
- ? **epileuca** WALKER, List, IV, 716 (*Tachina*).—Jamaica. Query by J. M. A.
- flavifrons** JENNICKE, see *Nemochata chrysiceps*.
- fuscipennis** JENNICKE, see *Archytas hystrix*.
- georgica** MACQUART, see *Archytas hystrix*.
- gonioides** BIGOT, see *Archytas lateralis*.
- hystricoides** WILLISTON, see *Archytas hystrix*.
- hystrix** FABRICIUS, see *Archytas*.
- innovata** WALKER, see *Archytas*.
- lateralis** MACQUART, see *Archytas*.
- leucostoma** DESVOIDY, see *Archytas aterrima*.
- metallica** DESVOIDY, see *Archytas hystrix*.
- "**myrrhea** SAY" is recorded from Pa. in the Imperial Museum by Brauer and Bergenstamm, Zweifl. d. Kaiserl. Mus., v, 409. It seems to be a manuscript name.
- nepticula** VAN DER WULP, Tijdschr. v. Ent., xxxv, 191; *Biologia*, Dipt., II, 468.—Guerrero, Mex.
- nitida** VAN DER WULP, see *Ecinomyia algens*.
- nitidula** VAN DER WULP, Tijdschr. v. Ent., xxxv, 191; *Biologia*, Dipt., II, 467.—Guerrero, Mex.
- punctata** VAN DER WULP, Tijdschr. v. Ent., xxxv, 191; *Biologia*, Dipt., II, 468.—Guerrero, Mex.
- smaragdina** MACQUART, see *Archytas aterrima*.
- spinigera** VAN DER WULP, Tijdschr. v. Ent., xxxv, 192; *Biologia*, Dipt., II, 467.—Guerrero, Mex.
- virginiensis** MACQUART, see *Archytas hystrix*.

#### JURINELLA.

- BRÄUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 132, 1889 (*Jurinella* and *Pseudohystricia*); VI, 147, 1893 (id.).
- COQUILLET, Revis. Tachin., 147, notes, 1897.
- ambigua** MACQUART, Dipt. Exot., Suppl. IV, 2, 145 (*Hystricia*).—Mex.
- ? WILLISTON, Trans. Amer. Ent. Soc., XIII, 298, notes (id.).—Col., Mex. Query by Van der Wulp.
- VAN DER WULP, *Biologia*, Dipt., II, 13, pl. 1, f. 7 (id.).—Orizaba, Mex.; Guatemala, Costa Rica.
- BRÄUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 132, f. 236; VI, 147 (both *Pseudohystricia*).—Mex.
- TOWNSEND, Trans. Amer. Ent. Soc., XXII, 69, redesc. from Mex. (*Pseudohystricia*).
- GIGLIO-TOS, Ditt. del Mess., III, 26 (*Hystricia*), oc. at Solco, Mex.
- VAN DER WULP, *Biologia*, Dipt., II, 461, oc. in Guerrero and Atoyac, Mex. (*Jurinia*).
- exilis** TOWNSEND, Ent. News, III, 1892, 146 (*Pseudohystricia*).—Jamaica. Jamaica—Johnson.

- soror** WILLISTON, Trans. Amer. Ent. Soc., XIII, 298 (*Hystriicia*).—Ariz.  
 VAN DER WULP, Biologia, Dipt., II, 15, pl. I, f. 9, pt. desc. (id.).—Guatemala, Costa Rica.  
 GIGLIO-TOS, Ditt. del Mess., III, 28 (id.), note.—Mex.  
 COQUILLET, Revis. Tachin., 147.—Col.

## MICROCHIRA.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 188, 1893.  
**mexicana** BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 188.—Mex.

## TROPIDOPSIS.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 132, 1889; VI, 147, 1893.  
**pyrrhaspis** WIEDEMANN, Auss. Zw., II, 307 (*Tachina*).—Brazil.  
 WALKER, List, IV, 733 (*Tachina anthemon*).—Brazil.  
 SCHINER, Novara, 332 (*Hystriicia*), notes.—S. A.  
 VAN DER WULP, Biologia, Dipt., II, 18, pt. desc. (*Hystriicia*).—Cordova, Mex.; Guatemala.  
 GIGLIO-TOS, Ditt. del Mess., III, 28, notes.—Tuxpango and Orizaba, Mex.  
 VAN DER WULP, Biologia, Dipt., II, 461 (*Hystriicia*), oc.—Vera Cruz and Jalapa, Mex.

## DEXIIDÆ.

- BIGOT, Revue d'Entomol., 1885, 266, table of all genera.  
 VAN DER WULP, Biologia, Dipt., II, 211, table of Mexican genera, 1891.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 1891.  
 TOWNSEND, Trans. Amer. Ent. Soc., XIX, 1892, 273, table of N. A. genera.  
 VAN DER WULP, Tijdschr. v. Ent., XXVIII, 189, 1885, has a table of the long-legged genera, referring especially to those of Tropical America.

*Note.*—Brauer and Bergenstamm published an extensive work in the same year as Van der Wulp, 1891. I am unable to settle the question of actual priority; but as Van der Wulp allowed Brauer and Bergenstamm to use his types as a matter of courtesy, and they attributed his genera to him, it would seem unwise to disturb this arrangement.

The ideas of the authors named above differ widely as to the limits and validity of genera; frequently they are hopelessly contradictory. The work of Brauer and Bergenstamm is obviously of a preliminary character, undergoing material change with each succeeding instalment, which makes it undesirable to follow it for sequence of genera.

The differences between Tachinidæ and Dexiidæ are evanescent, and the prospect is that the families will ultimately be combined, or new family characters established. In the present work, most of the doubtful genera, if not in fact all of them, will be found in the Tachinidæ.

The following notes may be grouped together, for convenience of reference:

- Illigera ælops** WALKER is a *Beskia*.  
**Illigera corythus** WALKER is *Xanthomclana atripennis*.  
**Illigera helymus** WALKER is a *Metachata*.  
**Megerlea rufocaudata** BIGOT goes in *Sarcophilodes*.  
**Oplisa albifacies** BIGOT is a *Pseudodexia*.  
**Oplisa nigrifacies** BIGOT; according to Brauer, Sitzungsbericht d. K. Akad., CVI, 32, the types include four species, referable to three genera.  
**Phorostoma appendiculata** BIGOT is a *Myiomima*.

*Phorostoma melanogaster* BIGOT is *Sardiocera valida*.

*Ptilodegeeria* B. and B.; for the type species, see *Hypostena obumbrata* V. d. W.

*Pyrrrosia ochracea* BIGOT is an *Æstrophasia*.

*Sericocera pictipennis* MACQ. is *Euantha dives*.

*Tromodesia hæmorrhoidalis* BIGOT is *Leptoda atrifrons*.

#### HYSTRISIPHONA.

BIGOT, Revue et Mag. Zool., 1859, 309.

VAN DER WULP, Biologia, Dipt., II, 213, 1891.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 174, 1893 (the reference in IV, 120, 1889, is a mistake; the species there mentioned is referred, VI, 182, to *Echinodexia*, n. g.).

*bicolor* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., III, 54, f. 17.—Mex.

*nigra* BIGOT, Rev. et Mag. Zool., 1859, 309; Bull. Soc. Ent. France, 1883, xlv.—Mex.

VAN DER WULP, Biologia, Dipt., II, 213, redesc.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 174, 1893.—Cent. Amer.

BRAUER, Sitzungsbericht d. K. Akad., CVII, 13 (*H. mclas.* by mistake), note on type.

Oaxaca, Mex.—Giglio-Tos.

*pseudohystricia* BRAUER and BERGENSTAMM, see *Echinodexia*.

#### ECHINODEXIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 182, 1893.

*pseudohystricia* BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 120 (*Hystrisiphona*); VI, 182, gen. ref.—Mex.

VAN DER WULP, Biologia, Dipt., II, 219, pl. v, f. 3 (*Hystrichodexia*).—Guerrero, Mex. Solco, Mex.—Giglio-Tos.

#### PRORHYNCHOPS.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 364, 1891; VI, 174, 1893.

*bilimeki* BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 364.—Mazatlan, Mex.

#### PROSENA.

ST. FARGEAU et SERVILLE, Encycl. Méth., X, 500, 1825.

SCHINER, Fauna Austr., I, 557, 1862.

VAN DER WULP, Biologia, Dipt., II, 214, 1891, desc. and table of Mexican species.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 125, 1889; VI, 175, 1893.

BRAUER and BERGENSTAMM, loc. cit., IV, 127; VI, 175 (*Mochlosoma*).

*analis* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., III, 55 (both *Mochlosoma*).—Mex.

*curvirostris* BIGOT, Annales, 1888, 264.—Mex.

VAN DER WULP, Biologia, Dipt., II, 217.—Guerrero, Vera Cruz and Tabasco in Mex.; Costa Rica.

BRAUER, Sitzungsbericht d. K. Akad., CVIII, 13, note on types.

Orizaba, Mex.—Giglio-Tos; Beulah, N. M.—Skinner.



- lacertosa* VAN DER WULP, *Biologia*, Dipt., II, 215, pl. v, f. 1.—Durango, Mex.  
Solco, Mex.—Giglio-Tos.
- maculifera* BIGOT, see *Stomatodexia cothurnata*.
- melæna* VAN DER WULP, *Biologia*, Dipt., II, 217.—Guerrero, Mex.
- mexicana* MACQUART, see *Thelaira*.
- obscura* BIGOT, see *Eudexia*.
- rufipes* COQUILLET, *Canad. Ent.*, 1902, 202 (*Mochlosoma*).—Sierra Madre, Chihuahua, Mex.
- sericea* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147, 1893; *Ditt. del Mess.*, III, 56 (both *Mochlosoma*).—Mex.
- ? *tessellans* VAN DER WULP, *Biologia*, Dipt., II, 216.—Guerrero and Durango, Mex. Van der Wulp says it may be the same as *mexicana*, which is *Thelaira*; hence I put the query.
- valida* BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 126, 168, pl. VIII, f. 102 (*Mochlosoma*).—Pa.; Mex.  
VAN DER WULP, *Biologia*, Dipt., II, 215, pl. v, f. 2.—Guerrero, Mex.

## PROSENOIDES.

- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 370, 1891; VI, 175, 1893.
- flavipes* COQUILLET, *Proc. Acad. Nat. Sci. Phil.*, 1895, 314.—Lake Worth and Charlotte Harbor, Fla.

## MYIOMIMA.

- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 119, 1889; V, 363, 1891; VI, 175, 1893.
- appendiculata* BIGOT, *Annales*, 1888, 269 (*Phorostoma*).—Mex.
- BRAUER, *Sitzungsbericht d. K. Akad.*, CVIII, 12, notes on type, and gen. ref.
- sarcophagina* BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 119, 167; V, 363; VI, 175.—Cent. Amer.  
VAN DER WULP, *Biologia*, Dipt., II, 264, brief note.

## HYSTRICHODEXIA.

- ROEDER, *Stett. Ent. Zeit.*, 1886, 266.
- VAN DER WULP, *Biologia*, Dipt., II, 218, 1891, def. and table of Mexican species.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 182, 1893.
- aurea* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147, 1893; *Ditt. del Mess.*, III, 59.—Mex.
- brevicornis* MACQUART, *Dipt. Exot.*, Suppl. IV, 230 (*Proscna*).—Brazil.  
GIGLIO-TOS, *Ditt. del Mess.*, III, 58.—Mex.
- contristans* VAN DER WULP, *Biologia*, Dipt., II, 221.—Guerrero, Mex.
- coracina* VAN DER WULP, *Biologia*, Dipt., II, 221.—Guerrero, Mex.
- echinata* VAN DER WULP, *Biologia*, Dipt., II, 220.—Costa Rica.
- formidabilis* BIGOT, see *Eudexia*.
- mellea* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147, 1893; *Ditt. del Mess.*, III, 58.—Oaxaca, Mex.
- pseudohystricia* BRAUER and BERGENSTAMM, see *Echinodexia*.
- ræderi* WILLISTON, *Kans. Univ. Quart.*, II, 77.—Ariz.
- ? *spinosa* BIGOT, *Annales*, 1888, 266 (*Rhynchodexia*).—Hayti.  
BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 31, refers here, or to *Eudexia*, from type.

## EUDEXIA.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 120, 1889; vi, 174, 1893.
- formidabilis** BIGOT, Annales, 1888, 264 (*Rhamphiniina*).—Mex.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 120 (*goliath*); vi, 174, 182 (id.).—Venezuela.
- VAN DER WULP, Biologia, Dipt., II, 220, pl. v, f. 4 (*Hystrichodexia*).—Paso del Macho, Mex.; Nicaragua. Notes on the type of Bigot.
- BRAUER, Sitzungsbericht d. K. Akad., cvI, 31, syn. and gen. ref., from type.
- GIGLIO-TOS, Ditt. del Mess., III, 58, oc. in Orizaba, Mex. (*Hystrichodexia*).
- obscura** BIGOT, Annales, 1888, 264 (*Prosenia*); 265 (*Rhamphiniina anthracina*).—Mex.
- VAN DER WULP, Biologia, Dipt., II, 234, desc. and synonymy, from types (*Rhynchodexia*).—Durango, Mex.
- BRAUER, Sitzungsbericht d. K. Akad., cvIII, 14, gen. ref., from type of *anthracina*.
- Solco and Patzcuaro, Mex.—Giglio-Tos.

## BATHYDEXIA.

- VAN DER WULP, Biologia, Dipt., II, 222, 1891.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 363, 1891; vi, 173, 1893.
- albolineata** VAN DER WULP, Biologia, Dipt., II, 223.—Costa Rica.
- appendiculata** BIGOT, Annales, 1888, 269 (*Phorostoma*).—Mex.
- VAN DER WULP, Biologia, Dipt., II, 222.—Oaxaca, Mex.; Guatemala.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 363.—Cent. Amer.

## GYMNODEXIA.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 364, 1891; vi, 173, 1893.
- zonata** COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 315.—Jacksonville, Fla.

## SCOTIPTERA.

- MACQUART, Dipt. Exot., II, 3, 83, 1843.
- ? DESVOIDY, Myodaires, 317, 1830 (*Sophia* in part). [Van der Wulp, with a query.]
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 126, 1889; vi, 175, 1893.
- VAN DER WULP, Biologia, Dipt., II, 223, 1891.
- ? **cyanea** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., III, 61.—Angang, Mex. Query by himself.
- melaleuca** WIEDEMANN, Auss. Zw., II, 369 (*Dexia*).—Rio Janeiro.
- MACQUART, Dipt. Exot., II, 3, 83, pl. IX, f. 1.—Brazil.
- PERTY, Delectus Animal., 186, pl. xxxvii, f. 7.—Brazil.
- ? DESVOIDY, Myodaires, 318 (*Sophia punctata*). [Van der Wulp, with a doubt.]
- VAN DER WULP, Biologia, Dipt., II, 224, pl. v, f. 5.—Guatemala; Panama.
- varipennis** VAN DER WULP, Biologia, Dipt., II, 224.—Vera Cruz, Mex.

## MYIOSCOTIPTERA.

- GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., III, 62, 1894.
- cincta** GIGLIO-TOS, locis citatis.—Solco, Mex.

## RHYNCHODEXIA.

BIGOT, Bull. Soc. Ent. France, 1885, p. xi (*Rhynchiodexia* and *Rhamphinina*).

VAN DER WULP, Biologia, Dipt., II, 225, 1891, def. and table of Mexican species; syn.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 182, 1893, suggest *Myiomina*, and in the index write "*? Myiomina*."

Note.—There is much confusion about the species of *Rhamphinina*. Most of Bigot's species certainly do not belong to *Rhynchodexia*.

*angulata* VAN DER WULP, Biologia, Dipt., II, 233.—Guerrero, Mex.

Orizaba, Mex.—Giglio-Tos.

*anthracina* BIGOT, of V. d. Wulp, see *Eudexia obscura*.

*argentina* BIGOT, see *Ptilodexia*.

*carolinensis* BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 119, 167; VI, 173.—S. Car.

*conjuncta* VAN DER WULP, Biologia, Dipt., II, 228.—Guerrero and Durango, Mex.

*discolor* VAN DER WULP, Biologia, Dipt., II, 227.—Guerrero, Vera Cruz and Durango, Mex.

*dubia* BIGOT, see *Ptilodexia*.

*formidabilis* BIGOT, see *Eudexia*.

*fraterna* VAN DER WULP, Biologia, Dipt., II, 229.—Orizaba, Guerrero, etc., Mex.

GIGLIO-TOS, Ditt. del Mess., III, 61, note.—Oaxaca, Orizaba, Tehuacan, Mex.

*fumipennis* BIGOT, see *Ptilodexia*.

*imitatrix* VAN DER WULP, Biologia, Dipt., II, 236.—Guerrero, Tabasco, and Jalisco, Mex.

*macroptera* VAN DER WULP, Biologia, Dipt., II, 232.—Guerrero and Mexico City, Mex.

*major* BIGOT, see *Ptilodexia*.

*omissa* VAN DER WULP, Biologia, Dipt., II, 235.—Guerrero, Jalisco and N. Yucatan, Mex.

*picta* BIGOT, see *Leptoda*.

*planifrons* VAN DER WULP, Biologia, Dipt., II, 234, pl. v, f. 7.—Durango, Mex.

*præusta* VAN DER WULP, Biologia, Dipt., II, 235.—Durango, Mex.

*punctipennis* VAN DER WULP, Biologia, Dipt., II, 233.—Guerrero and Durango, Mex.

*rubricauda* BIGOT, Annales, 1888, 265 (*Rhamphinina*).—Cuba.

BRAUER, Sitzungsbericht d. K. Akad., CVIII, 14, has some enigmatical comments on the type, from which I gather that it is the same as *hamorhoa* V. d. W., placed under *Peleteria robusta*.

*rubricornis* VAN DER WULP, Biologia, Dipt., II, 230.—Guerrero, N. Sonora, Tabasco, and Vera Cruz, Mex.

GIGLIO-TOS, Ditt. del Mess., III, 60, note.—Mex.

*rufianalis* VAN DER WULP, Biologia, Dipt., II, 231.—Guerrero, Jalisco, and N. Yucatan, Mex.

COQUILLETT, Proc. U. S. N. M., XXII, 254, oc. in Porto Rico (*Myocera*).

*rufipennis* MACQUART, see *Ptilodexia*.

*rutilans* VAN DER WULP, Biologia, Dipt., II, 227.—Guerrero, Mex.

*scutellata* VAN DER WULP, Biologia, Dipt., II, 230.—Durango, Mex.

GIGLIO-TOS, Ditt. del Mess., III, 60, note.—Orizaba, Mex.

*simulans* VAN DER WULP, Biologia, Dipt., II, 229.—N. Sonora, Mex.

*sororia* WILLISTON, Trans. Ent. Soc. Lond., 360, pl. XI, f. 98.—St. Vincent, W. I.

*spinosa* BIGOT, see *Hystrichodexia*.

*striata* VAN DER WULP, *Biologia*, Dipt., II, 234. pl. v, f. 6.—Panama.

*strigilata* VAN DER WULP, *Biologia*, Dipt., II, 232.—Durango, Mex.

*tibialis* DESVOIDY, see *Ptilodexia*.

*tincticornis* BIGOT, see *Ptilodexia major*.

*varipes* VAN DER WULP, *Biologia*, Dipt., II, 231.—Guerrero, Mex.

#### MYIOCERA.

DESVOIDY, *Myodaires*, 328, 1830 (*Myocera*).

VAN DER WULP, *Biologia*, Dipt., II, 236, 1891.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, VI, 175, 1893. change to *Myiocera*.

*appendiculata* BIGOT, see *Myiomima*.

*bivittata* COQUILLET, *Proc. U. S. N. M.*, XXV, 121.—White Mts., N. Mexico.

*cremides* WALKER, *List*, IV, 842 (*Dexia*).—N. A. N. J.—Smith Cat.

Gen. ref. by Coquillett, in litt.

*melanogaster* BIGOT, see *Sardiocera*.

*rava* VAN DER WULP, *Biologia*, Dipt., II, 237.—Guerrero and Durango, Mex.

Beulah, N. M.—Skinner.

*ruficornis* BIGOT, see *Sardiocera*.

*simplex* BIGOT, *Annales*, 1888, 266.—Mex.

VAN DER WULP, *Biologia*, Dipt., II, 237, note on type.

BRAUER, *Sitzungsbericht d. K. Akad.*, CVIII, 15. same.

*tibialis* DESVOIDY, of Chagnon's List, see *Ptilodexia*.

#### PARAPROSENA.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 127, 1889; VI, 175, 1893.

*apicalis* DESVOIDY, *Myodaires*, 316 (*Zelia*).—Carolina.

N. J.—Smith Cat., with gen. ref.

#### STOMATODEXIA.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 125, 1889; V, 369, 373, 1891; VI, 133, 1893.

VAN DER WULP, *Biologia*, Dipt., II, 238, 1891.

*cothurnata* WIEDEMANN, *Auss. Zw.*, II, 249 (*Stomoxys*).—Brazil.

BIGOT, *Annales*, 1888, 264 (*Proscna maculifera*).—Mex.

VAN DER WULP, *Biologia*, Dipt., II, 239.—Guerrero, Vera Cruz and Jalisco, Mex.; syn. of Bigot, from type.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, VI, 133.—Brazil.

GIGLIO-TOS, *Ditt. del Mess.*, III, 64, note.—Orizaba, Mex.

BRAUER, *Sitzungsbericht d. K. Akad.*, CVIII, 13, refers from the type to *St. flavipennis*, but with a doubt; as Van der Wulp, also saw the type, I follow him in this point.

*flavipennis* WIEDEMANN, *Auss. Zw.*, II, 380 (*Dexia*).—Brazil.

VAN DER WULP, *Biologia*, Dipt., II, 138 (*Myobia*).—Guerrero, Mex.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, V, 407, gen. ref.

*quadrimaculata* WALKER, *Dipt. Saund.*, 319 (*Dexia*).—Brazil.

GIGLIO-TOS, *Ditt. del Mess.*, III, 64, note and gen. ref.; oc. in Mex.

*similigena* VAN DER WULP, *Biologia*, Dipt., II, 239.—Guerrero, Mex.

GIGLIO-TOS, *Ditt. del Mess.*, III, 64, oc. in Orizaba and Oaxaca, Mex.

## MEGAPARIA.

VAN DER WULP, *Biologia*, Dipt., II, 240, 1891.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 172, 1893.

Also mentioned by B. and B., v, 362, 1891, as a new genus, unnamed from Ciudad, Mex.

*flaveola* COQUILLET, *Proc. U. S. N. M.*, XXV, 121.—Col.

*opaca* COQUILLET, *Jour. N. Y. Ent. Soc.*, VII, 218.—Jacksonville, Fla. (by misprint Jackson, Fla.).

*venosa* VAN DER WULP, *Biologia*, Dipt., II, 240, pl. v, f. 9.—Durango, Mex.

GIGLIO-TOS, *Ditt. del Mess.*, III, 64, notes.—Mex.

## MELANOPHORA.

MEIGEN, *Illig. Mag.*, II, 279, 1803; *Syst. Besch.*, VII, 213, 1838.

SCHINER, *Fauna Austr.*, I, 552, 1862.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 111, 1889; VI, 159, 1893.

*diabroticæ* SHIMER, see *Cclatoria*.

*distincta* DESVOIDY, see *Linnæmyia comta*.

*nigripes* DESVOIDY, see *Linnæmyia comta*.

*roralis* LINNÉ, *Fauna Suec.*, 2d ed., p. 455 (*Musca*): p. 459 (*Musca grossificationis*).—Sweden.

FABRICIUS, *Syst. Antl.*, 304 and 324 (*Musca roralis* and *Tephritis grossificationis*).

MEIGEN, *Syst. Besch.*, IV, 284 (*Tachina*).

SCHINER, *Fauna Austr.*, I, 553.

• LOEW, in *Silliman's Journal*, oc. in N. A.

BRUES, *Ent. News*, XIV, 291, reared from sow-bug, *Porcellio* sp.—Woods Hole, Mass.

N. J.—Smith Cat.: Lawrence, Kans.—J. M. A.

## TRIXODES.

COQUILLET, *Canad. Ent.*, XXXIV, 201, 1902.

*obesa* COQUILLET, loc. cit.—Sierra Madre, Chihuahua, Mex.; Gila R., N. M.

## CAMARONA.

VAN DER WULP, *Biologia*, Dipt., II, 241, 1891.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 174, 1893, notes.

*cæruleonigra* VAN DER WULP, *Biologia*, Dipt., II, 242.—Guerrero, Mex.

*xanthogaster* VAN DER WULP, *Biologia*, Dipt., II, 241, pl. v, f. 11.—Guerrero, Mex. (*xanthogastra*).

## DEXIA.

MEIGEN, *Syst. Besch.*, V, 33, 1826.

SCHINER, *Fauna Austr.*, I, 588, 1862.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 120, 1889; VI, 174, 1893.

VAN DER WULP, *Biologia*, Dipt., II, 242, 1891.

*abdominalis* DESVOIDY, *Myodaires*, 306 (*Estheria*).—Nova Scotia.

*abzoe* WALKER, *List*, IV, 846.—Ga.

*æneiventris* WIEDEMANN, see *Mescombrinella*.

*albifrons* WALKER, *Dipt. Saund.*, 317.—U. S.

*analis* SAY, see *Leskia*.

*analis* DESVOIDY, *Myodaires*, 315 (*Zelia*).—Carolina.

*apicalis* DESVOIDY, see *Paraprosena*.

- canescens* WALKER, Dipt. Saund., 310.—U. S.  
*cerata* WALKER, List, iv, 847.—N. A.  
*cremides* WALKER, see *Myiocera*.  
*dives* WIEDEMANN, see *Euantha*.  
*flavipennis* WIEDEMANN, see *Stomatodexia*.  
*fuscanipennis* MACQUART, Dipt. Exot., Suppl. I, 188, pl. xx, f. 11.—Yucatan.  
*genuina* VAN DER WULP, Biologia, Dipt., II, 243.—Guerrero, Mex.  
*gracilis* WIEDEMANN, see *Leptoda*.  
*halone* WALKER, List, iv, 837.—Ga.  
*harpasa* WALKER, List, iv, 840.—N. A.  
*melanocera* DESVOIDY, Myodaires, 312.—Carolina.  
 ? *nigriceps* BIGOT, Annales, 1888, 267 (*Myostoma*).—Wash.  
     BRAUER, Sitzungsbericht d. K. Akad., CVIII, 11, says will form a new genus  
     near *Dexia*, from type; hence I place here provisionally with query.  
*ogoa* WALKER, List, iv, 841.—Nova Scotia.  
*pedestris* WALKER, Dipt. Saund., 313.—U. S.  
*pertecta* WALKER, Trans. Ent. Soc., n. ser., v, 307.—Mex.  
 ? *plumosa* WIEDEMANN, Auss. Zweifl., II, 370.—Brazil.  
     BIGOT, in Sagra's Cuba, 815, oc. in Cuba. Very doubtful, hence the ques-  
     tion.—J. M. A.  
*postica* WALKER, Dipt. Saund., 310.—Ga.  
*prexaspes* WALKER, List, iv, 837 (*Estheria*).—Ga.  
*pristis* WALKER, see *Macquartia*.  
*punctata* DESVOIDY, Myodaires, 308 (*Dincra*).—Philadelphia.  
*rostrata* DESVOIDY, Myodaires, 315 (*Zelia*).—N. A.  
*rubiventris* MACQUART, Dipt. Exot., Suppl. I, 188; pl. xx, f. 10.—Yucatan.  
*rufipennis* MACQUART, see *Ptilodexia*.  
*strenua* DESVOIDY, Myodaires, 315 (*Zelia*).—San Domingo.  
     Porto Rico—Roeder.  
*suavis* VAN DER WULP, Tijdschr. v. Ent., XXVI, sep. 33.—Guadeloupe.  
*thomæ* WIEDEMANN, see *Leptoda*.  
*tibialis* DESVOIDY, see *Ptilodexia*.  
*triangularis* VAN DER WULP, Tijdschr. v. Ent., x, 149, pl. v, f. 1-5.—Wis.  
     Fla.—Johnson (*Gymnodexia*).  
*velox* DESVOIDY, Myodaires, 316 (*Zelia*).—Carolina.  
*vertebrata* SAY, Jour. Acad. Sci. Phil., VI, 176; Compl. Works, II, 366.—Ind.  
     N. J.—Smith Cat. (*Zelia*); White Mts., N. H.—Slosson (id.); Ormond  
     and Tampa, Fla.—Johnson (*Leptoda*).

#### ATELOGLOSSA.

- COQUILLET*, Jour. N. Y. Ent. Soc., VII, 219, 1899 (*Atelogossa* by a mis-  
 print).  
*cinerea* COQUILLET, loc. cit.—Waldboro, Me.

#### PHASIOPS.

- COQUILLET*, Jour. N. Y. Ent. Soc., VII, 219, 1899.  
*flava* COQUILLET, loc. cit.—Caldwell, N. Y.

#### MORPHOMYIA.

- RONDANI*, Dipt. Ital. Prod., I, 85, 1856.  
*BRAUER* and *BERGENSTAMM*, Zweifl. d. Kaiserl. Mus., IV, 150, 1889; v, 389,  
 1891; VI, 176, 1893.  
*rufonotata* BIGOT, Annales, 1888, 269.—Cal.



## ACRONACANTHA.

VAN DER WULP, *Biologia*, Dipt., II, 243, 1891.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 182, 1893.

*nubilipennis* VAN DER WULP, *Biologia*, Dipt., II, 243, pl. v, f. 12.—Costa Rica.

## DEXIOSOMA.

RONDANI, *Dipt. Ital. Prod.*, I, 85, 1856.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 117, 1889; VI, 171, 1893.

VAN DER WULP, *Biologia*, Dipt., II, 244, 1891.

*fumipennis* BIGOT, see *Ptilodexia*.

*partitum* BIGOT, *Annales*, 1888, 270.—Mex.

VAN DER WULP, *Biologia*, Dipt., II, 245, note on type.

BRAUER, *Sitzungsbericht d. K. Akad.*, CVIII, 14, same; suggests *Pachygraphia*, a South American genus.

*vibrissatum* VAN DER WULP, *Biologia*, Dipt., II, 244, pl. v, f. 13.—Tabasco, Mex.  
GIGLIO-TOS, *Ditt. del Mess.*, III, 63, note.—Tuxpango, Mex.

## MEGAPROSOPUS.

MACQUART, *Dipt. Exot.*, II, 3, 83, 1843.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 117, 1889; VI, 171, 1893.

*michiganensis* TOWNSEND, see *Microphthalma disjuncta*.

*rufiventris* MACQUART, *Dipt. Exot.*, II, 3, 84, pl. x, f. 1.—Mex.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 117; VI, 171.

## MACROMETOPA.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 117, 1889; V, 362, 1891; VI, 172, 1893.

VAN DER WULP, *Biologia*, Dipt., II, 245, 1891.

*calogaster* BIGOT, *Annales*, 1888, 266 (*Microphthalma*).—Mex.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 166 (*Macrometopa mexicana*); VI, 171 (id.).—Mex.

VAN DER WULP, *Biologia*, Dipt., II, 245, pl. v, f. 14, desc. and syn.—Guerrero and Morelos, Mex.

BRAUER, *Sitzungsbericht d. K. Akad.*, CVIII, 10, confirms syn. and gen. ref., from type.

## STENODEXIA.

VAN DER WULP, *Biologia*, Dipt., II, 246, 1891.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 379, 1891; VI, 133, 1893.

*albincta* VAN DER WULP, *Biologia*, Dipt., II, 246, pl. v, f. 15.—Tabasco and N. Yucatan, Mex.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 133.

## PTILODEXIA.

BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 119, 1889 (*Ptilodexia* and *Clinoneura*); V, 363, notes and syn., 1891; VI, 173, 1893.

? *argentina* BIGOT, *Annales*, 1888, 265 (*Rhamphiniina*).—Argentina.

BRAUER, *Sitzungsbericht d. K. Akad.*, CVIII, 14; a species from Mexico in the Imperial Museum is probably the same, compared with the type; hence I list it with a question.

- dubia** BIGOT, Bull. Soc. Ent. France, 1885, p. xi (*Rhamphinina*).—Mex.  
 VAN DER WULP, Biologia, Dipt., II, 236, note; perhaps *Rhynchodexia*.  
 BRAUER, Sitzungsbericht d. K. Akad., CVIII, 15, gen. ref. and note, from type.
- fumipennis** BIGOT, Annales, 1888, 270 (*Dexiosoma*).—Mex.  
 VAN DER WULP, Biologia, Dipt., II, 230, 245, is not a *Dexiosoma*.  
 BRAUER, Sitzungsbericht d. K. Akad., CVIII, 14, notes and gen. ref., from type.
- longicornis** BIGOT, Annales, 1888, 270 (*Dexiosoma*).—Mex.  
 VAN DER WULP, Biologia, Dipt., II, 230, 245, refers to *Rhynchodexia*, from type.  
 BRAUER, Sitzungsbericht d. K. Akad., CVIII, 14, refers to *Ptilodexia*, from type, with additional notes.  
*Note*.—Van der Wulp included *Ptilodexia* in *Rhynchodexia*, hence there is no contradiction.
- major** BIGOT, Annales, 1888, 265 and 266 (*Rhamphinina major* and *tincticornis*).—Mex. and Wash.; Mex.  
 VAN DER WULP, Biologia, Dipt., II, 228 (*Rhynchodexia tincticornis*).—Paso del Macho, Mex.; Costa Rica.  
 GIGLIO-TOS, Ditt. del Mess., III, 60, notes (*Rhynchodexia*).—Mex.  
 BRAUER, Sitzungsbericht d. K. Akad., CVIII, 14, 15, syn. of Bigot and gen. ref., from type.
- rufipennis** MACQUART, Dipt. Exot., II, 3, 87, pl. x, f. 3 (*Dexia*).—Nova Scotia.  
 BRAUER, Sitzungsbericht d. K. Akad., CVIII, 14, determines Bigot's specimens (types?) to go in this genus.  
 White Mts., N. H.—Mrs. Slosson.
- tibialis** DESVOIDY, Myodaires, 306 (*Estheria*).—Nova Scotia.  
 White Mts., N. H.—Slosson (*Ptilodexia*); Montreal—Chagnon (id.).  
 Coquillett in litt. (id.).  
 Beulah, N. M.—Skinner (*Myocera*).
- tincticornis** BIGOT, see *major*.

#### SARDIOCERA.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 119, 1889; VI, 173, 1893.
- ruficornis** BIGOT, Annales, 1888, 266 (*Myocera*).—Baltimore.
- valida** WIEDEMANN, Auss. Zw., II, 387 (*Musca*).—No locality.  
 BIGOT, Annales, 1888, 269 (*Phorostoma mclanogaster*).—N. Y.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 119, 167; V, 363, ref. to Wied.; VI, 173.—Carolina.  
 BRAUER, Sitzungsbericht d. K. Akad., CVIII, 12, note on Bigot's type; syn.

#### CHOLOMYIA.

- BIGOT, Bull. Soc. Ent. France, 1884, xxxvii.
- VAN DER WULP, Biologia, Dipt., II, 246, 1891.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 375, notes.
- inæquipes** BIGOT, Bull. Soc. Ent. France, 1884, xxxvii.—Mex.  
 VAN DER WULP, Biologia, Dipt., II, 247, pl. VI, f. 1, 2.—Guerrero and Tabasco, Mex. (*Dexia longipes* FABR., of S. A., may be the same.)  
 BRAUER, Sitzungsbericht d. K. Akad., CVI, 37, would put this in *Leptoda*, but Van der Wulp's figures seem to show too much difference.

## MELALEUCA.

VAN DER WULP, *Biologia*, Dipt., II, 247, 1891.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, VI, 183, 1893.

*spectabilis* VAN DER WULP, *Biologia*, Dipt., II, 248, pl. VI, f. 3.—Guerrero, Mex.

## EUANTHA.

VAN DER WULP, *Tijdschr. v. Ent.*, XXVIII, 198, 1885; *Biologia*, Dipt., II, 248, 1891.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 137, 188; VI, 128, 1893.

TOWNSEND, *Annals and Mag. Nat. Hist.*, XIX, 34, 1897, notes.

*liturata* OLIVIER, *Encycl. Méth.*, VIII, 423 (*Ocyptera*).—Carolina.

WIEDEMANN, *Auss. Zw.*, II, 377 (*Dexia dives*).—Ky.

MACQUART, *Dipt. Exot.*, II, 3, 67, pl. VII, f. 5 (*Scricocera pictipennis*).—Philadelphia.

VAN DER WULP, *Biologia*, Dipt., II, 249, pl. VI, f. 4 (*dives*).—Guerrero, Mex., and Guatemala; syn. of Macquart with Wiedemann.

TOWNSEND, *Annals and Mag. Nat. Hist.*, XIX, 34, notes (*dives*).—Vera Cruz.

COQUILLET, *Revis. Tachin.*, 86, footnote, syn. of Wiedemann with Olivier. N. J.—Smith Cat.; St. Augustine, Fla.—Johnson.

*pulchra* VAN DER WULP, *Biologia*, Dipt., II, 249.—Guerrero, Mex.

## LEPTODA.

VAN DER WULP, *Tijdschr. v. Ent.*, XXVIII, 196, 1885; *Biologia*, Dipt., II, 250, 1891.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, VI, 133, 1893.

*atrifrons* WIEDEMANN, *Auss. Zw.*, II, 403 (*Musca*).—No locality.

BIGOT, *Annales*, 1888, 267 (*Tromodesia hamorrhoidalalis*).—Mex.

VAN DER WULP, *Biologia*, Dipt., II, 238, pl. V, f. 8 (id.), redesc. of Bigot's type.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, VI, 183, syn.

*gracilis* WIEDEMANN, *Auss. Zw.*, II, 373 (*Dexia*).—No locality.

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 125; VI, 133.—Central America; Mexico.

VAN DER WULP, *Biologia*, Dipt., II, 250, pl. VI, f. 5.—Guerrero, Mex.; Guatemala.

*picta* BIGOT, *Annales*, 1888, 265 (*Rhamphinina*).—Cuba.

BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 31, gen. ref., from type.

*potens* WIEDEMANN, *Auss. Zweifel.*, II, 312 (*Tachina*).—Rio Janeiro.

MACQUART, *Dipt. Exot.*, II, 3, 58, refers to genus *Eurigaster*.

BIGOT, in Sagra's Cuba, 810, oc. in Cuba.

BRAUER, *Sitzungsbericht d. K. Akad.*, CVI, 30, gen. ref.

*rufina* BIGOT, *Bull. Soc. Ent. France*, 1885, 3 (*Homodexia*).—Cal.

BRAUER, *Sitzungsbericht d. K. Akad.*, CVIII, 8, gen. ref., from type; notes.

*semirufa* VAN DER WULP, *Biologia*, Dipt., II, 250.—N. Yucatan, Mex.

*thomæ* WIEDEMANN, *Auss. Zw.*, II, 379 (*Dexia*).—St. Thomas, W. I.

WALKER, *List*, IV, 840, oc. in Jamaica (*Dexia*).

BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, V, 406, gen. ref., from type.

## URAMYIA.

DESVOIDY, Myodaires, 215, 1830.

BIGOT, Bull. Soc. Ent. France, 1885, xxxiii (*Oxydextia*). [V. d. W.]

VAN DER WULP, Biologia, Dipt., II, 251, 1891; Tijdschr. v. Ent., xxx, 168.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 130, 1889; VI, 135, 1893 (*Uromyia*).

*acuminata* BIGOT, Bull. Soc. Ent. France, 1885, xxxiii (*Oxydextia*).—Brazil.

VAN DER WULP, Biologia, Dipt., II, 251, pl. VI, f. 6 (*producta*); Tijdschr. v. Ent., xxx, 168, correction and extended notes on the two species, with figs. on pl. XI.—Cordova and Jalapa, Mex.

*producta* DESVOIDY, Myodaires, 216.—Brazil.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 130; VI, 135.—Central and S. Amer.; Venezuela. According to V. d. W., these may have been specimens of *acuminata*.

## CORDYLIGASTER.

MACQUART, Dipt. Exot., II, 3, 90, 1843.

VAN DER WULP, Biologia, Dipt., II, 252, 1891.

GIGLIO-TOS, Ditt. del Mess., III, 67, 1891, proposes to change the name to *Cordylidextia*, on account of preoccupation. I am not certain that the name in Libellulidæ was originally spelled the same.

*minuscua* VAN DER WULP, Biologia, Dipt., II, 252, pl. VI, f. 7.—Guerrero and Tabasco, Mex.

GIGLIO-TOS, Ditt. del Mess., III, 67, note.—Orizaba, Mex.

## CHÆTONA.

VAN DER WULP, Biologia, Dipt., II, 253, 1891.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 378, 1891.

*congrua* VAN DER WULP, Biologia, Dipt., II, 253.—Guerrero, Mex.

*cruenta* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., III, 65.—Mex.

*flavipennis* COQUILLET, Proc. U. S. N. M., XXV, 121.—Vinton, Ohio.

*grisea* COQUILLET, Jour. N. Y. Ent. Soc., VII, 222.—Ga.

*longiseta* WIEDEMANN, Auss. Zw., II, 381 (*Dextia*).—Brazil.

BIGOT, Annales, 1888, 262 (*Viviana citrina*).—Mex. [Brauer.]

VAN DER WULP, Biologia, Dipt., II, 253, pl. VI, f. 8.—Costa Rica.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 386, note.

*nitens* COQUILLET, Jour. N. Y. Ent. Soc., VII, 221.—Franconia, N. H. ? White Mts., N. H.—Slosson ("*tenebrosa* Coq. MSS."—this may be the species, described under a different name).

*spinosa* COQUILLET, Jour. N. Y. Ent. Soc., VII, 222.—Pa.

*zonata* BIGOT, Annales, 1888, 261 (*Cromasia*).—Mex.

BRAUER, Sitzungsbericht d. K. Akad., CVI, 15, type redesc.; gen. ref.

## METADEXIA.

COQUILLET, Jour. N. Y. Ent. Soc., VII, 220, 1899.

*tricolor* COQUILLET, loc. cit.—La., Kans., N. M.

*Thelairodes basalis* may also belong here.

## THELAIRODES.

VAN DER WULP, Biologia, Dipt., II, 254, 1891, def. and table of species.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 377, 1891; VI, 131, 1893.

- basalis** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., III, 65.—Mex.  
N. J.—Smith Cat. (*Mctadexia*).
- cinereicollis** VAN DER WULP, Biologia, Dipt., II, 255.—Guerrero, Mex.
- pallida** VAN DER WULP, Biologia, Dipt., II, 255, pl. VI, f. 10.—Guerrero, Mex.
- spinosa** BIGOT, Annales, 1888, 268 (*Homodexia*).—Mex.  
VAN DER WULP, Biologia, Dipt., II, 263, doubtfully refers to *Morinia*.  
BRAUER, Sitzungsbericht d. K. Akad., CVII, 23, gen. ref., from type.
- vittigera** BIGOT, Annales, 1888, 267 (*Homodexia*).—Mex.  
VAN DER WULP, Biologia, Dipt., II, 254, pl. VI, f. 9.—Guerrero, Vera Cruz and Tabasco, Mex.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 131.

## THELAIRA.

- DESVOIDY, Myodaires, 214, 1830.
- SCHINER, Fauna Austr., I, 554, 1862.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 110, 1889; V, 358, 1891; VI, 131, 1893.
- leucozona** PANZER, Fauna Germ., CIV, 19 (*Musca*); 18 (*Musca nigripes*).—Europe.  
FALLÉN, Muscides, 42 (*Musca lateralis* and *nigrina*).  
ZETTERSTEDT, Dipt. Scand., III, 1267.  
SCHINER, Fauna Austr., I, 555.  
Harrison, Idaho—J. M. A., identified for me by Coquillett.
- mexicana** MACQUART, Dipt. Exot., Suppl. IV, 231, pl. XXI, f. 12 (*Proscena*).—Mex.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 406, gen. ref.

## XANTHODEXIA.

- VAN DER WULP, Biologia, Dipt., II, 256, 1891.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 377, 1891.
- sericea** WIEDEMANN, Auss. Zw., II, 316 (*Tachina*).—Brazil.  
VAN DER WULP, Biologia, Dipt., II, 256, pl. VI, f. 11.—Guerrero, Vera Cruz and Tabasco, Mex.

## PSEUDODEXIA.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 372, 378, 1891; VI, 131, 1893.
- albifacies** BIGOT, Annales, 1888, 268 (*Oplisa*).—Mex.  
VAN DER WULP, Biologia, Dipt., II, 264, refers to *Anisia*.  
BRAUER, Sitzungsbericht d. K. Akad., CVI, 32, gen. ref., from type.
- dubia** BIGOT.—Such a species is mentioned by Brauer, Sitzungsbericht d. K. Akad., CVI, 29, from Mexico, among Bigot's types. Brauer could not find the place of publication, nor can I. Probably it was never published.
- longicornis** BIGOT, Annales, 1888, 267 (*Homodexia*).—Mex.  
VAN DER WULP, Biologia, Dipt., II, 264, suggests *Calodexia*.  
BRAUER, Sitzungsbericht d. K. Akad., CVI, 29, redesc. of type and gen. ref.
- pallidicornis** BIGOT, Annales, 1888, 268 (*Anthracomyia*).—Mex.  
VAN DER WULP, Biologia, Dipt., II, 264, note on generic position.  
BRAUER, Sitzungsbericht d. K. Akad., CVI, 32, notes on type, and gen. ref.

## CALODEXIA.

- VAN DER WULP, Biologia, Dipt., II, 257, 1891, def. and table of species.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 131, 1893—not V, 375, which was based on a misunderstanding.

- calceata* VAN DER WULP, *Biologia*, Dipt., II, 258.—Guerrero, Vera Cruz and Tabasco, Mex.  
*longicornis* BIGOT, see *Pseudodexia*.  
*majuscula* VAN DER WULP, *Biologia*, Dipt., II, 257, pl. VI, f. 12.—Tabasco, Mex.  
*pallidicornis* BIGOT, see *Pseudodexia*.  
*obscuripes* VAN DER WULP, *Biologia*, Dipt., II, 258.—Vera Cruz, Mex.

## RHOMBOTHYRIA.

- VAN DER WULP, *Biologia*, Dipt., II, 259, 1891.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, V, 377, 1891; VI, 131, 1893.  
*flavicosta* VAN DER WULP, *Biologia*, Dipt., II, 259, pl. VI, f. 13.—Guerrero, Mex.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 131.

## PSEUDOMORINIA.

- VAN DER WULP, *Biologia*, Dipt., II, 259, 1891.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 183, 1893, notes.  
*pictipennis* VAN DER WULP, *Biologia*, Dipt., II, 260, pl. VI, f. 14.—Guerrero, Mex.

## MORINIA.

- DESVOIDY, *Myodaires*, 264, 1830.  
 RONDANI, *Dipt. Ital. Prod.*, I, 87, 1856 (*Anthracomyia*). [B. B.]  
 SCHINER, *Fauna Austr.*, I, 550, 1862.  
 VAN DER WULP, *Biologia*, Dipt., II, 260, 1891.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, IV, 110, 1889; V, 381, 1891; VI, 183, 205, 1893.  
*fumata* VAN DER WULP, *Biologia*, Dipt., II, 261.—Tabasco, Mex.  
*longitarsis* VAN DER WULP, *Biologia*, Dipt., II, 261.—Guerrero and Orizaba, Mex.  
*spinosa* BIGOT, see *Thelairoides*.  
*trichopoda* VAN DER WULP, *Biologia*, Dipt., II, 261.—Vera Cruz and Tabasco, Mex.  
*washingtoniana* BIGOT, *Annales*, 1888, 269.—Wash.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, refers to *Anthracomyia* from type.

## MELANODEXIA.

- WILLISTON, *Dipt. of Death Valley Exped.*, 256, 1893.  
*tristis* WILLISTON, *loc. cit.*—Monterey Co., Cal., and S. Cal.

## COMYOPS.

- VAN DER WULP, *Biologia*, Dipt., II, 262, 1891.  
 BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 135, 1893.  
*nigripennis* VAN DER WULP, *Biologia*, Dipt., II, 262, pl. VI, f. 15.—Tabasco, Mex.  
*striaticollis* VAN DER WULP, *Biologia*, Dipt., II, 262.—Guerrero, Mex.

## CYRTOSOMA.

- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 131, 132, 1893.  
*rufum* BRAUER and BERGENSTAMM, *loc. cit.*—Guerrero, Mex.

## THERESIA.

- DESVOIDY, *Myodaires*, 325, 1830.  
*tandrec* DESVOIDY, *Myodaires*, 326.—Carolina.



## HOMODEXIA.

BIGOT, Annales, Bull. Soc. Ent. France, 1885, xxvi.

VAN DER WULP, Biologia, Dipt., II, 263, shows that the genus is untenable, and distributes the species among other genera; this distribution however, is considerably modified by Brauer, on examination of the types.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 205, notes.

? *flavipes* BIGOT, Bull. Soc. Ent. France, 1885; Annales, 1888, 268.—Mex.

VAN DER WULP, Biologia, Dipt., II, 263, suggests *Tclothiria*.

BRAUER, Sitzungsbericht d. K. Akad., CVII, 23, will form a new genus near *Calodexia*, from type.

*longicornis* BIGOT, see *Pseudodexia*.

*rufina* BIGOT, see *Leptoda*.

*spinosa* BIGOT, see *Thelairodcs*.

*triangulifera* BIGOT, see *Hypostena*.

? *vittigera* BIGOT, Annales, 1888, 267.—Mex. Query by Bigot.

## SARCOPHAGIDÆ.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 279, table N. A. genera.

HOWARD, Proc. Wash. Acad. Sci., II, 561, note on habits.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 161, table of genera.

RILEY, 4th Rept. U. S. Ent. Comm., App., 109-111, compares larvæ with those of Tachinidæ; quoted by Comstock, Rept. Dept. Agr., 1879, 304.

## MICROCHÆTINA.

VAN DER WULP, Biologia, Dipt., II, 240, 1891.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 162, 238, 1893 (the latter a note on an undescribed species of *Trichoprosopus*, as determined by Wulp, from Central America,—which they place here).

*cinerea* VAN DER WULP, Biologia, Dipt., II, 241, pl. v, f. 10.—Mazatlan, Mex. Ormond, Fla.—Johnson.

## HESPEROMYIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 114, 1889; v, 359. 1891; VI, 162, 1893.

*erythroceræ* BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 114.—Texas.

## PARAMINTHO.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 366, 1891; VI, 162, 1893.

VAN DER WULP, Biologia, Dipt., II, 265, 1895.

*modulata* VAN DER WULP, Biologia, Dipt., II, 266, pl. VII, f. 1.—Guerrero, Mex.

## ONESIA.

DESVOIDY, Myodaires, 365, 1830.

SCHINER, Fauna Austr., I, 575, 1862.

VAN DER WULP, Biologia, Dipt., II, 288, 1896.

HENDEL, Wien. Ent. Zeit., XXI, 83, notes on hypopygial structures in this and related genera.

*lucilioides* VAN DER WULP, Biologia, Dipt., II, 288, pl. VII, f. 11.—Mexico City.

## PECKIA.

- DESVOIDY, Myodaires, 335, 1830.  
 MACQUART, Hist. Nat. Dipt., II, 222, 1835 (*Phrissopodia*); Dipt. Exot., II, 3, 96, 1843 (*Phrissopoda*).  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 124, 1889; VI, 163, 1893 (*Phrissopoda*).  
 JOHNSON, Proc. Acad. Nat. Sci. Phil., 1894, 279, mentions an undet. species of *Phrissopoda* bred from a snail in Jamaica.  
**fortipes** WALKER, Trans. Ent. Soc., n. ser., v, 310 (*Sarcophaga*).—Hayti.  
**immanis** WALKER, List, IV, 815 (*Sarcophaga*).—Honduras.  
 GIGLIO-TOS, Ditt. del Mess., III, 68 (*Phrissopoda*).—Mexico.  
**lamanensis** DESVOIDY, Myodaires, 335.—Lamana.  
 GIGLIO-TOS, Ditt. del Mess., III, 68, oc. in Orizaba, Mex. (*Phrissopoda*).  
**plumipes** DESVOIDY, Myodaires, 336.—Hayti.  
 WALKER, Trans. Ent. Soc., n. ser., v, pt. VII, 41 (*Sarcophaga intermutans*).—Mexico.  
 GIGLIO-TOS, Ditt. del Mess., III, 68, syn. and oc.—Mex.  
**præceps** WIEDEMANN, Auss. Zw., II, 355 (*Sarcophaga*).—Cuba.  
 DESVOIDY, Myodaires, 335 (*imperialis*).—Cuba.  
 MACQUART, Hist. Nat. Dipt., II, 223 (*imperialis*).—Cuba.  
 MACQUART, Dipt. Exot., II, 3, 96, note and doubtful oc. at Port Jackson, Australia (*Phrissopoda*).  
 WILLISTON, Trans. Amer. Ent. Soc., XIII, 307, oc. in San Domingo (id.).  
 GIGLIO-TOS, Ditt. del Mess., III, 67, note (id.).—Mex.

## SARCOPHAGA.

- MEIGEN, Syst. Besch., v, 14, 1826.  
 SCHINER, Fauna Austr., I, 568, 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 122, 1889; VI, 164, 1893.  
 VAN DER WULP, Biologia, Dipt., II, 266, 1895, notes and table of Mexican species.  
 COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 317 (*Helicobia*). [Hough.]  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 362, table of St. Vincent species.  
 MIK, Wien. Ent. Zeit., XVII, 162-166, parasitic habits of European species.  
 Note.—Several undetermined species have been reared from grasshoppers in the western part of the United States.  
**acanthoptera** VAN DER WULP, Biologia, Dipt., II, 271, pl. VII, f. 5.—Guerrero, Vera Cruz and Tabasco, Mex.  
**acerba** WALKER, List, IV, 824.—Nova Scotia.  
**ægra** WALKER, List, IV, 821.—Mass.  
 N. J.—Smith Cat.; Lake Worth, Fla.—Johnson.  
**æquata** VAN DER WULP, Biologia, Dipt., II, 286.—Guerrero and Tabasco, Mex.  
**afficta** VAN DER WULP, Biologia, Dipt., II, 286.—Morelos, Vera Cruz, and N. Yucatan, Mex.  
**anaces** WALKER, List, IV, 833.—“N. A.?”  
**anxia** WALKER, List, IV, 818.—“N. A.?”  
 Fla.—Johnson.  
**argyrocephala** MACQUART, Dipt. Exot., Suppl., I, 192.—Texas.  
**aspera** WALKER, List, IV, 825.—“N. A.?”  
**assidua** WALKER, Dipt. Saund., 328.—U. S.  
 HOWARD, Proc. Wash. Acad. Sci., II, 566, figs. and life hist.; reared from human excrement.—D. C.

- MORGAN, Bull. 30, n. ser., Div. Ent., 1901, 25, figs. larva and adult; bred from *Melanoplus differentialis*.—Miss.
- St. Augustine and Palatka, Fla.—Johnson.
- aterrima** DESVOIDY, Myodaires, 366 (*Peckia*).—Carolina.
- avida** WALKER, List, IV, 822.—Nova Scotia.
- basalis** WALKER, Dipt. Saund., 328.—U. S.
- carnaria** LINNÉ, does not occur in the United States, as I am positively assured by Dr. Hough, who has examined vast quantities of material without finding it. The following references undoubtedly refer to other species, probably several:
- HARRIS, Cat. Ins. Mass., oc. in Mass.
- RILEY, 7th Mo. Rept., 180, 181; 9th Rept., 95, parasitic on eggs of Rocky Mountain locust.
- RILEY, 1st Rept. U. S. Ent. Comm., 289, 323, 324, fig., attacking eggs of the same, and also parasitic on the growing insects; 4th Rept. U. S. Ent. Comm., 107, fig.; app., 109; parasitic on *Aletia xyliana* in the south.
- HUGO SUMMA, M.D., in St. Louis Med. and Surg. Journal, May, 1889, records a case of nasal myiasis in man due to *S. carnaria*; abstract in Insect Life, III, 40.
- WALTER B. JOHNSON, M.D., in Ophthalmic Record, 1892, account of larva in ear of man; abstract in Insect Life, IV, 341.
- LUGGER, 2d Rept. Ent. Minn., 1896, 155, fig.; habits, etc.
- chætopygialis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 366.—St. Vincent, W. I.
- chrysostoma** WIEDEMANN, Auss. Zw., II, 356.—W. I.
- SCHINER, Novara, 313, notes.—Brazil.
- cimbicis** TOWNSEND, Canad. Ent., XXIX, 126.—Brookings, S. D.; bred from *Cim-bex americana*.
- HUNTER (S. J.), Kans. Univ. Quart., VII, 206, reared from *Melanoplus differentialis* in Kansas; "Alfalfa, Grasshoppers and Bees," Bull. Ent. Dept., Univ. of Kans., 33, notes and fig.
- claripalpis** VAN DER WULP, Biologia, Dipt., II, 280.—Guerrero and N. Yucatan, Mex.
- comes** WALKER, Dipt. Saund., 323.—U. S.
- concinata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 364.—St. Vincent, W. I.
- conclausa** WALKER, Trans. Ent. Soc., n. ser., v, 309.—Mex.
- conjungens** VAN DER WULP, Biologia, Dipt., II, 272.—Vera Cruz and Orizaba, Mex.
- consobrina** DESVOIDY, Myodaires, 344 (*Myophora*).—Philadelphia.
- cubensis** MACQUART, Dipt. Exot., II, 3, 106, pl. XII, f. 6.—Cuba.
- BIGOT, in Sagra's Cuba, 819.—Cuba.
- BRAUER, Sitzungsbericht d. K. Akad., CVII, 21, note.
- davidsonii** COQUILLET, Insect Life, v, 24.—Los Angeles Co., Cal.; larvæ feeding on eggs of the spider *Phidippus opifex* McC.
- DAVIDSON, Insect Life, VI, 268, reared from egg sacs of *Argiope argentata*, Santa Catalina Id., Cal.
- debilis** VAN DER WULP, Biologia, Dipt., II, 279, pl. VII, f. 9.—Guerrero, Vera Cruz and Tabasco, Mex.
- deleta** VAN DER WULP, Biologia, Dipt., II, 282.—Guerrero, Mex.
- derelicta** WALKER, Dipt. Saund., 322.—U. S.
- despensa** WALKER, Trans. Ent. Soc., n. ser., v, 309.—Mex.
- diversinervis** VAN DER WULP, Biologia, Dipt., II, 274, pl. VII, f. 7.—Tabasco, Mex.
- diversipes** COQUILLET, Proc. U. S. N. M., XXII, 255.—Porto Rico.
- effreneta** WALKER, Trans. Ent. Soc., n. ser., v, 309.—Mex.

- errabunda* VAN DER WULP, *Biologia*, Dipt., II, 278.—Guerrero and Tabasco, Mex.
- fervida* DESVOIDY, *Myodaires*, 341 (*Myophora*).—San Domingo.
- fortipes* WALKER, see *Peckia*.
- fulvipes* MACQUART, *Dipt. Exot.*, II, 3, 105, pl. XII, f. 5.—Cuba.
- fulvipes* (bis) WALKER, *Dipt. Saund.*, 328.—U. S.  
St. Augustine, Fla.—Johnson.
- fuscianalis* VAN DER WULP, *Biologia*, Dipt., II, 275.—Vera Cruz and Tabasco, Mex.
- georgina* WIEDEMANN, *Auss. Zw.*, II, 357.—Ga.  
HARRIS, *Ins. Inj. Veget.*, 3d edit., 613, oc. in Mass.  
WALKER, *List*, IV, 829, oc. in Brit. Amer.  
BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, V, 414, note.
- helicis* TOWNSEND, *Psyche*, Feb., 1892, 220.—Ohio; bred from *Helix thyroides*.  
COQUILLET, *Proc. Acad. Nat. Sci. Phil.*, 1895, 317 (*Helicobia*); *Proc. U. S. N. M.*, XXII, 255, oc. in Porto Rico (id.).—Fla., Miss., Ill., Ohio, D. C., Cal.  
HOWARD, *Ins. Life*, VI, 372, records breeding from *Loxostege sticticalis*.  
TOWNSEND, *Psyche*, June, 1893, 468, reared from *Lachnosterna* sp., *Pieris rapæ*, and *Leucania unipuncta* by Forbes.  
MORGAN, *Bull.* 30, n. ser., Div. of Ent., 1901, 25, bred from *Melanoplus differentialis*.—Miss.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- hunteri* HOUGH, *Kans. Univ. Quart.*, VII, 207–210, figs.; also in Hunter's "Alfalfa, Grasshoppers and Bees," *Bull. Ent. Dept.*, Univ. of Kans., 34, fig.—Kansas; bred from *Melanoplus differentialis*.  
MORGAN, *Bull.* 30, n. ser., Div. of Ent., 1901, 25, bred from *Melanoplus differentialis*.—Miss.
- immanis* WALKER, see *Peckia*.
- importuna* WALKER, *List*, IV, 819.—"N. A.?"
- incerta* WALKER, *Dipt. Saund.*, 324.—Jamaica.  
HOWARD, *Canad. Ent.*, XXXIII, 43, oc. Va., bred from cowdung.  
Jamaica—Johnson; Cuba—Bigot, in Sagra.
- innota* WALKER, *Trans. Ent. Soc.*, n. ser., V, 308.—Mex.
- intermutans* WALKER, see *Peckia plumipes*.
- lambens* WIEDEMANN, *Auss. Zw.*, II, 365.—W. I.  
HOWARD, *Proc. Wash. Acad. Sci.*, II, 567, note on habits.  
Porto Rico—Roeder and Coquillett.
- lanipes* DESVOIDY, *Myodaires*, 336.—Carolina.
- leucaniæ* TOWNSEND, *Psyche*, June, 1893, 468.—Ill.; bred from *Leucania unipuncta* HOW.
- Pherminieri* DESVOIDY, *Myodaires*, 339 (*Myophora*).—Carolina.
- micropyga* VAN DER WULP, *Biologia*, Dipt., II, 279.—Guerrero, Mex.
- micropygialis* WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 363.—St. Vincent, W. I.
- muscoides* BIGOT, in Sagra's Cuba, 816.—Cuba.
- oberrans* VAN DER WULP, *Biologia*, Dipt., II, 283.—Guerrero, Mex.
- obsoleta* WIEDEMANN, *Auss. Zweifel.*, II, 367.—W. I.  
? GIGLIO-TOS, *Ditt. del Mess.*, III, 68, doubtful oc. in Tuxpango, Mex.
- occidua* FABRICIUS, *Syst. Ent.*, IV, 315; *Syst. Antl.*, 288 (both *Musca*).—W. I.  
WIEDEMANN, *Auss. Zweifel.*, II, 368.—W. I.  
COQUILLET, *Proc. U. S. N. M.*, XXII, 254, oc. in Porto Rico.
- ochripyga* VAN DER WULP, *Biologia*, Dipt., II, 285.—Guerrero, Tabasco and N. Yucatan, Mex.

- opifera** COQUILLET, *Insect Life*, v, 22.—Los Angeles, Cal.; parasitic on *Melanoplus devastator* SCUD.
- otiosa** WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 364.—St. Vincent, W. I.
- pallinervis** THOMSON, *Eugenies Resa*, 535.—California and Honolulu.
- pallipes** WALKER, *Dipt. Saund.*, 329.—U. S.
- pavida** WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 365.—St. Vincent, W. I.
- perneta** WALKER, *Trans. Ent. Soc.*, n. ser., v, 308.—Mexico.
- pexata** VAN DER WULP, *Biologia, Dipt.*, II, 284.—Guerrero, Vera Cruz and Tabasco, Mex.
- plinthopyga** WIEDEMANN, *Auss. Zweifl.*, II, 360.—St. Thomas, W. I.  
WALKER, *Linn. Trans.*, XVII, 352, oc. in Brazil.  
GIGLIO-TOS, *Ditt. del Mess.*, III, 69.—Orizaba and Tuxpango, Mex.  
Porto Rico—Roeder and Coquillett; Jamaica—Johnson.
- plumigera** VAN DER WULP, *Biologia, Dipt.*, II, 273, pl. VII, f. 6.—Tabasco, Mex.
- plumipes** DESVOIDY, see *Peckia*.
- prævolans** VAN DER WULP, *Biologia, Dipt.*, II, 275, pl. VII, f. 8.—Guerrero and Orizaba, Mex.
- protrita** WALKER, *Trans. Ent. Soc.*, n. ser., v, 317 (*Anthomyia*).—Mexico.  
The type is a female *Sarcophaga*—STEIN, 205.
- pusilla** BIGOT, in Sagra's Cuba, 817.—Cuba.
- pusiola** VAN DER WULP, *Biologia, Dipt.*, II, 278.—Mexico City, Guerrero and Orizaba, Mex.
- quadrisetosa** COQUILLET, *Ent. News*, XII, 17 (*Helicobia*).—Md., D. C., Va.  
HOWARD, *Proc. Wash. Acad. Sci.*, II, 568 (id.), note on habits; breeds in human excrement; *Canad. Ent.*, XXXIII (id.), oc. in Va., bred from cowdung.
- querula** WALKER, *List*, IV, 821.—"N. A.?"
- rabida** WALKER, *List*, IV, 823.—Nova Scotia.
- rapax** WALKER, *List*, IV, 818.—"N. A.?"
- rediviva** WALKER, *List*, IV, 823.—Martin Falls, Canada.
- rubella** WIEDEMANN, *Auss. Zweifl.*, II, 357.—Antigua.
- rufipalpis** MACQUART, *Dipt. Exot.*, II, 3, 102.—Brazil.  
VAN DER WULP, *Notes from the Leyden Museum*, IV, 88; *Tijdschr. v. Ent.*, XXVI, sep. 36, oc. in Curaçao and note.
- rufitibia** VAN DER WULP, *Biologia, Dipt.*, II, 270, pl. VII, f. 3.—Guerrero, Mex.
- rufiventris** WIEDEMANN, *Auss. Zweifl.*, II, 362.—Brazil.  
BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, v, 414, notes; occurs in Texas.
- sarraceniæ** RILEY, *Trans. Acad. Sci. St. Louis*, III, 238; *App. to 4th Rept. U. S. Ent. Comm.*, quotes orig. desc. of larva and pupa.—Mo.  
RILEY, *2d Rept. U. S. Ent. Comm.*, 262; *Gen. Index Mo. Repts.*, 60.  
COMSTOCK, *Rept. Dept. Agr.*, 1881, 304, pl. XIV, f. 2, reared from pupa of *Aletia argillacca* in the south.  
HOWARD, *Proc. Wash. Acad. Sci.*, II, 565, figs. and life hist.; bred from human excrement.  
MORGAN, *Bull.* 30, n. ser., *Div. Ent.*, 1901, 25, figs. larva and adult; bred from *Melanoplus differentialis*.—Miss.  
Fla.—Johnson; White Mts., N. H.—Slosson; Axton, N. Y.—M. and H. Province of Quebec—Fyles.
- setulosa** VAN DER WULP, *Biologia, Dipt.*, II, 276.—Durango, Mex.
- ? **spinigena** RONDANI, *Arch. Zool.*, III, 26.—Valdivia, S. A.  
GIGLIO-TOS, *Ditt. del Mess.*, III, 68, note.—Mexico.  
VAN DER WULP, *Biologia, Dipt.*, II, 287, note; doubts the generic ref.

- stellata* VAN DER WULP, *Biologia*, Dipt., II, 272.—Guerrero, Vera Cruz and Tabasco, Mexico.
- stimulans* WALKER, *List*, IV, 817.—“N. A.?”
- sueta* VAN DER WULP, *Biologia*, Dipt., II, 281.—Guerrero, Mex.
- surrubea* VAN DER WULP, *Biologia*, Dipt., II, 273.—Tabasco, Mex.
- taitensis* SCHINER, *Novara*, 314.—Tahiti.  
VAN DER WULP, *Tijdschr. v. Ent.*, XXVI, sep. 36, oc. in Guadeloupe and note.
- tenuiventris* VAN DER WULP, *Biologia*, Dipt., II, 282.—Guerrero and Tabasco, Mex.
- tridens* VAN DER WULP, *Biologia*, Dipt., II, 281.—Guerrero, Mex.
- trigonomaculata* MACQUART, *Dipt. Exot.*, II, 3, 106, pl. XII, f. 2.—Mex.
- tripartita* VAN DER WULP, *Biologia*, Dipt., II, 284.—Jalisco, Mex.
- triplasia* VAN DER WULP, *Biologia*, Dipt., II, 283, pl. VII, f. 10.—Guerrero, Mex.
- trivialis* VAN DER WULP, *Biologia*, Dipt., II, 277.—Mexico, numerous places.  
HOWARD, *Proc. Wash. Acad. Sci.*, II, 567, oc. in Md., D. C. and Va.: bred from human excrement.
- trivittata* MACQUART, *Dipt. Exot.*, II, 3, 105, pl. XII, f. 3.—Cuba, Mex.  
BIGOT, *Sagra's Cuba*, 816.—Cuba.
- turbata* VAN DER WULP, *Biologia*, Dipt., II, 276.—Guerrero, Tabasco and Orizaba, Mex.
- uncata* VAN DER WULP, *Biologia*, Dipt., II, 277.—Guerrero and N. Yucatan, Mex.
- vagabunda* VAN DER WULP, *Biologia*, Dipt., II, 270, pl. VII, f. 4.—Guerrero, etc., in Mexico.
- ventricosa* VAN DER WULP, *Biologia*, Dipt., II, 274.—Guerrero and Tabasco, Mex.
- vigil* WALKER, *List*, IV, 831.—Nova Scotia.
- villipes* VAN DER WULP, *Biologia*, Dipt., II, 269, pl. VII, f. 2.—N. Sonora and Guerrero, Mex.
- viridescens* DESVOIDY, *Myodaires*, 342 (*Myophora*).—Nova Scotia.
- volucris* VAN DER WULP, *Biologia*, Dipt., II, 285.—Guerrero, Mex.
- xanthopyga* VAN DER WULP, *Biologia*, Dipt., II, 271.—Guerrero, Morelos and Orizaba, Mex.  
*Note*.—Brauer and Bergenstamm, in *Zweifl. d. Kaiserl. Mus.*, v, 414, record “*Sarcophaga xanthophyga* S.” from South Carolina. I presume this refers to *S. xanthophora* SCHINER, *Novara*, 313, from South America.

#### SARCODEXIA.

- TOWNSEND, *Jour. Inst. of Jamaica*, I, 105, 1892.
- BRAUER and BERGENSTAMM, *Zweifl. d. Kaiserl. Mus.*, VI, 193, “from the description a *Sarcophaga*.”
- sternodontis* TOWNSEND, *op. cit.*—Kingston, Jamaica; bred from a Cerambycid. In the same *Journal* for Dec., 1892, it is recorded as bred from the scorpion *Centrurus edwardsii*.

#### SARCOPHAGULA.

- VAN DER WULP, *Tijdschr. v. Ent.*, XXX, 173, 1887; *Biologia*, Dipt., II, 289, 1896, def. and table of Mexican species.
- canuta* VAN DER WULP, *Biologia*, Dipt., II, 289, pl. VII, f. 12.—Guerrero, etc., in Mexico.
- imbecilla* VAN DER WULP, *Biologia*, Dipt., II, 289.—Guerrero, etc., in Mexico.
- tenuis* VAN DER WULP, *Biologia*, Dipt., II, 290.—Guerrero, etc., in Mexico.



## ERYTHRANDRA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 368, 1891; vi, 165, 1893.

**picipes** BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 368; vi, 165.—Ga.

## SARCOPHILODES.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 164, 1889; vi, 166, 1893.

**puella** WILLISTON, Trans. Ent. Soc. Lond., 1896, 361, pl. XII, f. 120 bis.—St. Vincent, W. I.

**pusilla** WIEDEMANN, Auss. Zweifl., II, 337 (*Tachina*).—W. I.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 164; v, 369; vi, 166, gen. ref. from type.

? **rufocaudata** BIGOT, Annales, 1888, 269 (*Megerlia*).—Mex.

COQUILLET, Jour. N. Y. Ent. Soc., VII, 1899, 218, gen. ref., with a doubt.

BRAUER, Sitzungsbericht d. K. Akad., CVII, 22, would locate in a new genus near *Tephromyia*, from type.

## SAROTHROMYIA.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 365, 1891; vi, 160, 1893, place near *Brachycoma*.

**femorialis** SCHINER, Novara, 315 (*Sarcophila*).—Brazil.

Lake Worth, Fla.—Johnson, with gen. ref.

## JOHNSONIA.

COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 316.

**elegans** COQUILLET, loc. cit.—St. Augustine, Fla.

## MUSCIDÆ.

BIGOT, Bull. Soc. Zool. France, 1887, 586, table of all genera.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 1892, table of genera.

GIRSCHNER, Berl. Ent. Zeitsch., XXXVIII, 297, 312, 1893, new system of the family; Ent. Nachrichten, XXI, 82-86, 1895; Ill. Woch. f. Ent., I, 12-16, and in a few following numbers, 1896.

VAN DER WULP, Biologia, Dipt., II, 291, 1896, table of Mexican genera.

BRAUER, Sitzungsbericht d. K. Akad., CVIII, 495, 1899, table of genera of Caliphorinæ. In the same paper he remarks that some of Bigot's supposedly North American specimens belong to genera hitherto confined to the eastern hemisphere, "so that I must assume that the locality assigned to many of the species in the Bigot collection is erroneous."

HOUGH, Proc. Acad. Nat. Sci. Phil., 1898, 165-172, gives a valuable article on the anatomy of Muscidæ; in Ent. News, x, 62-66, 1899, he discusses the classification of the family; see also his article in Biol. Bull., I, 21, 1899.

## TYREOMMA.

VAN DER WULP, Biologia, Dipt., II, 292, 1896.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 381, 1891, described as Wulp's genus, from his MS. name on the specimens; vi, 135, 1893, full desc.

**muscinum** VAN DER WULP, Biologia, Dipt., II, 293, pl. VII, f. 13.—Guerrero, Mex.

## POLLENIA.

- DESVOIDY, Myodaires, 412, 1830.  
 SCHINER, Fauna Austr., 1, 585, 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., iv, 155, 1899; vi, 179, 1893.  
 HOUGH, Ent. News, x, 63, 1899; Zool. Bull., ii, 283, 1899, figs. chætotaxy.  
**glabricula** BIGOT, Bull. Soc. Zool. France, 1887, 594 (*Nitellia*).—Cal.  
 BRAUER, Sitzungsbericht d. K. Akad., cviii, 521, gen. ref. from type.  
**obscura** BIGOT, Bull. Soc. Zool. France, 1887, 597.—N. A.  
 HOUGH, Zool. Bull., ii, 283, says the desc. is unrecognizable.  
 BRAUER, Sitzungsbericht d. K. Akad., cviii, 517, gen. ref. confirmed from type.  
**rudis** FABRICIUS, Ent. Syst., iv, 314 (*Musca*); 315 (*M. obscura*); Syst. Antl., 287 (*Musca*).—Europe.  
 FALLÉN, Muscides, 48 (*Musca*).  
 MEIGEN, Syst. Besch., v, 66, 67 (*Musca rudis, varia, and depressa*). [Hgh.]  
 SCHINER, Fauna Austr., 1, 586.  
 DALL, Proc. U. S. N. M., 1883, 635, habits, notes by Riley.—Geneva, N. Y.  
 LINTNER, 4th N. Y. Rept., 309-314; the Cluster Fly, sometimes gathers in houses in immense numbers in the cooler season.—N. Y.  
 RILEY and HOWARD, Insect Life, v, 263, notes from correspondence on clustering in houses.  
 HOUGH, Zool. Bull., ii, 283, syn.  
 HOWARD, Canad. Ent., xxxiii, 44, oc. in Va.; bred from cowdung. Quebec—Wulp; N. J.—Smith Cat.; Montreal—Chagnon; Ohio—Webster.  
**vespillo** FABRICIUS, Ent. Syst., iv, 318 (*Musca*); Syst. Antl., 292 (id.).—Europe.  
 MEIGEN, Syst. Besch., v, 65 (id.).  
 WALKER, List, iv, 907, oc. in Nova Scotia.  
 SCHINER, Fauna Austr., 1, 586.  
 HOUGH, Biol. Bull., ii, 283, fig. 1, confirms oc. in N. A.

## CHRYSOMYIA.

- DESVOIDY, Myodaires, 444, 1830.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 391, 1891 (*Paralucilia* in part).  
 GIGLIO-TOS, Ditt. del Mess., iv, 5, 1895, def.  
 HOUGH, Ent. News, x, 64, 1899, def., and includes the species formerly called *Compsomyia*.  
**aztequina** BIGOT, Annales, 1877, 252.—Mex.  
 GIGLIO-TOS, Ditt. del Mess., iv, 5, makes a syn. of *macellaria*.  
 BRAUER, Sitzungsbericht d. K. Akad., cviii, 523, confirms gen. ref. from type.  
**cærulescens** DESVOIDY, Myodaires, 447, 8.—Carolina.  
**callipes** BIGOT, Annales, 1877, 249 (*Somomyia*).—Mex.  
 BRAUER, Sitzungsbericht d. K. Akad., cviii, 524, gen. ref. (*Compsomyia*).  
**certina** WALKER, List, iv, 873 (*Musca*).—Fla.  
 Probably same as *Pseudopyrellia cornicina*.  
**decora** DESVOIDY, Myodaires, 448.—W. I.  
**flavigena** BIGOT, Annales, 1877, 249 (*Somomyia*).—Mex.  
 BRAUER, Sitzungsbericht d. K. Akad., cviii, 522, refers the type to *Compsomyia*.

**fulvipes** MACQUART, see *macellaria*.

? **hyacinthina** DESVOIDY, Myodaires, 450.—S. A.

MACQUART, Dipt. Exot., II, 3, 148.—N. A. Very doubtful—J. M. A.

HOUGH, Kans. Univ. Quart., IX, 204, syn., etc., under the name of *segmentaria* FABR.; as it is scarcely a North American species, I do not rectify the nomenclature.

**pherminieri** DESVOIDY, Myodaires, 446.—Carolina.

**macellaria** FABRICIUS, Syst. Ent., 776 (*Musca*); Ent. Syst., IV, 319 (id.); Syst. Antl., 292 (id.).—W. I.

WIEDEMANN, Auss. Zw., II, 405 (id.).

OLIVIER, Encycl. Méth., VIII, 405 (id.).

MACQUART, Dipt. Exot., II, 3, 132, pl. XVI (*Calliphora fulvipes*); 147, pl. XVII (*Lucilia*).—Chili; Brazil and Cuba.

WALKER, List, IV, 873-878 (*Musca lyræa, verena, caruca, gamelia*).—Montevideo and Venezuela.

RONDANI, Ann. Soc. Nat. Modena, III, 3, 9 (*Somomyia fulvipes*).—S. A.

BIGOT, in Sagra's Cuba, 820 (*Lucilia*).—Cuba.

COQUEREL, Ann. Soc. Ent. France, 1858, 173, pl. IV, f. 2 (*Lucilia hominivorax*).

THOMSON, Eugénies Resa, 543, 544 (*Lucilia picierus* and *taniaria*).—Panama; no locality. [J. M. A. and Giglio-Tos.]

BIGOT, Annales, 1877, 252 (*Somomyia aztequina*).—Mex.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 391 (*Paralucilia fulvipes*).

SCHINER, Novara, 309 (*Calliphora fulvipes*).—Chili.

LYNCH A., An. Soc. Cientif. Argentina, x, 1880, 71.—Argentina.

GIGLIO-TOS, Ditt. del Mess., IV, 5 and 6, syn. and bibliog. (*macellaria* and *fulvipes*).—Mex. [Wulp.]

VAN DER WULP, Tijdschr. v. Ent., XXVII, 38; Biologia, Dipt., II, 297, bibliog., etc.—Mexico, various places.

MORGAN, Bull. 2, sec. ser., La. Ex. Sta., 1890, "The Screw-worm Fly," larvæ infest open sores on mules, etc.; abstract by Riley and Howard, Ins. Life, III, 131.—Miss.

FRANCIS, Bull. Tex. Ex. Sta., 1890, same; also abstracted in Ins. Life, III, 362.—Texas.

MURTFELDT, Ins. Life, IV, 200, "hominivorous habits" of, in St. Louis.

? RILEY and HOWARD, Ins. Life, VI, 56, notes on two cases of larvæ in human ear, supposed to be this species.

WEED, H. E., Canad. Ent., XXIII, 243; natural food of larvæ is decaying flesh.

LUGGER, 2d Rept. Ent. Minn., 158-160, fig., 131, popular account.

MOTTER, Jour. N. Y. Ent. Soc., VI, 223, oc. in human graves.

HERRICK, Bull. 53, Miss. Ex. Sta., 1900, habits and remedies.

HOUGH, Zool. Bull., II, 283, brief desc. and figs.

HOWARD, Proc. Wash. Acad. Sci., II, 562, figs. and habits.

Porto Rico—Roeder; N. J.—Smith Cat.; Jamaica—Johnson; Fla.—Johnson.

**plæi** DESVOIDY, Myodaires, 448.—W. I.

**tibialis** DESVOIDY, Myodaires, 446.—San Domingo.

**turbida** WALKER, Dipt. Saund., 336 (*Musca*).—Jamaica.

Probably *macellaria*—J. M. A.

**wheeleri** HOUGH, Zool. Bull., II, 284, figs.—Cal.

## CHLOROPROCTA.

- VAN DER WULP, *Biologia*, Dipt., II, 296, 1896.  
*semiviridis* VAN DER WULP, loc. cit., pl. VII, f. 16.—N. Yucatan, Mex.

## MESEMBRINELLA.

- GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147, 1893; *Ditt. del Mess.*, IV, II, 1895.  
 VAN DER WULP, *Biologia*, Dipt., II, 300, notes, 1896.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, CIV, 594, 1897.  
 HOUGH, *Ent. News*, X, 64, 1899.  
*æneiventris* WIEDEMANN, *Auss. Zw.*, II, 376 (*Dc.ria*).—Brazil.  
 VAN DER WULP, *Biologia*, Dipt., II, 301, pl. VII, f. 19.—N. Yucatan, Mex.  
*bicolor* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147; *Ditt. del Mess.*, IV, II, f. I.—Mexico.  
 VAN DER WULP, *Biologia*, Dipt., II, 301, pl. VII, f. 18. oc. and notes.—Costa Rica.  
 ? *secors* WALKER, *Trans. Ent. Soc.*, n. ser., V, 311 (*Calliphora*).—Mex.  
 VAN DER WULP, *Biologia*, Dipt., II, 311, doubtful gen. ref.  
*xanthorhina* BIGOT, *Bull. Soc. Ent. France*, 1887, clxxii (*Somomyia*).—Mex.  
 BRAUER, *Sitzungsbericht d. K. Akad.*, CVIII, 526, refers type here, and adds "*? chrysorrhæa* McQ."

## CYNOMYIA.

- DESVOIDY, *Myodaires*, 363, 1830.  
 SCHINER, *Fauna Austr.*, I, 574, 1862.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, IV, 122, 1889; VI, 163, 1893.  
 HOUGH, *Ent. News*, IX, 5, 1898; X, 64, 1899.  
*alpina* ZETTERSTEDT, *Ins. Lapp.*, 651; *Dipt. Scand.*, IV, 1304.—N. Europe.  
 GERSTÆCKER, *Die Zweite Nordpohlfahrt*, etc., oc in East Greenland.  
*americana* HOUGH, see *cadaverina*.  
*cadaverina* DESVOIDY, *Myodaires*, 365, 436, 437, 438 (*Cynomyia cadaverina*, *Calliphora myoidea*, *aurulans*, and *compressa*).—Carolina; Philadelphia; Carolina and Nova Scotia; Carolina. [Hough.]  
 KIRBY, *N. Amer. Zool. Ins.*, 317 (*Calliphora mortisæqua*).—N. A., lat. 65° [Hough.]  
 HOUGH, *Ent. News.*, IX, 105, figs. (*americana*).—Canada. Mass., Penn., Ga., La., Ind., Col., Ill., S. D. Synonymy acknowledged in *Zool. Bull.*, II, 285.  
 COQUILLET, *Proc. Wash. Acad. Sci.*, II, 440, oc. in Alaska.  
 HOWARD, *Proc. Wash. Acad. Sci.*, II, 567, notes on habits.  
 N. J.—Smith Cat.  
*elongata* HOUGH, *Ent. News*, IX, 106, figs.—S. D., Wyo.  
*flavipalpis* MACQUART, *Dipt. Exot.*, *Suppl.*, IV, 2, 236.—"America, Terre Nueve."  
 VAN DER WULP, *Tijdschr. v. Ent.*, XXVI, sep. 37, oc. in Quebec and "Fernambuc."  
 White Mts., N. H.—Slosson.  
*hirta* HOUGH, *Ent. News*, IX, 166, figs.—St. Paul Id., Alaska.  
 COQUILLET, *Proc. Wash. Acad. Sci.*, II, 440, oc. in Alaska (as *mortisæqua* KBY.).  
*mortuorum* LINNÉ, *Fauna Suec.*, 2d edit., 452 (*Musca*).—Europe; "habitat in cadaveribus et putridis."

- FABRICIUS, Spec. Ins., II, 439 (*M. vomitoria* and *mortuorum*); Ent. Syst., IV, 318 (id.); Syst. Antl., 290 (id.).—Europe.  
 DEGEER, Mém. Hist. Nat. Ins., VI, 30 (*M. chrysocephala*).  
 FALLÉN, Muscides, 45 (*Musca*).  
 LATREILLE, Gen. Crust., IV, 345 (*Sarcophaga*).  
 MEIGEN, Syst. Besch., V, 16 (id.).  
 SCHINER, Fauna Austr., I, 575.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., XXXI, 1887, 20, abstract of an interesting paper in Russian by Portchinsky on the larval habits, etc.  
 COQUILLET, Dipt. of Commander Ids., 344, oc. on Bering Id.  
 HENDEL, Wien. Ent. Zeit., XX, 32, notes.

## CALLIPHORA.

- DESVOIDY, Myodaires, 433, 1830.  
 SCHINER, Fauna Austr., I, 583, 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 157, 1889; VI, 180, 1893.  
 VAN DER WULP, Biologia, Dipt., II, 294, table of Mexican species, 1896.  
 HOUGH, Ent. News, X, 65, 1899; Zool. Bull., II, 285, 1899, table of species of the United States.
- aurulans* DESVOIDY, see *Cynomyia cadaverina*.  
*coloradensis* HOUGH, Zool. Bull., II, 286.—Col.  
*compressa* DESVOIDY, see *Cynomyia cadaverina*.  
*erythrocephala* MEIGEN, Syst. Besch., V, 62 (*Musca*).—Europe.  
 WIEDEMANN, Auss. Zweifl., II, 395 (id.).—Cape of Good Hope and Egypt.  
 MACQUART, Hist. Nat. Dipt., II, 262 (*vomitoria*).  
 ? O. FABRICIUS, Fauna Grœnl., 207 (*Volucella vomitoria*);—Schiödte, quoted by Osten Sacken).—Greenland.  
 DESVOIDY, Myodaires, 435 (*vicina*).—Philadelphia. [Hgh.]  
 WALKER, List, IV, 894 (*lilœa*).—Martin Falls, Canada. [Hgh.]  
 RILEY, PACKARD, and THOMAS, 1st Rept. U. S. Ent. Comm., 324, parasitic on Rocky Mountain locust.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., XXXI, 1887, 19, abstract of a very interesting Russian article by Portchinsky on the larval habits, egg-laying, etc.  
 VAN DER WULP, Biologia, Dipt., II, 295, oc. and bibliog.—Mexico.  
 COQUILLET, Dipt. of the Commander Ids., 344, oc. on Copper Id., Alaska.  
 HOWARD, Proc. Wash. Acad. Sci., II, 564, fig. and habits; the common "Blow-Fly."  
 Fla.—Johnson; White Mts., N. H.—Slosson; N. J.—Smith Cat.; Montreal—Chagnon.
- femorata* WALKER, Trans. Ent. Soc., n. ser., V, 310.—Mex.  
*fulvibarbis* FITCH, Trans. N. Y. Ag. Soc., 1849, 803, popular account.—N. Y.  
*grœnlandica* ZETTERSTEDT, see *Phormia terra-nova*.  
*ilerda* WALKER, List, IV, 895 (*Melinda*).—Martin Falls, Canada.  
*latifrons* HOUGH, Zool. Bull., II, 286, figs.—Wash., Ida., S. Cal., Mex.  
*melanaria* VAN DER WULP, Biologia, Dipt., II, 295, pl. VII, f. 15.—Guerrero, Mex.  
*mortisequa* KIRBY, see *Cynomyia cadaverina*.  
*myoidea* DESVOIDY, Myodaires, see *Cynomyia cadaverina*.  
*nigrina* BIGOT, Annales, 1877, 247 (*Somomyia*).—Ill.  
 BRAUER, Sitzungsbericht d. K. Akad., CVIII, 523, refers type to this genus.  
*præpes* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 1.—Mex.

- præscia** GIGLIO-TOS, Ditt. del Mess., IV, 3 (*Lucilia*).—Mexico.  
 VAN DER WULP, Biologia, Dipt., II, 294, notes and oc.—Orizaba and Guerrero, Mex.; Costa Rica.
- ? **punctata** DESVOIDY, Myodaires, 428 (*Ormia*).—W. I.  
 MACQUART, Hist. Nat. Dipt., II, 250 (*Ochromyia*).—Jamaica.  
 Porto Rico—Roeder (*Ormia*).  
 I refer here on the strength of Macq., Dipt. Exot., II, 3, 132.
- rectinervis** BIGOT, Bull. Soc. Ent. France, 1887, clxxiii (*Somomyia*).—Rocky Mts.  
 BRAUER, Sitzungsbericht d. K. Akad., CVIII, 521, gen. ref., from type.
- ? **rutilans** FABRICIUS, Spec. Ins., II, 436 (*Musca*).—The locality given by Fabricius is "in *America insulis*"—that is, the West Indies; but Wiedemann mentions South America. Probably extra-limital.
- secors** WALKER, see *Mesembrinella*.
- semiatra** SCHINER, Novara, 308.—Colombia.  
 ROEDER, Stett. Ent. Zeit., 1886, 269.—Mexico.  
 GIGLIO-TOS, Ditt. del Mess., IV, 1.—Mex.  
 VAN DER WULP, Biologia, Dipt., II, 295, pl. VII, f. 14.—Guerrero and Durango, Mexico; Costa Rica.
- splendida** MACQUART, Dipt. Exot., Suppl., I, 196.—Texas.
- ? **stygia** FABRICIUS, Spec. Ins., II, 438, etc.  
 OSTEN SACKEN, Cat., note 276, shows that this is probably from New Zealand.
- viridescens** DESVOIDY, Myodaires, 537.—Carolina.  
 MEIGEN, Syst. Besch., VII, 301 (*Musca violacca*).—Europe.  
 MACQUART, Dipt. Exot., Suppl., IV, 244 (*terra-novæ*).—Newfoundland.  
 HOUGH, Zool. Bull., II, 286, syn. and notes.  
 N. J.—Smith Cat.; Alaska—Coquillett; Axton, N. Y.—M. and H.
- vomitorea** LINNÉ, Fauna Suec., 2d edit., 452 (*Musca*).—Sweden; "habitat in cadaveribus et in carnibus calori expositis." The common blow-fly.  
 FABRICIUS, Syst. Antl., 285 (*M. carnivora*).—Germany and probably Philadelphia.  
 DEGEER, Mém. Hist. Nat. Ins., VI, 29 (*M. carnaria carulca*).  
 FALLÉN, Muscides, 47 (*Musca*).  
 MEIGEN, Syst. Besch., V, 60, desc. and habits.  
 MACQUART, Hist. Nat. Dipt., II, 262 (*fulvibarbis*).  
 SCHINER, Fauna Austr., I, 584.  
 ESCHHOLZ, Entomographien, I, 113 (*Musca obsæana*). [Hgh.]  
 FITCH, Trans. N. Y. Agl. Soc., 1849, IX, 802, pop. acct.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., 1887, XXXI, 17, abstract of an important Russian paper on the habits by Portschinsky.  
 HUGO SUMMA, M.D., St. Louis Med. and Surg. Journal, 1889, May, records nasal myiasis due to this species; abstract by Townsend, Ins. Life, III, 39.  
 LUGGER, 2d Minn. Rept., 1896, 162, pl. XII, f. 135.  
 N. J.—Smith Cat.; Beulah, N. M.—Skinner; White Mts., N. H.—Slosson; Montreal—Chagnon; Alaska—Coquillett.
- xanthorhina** BIGOT, see *Mesembrinella*.

## LUCILIA.

- DESVOIDY, Myodaires, 452, 1830.  
 SCHINER, Fauna Austr., I, 589, 1862.  
 HOUGH, Ent. News, X, 66, 1899; Zool. Bull., II, 287, table of species, 1899.



BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 157, 1889; VI, 180, 1893; also as *Paralucilia*, v. 391, 1891; VI, 180, 1893.

For a supposed species of *Lucilia* infesting the turtle, see Riley and Howard, Insect Life, v, 269; also True, Science, IV, 511, and Packard, Amer. Naturalist, XVI, 598.

**argentifera** BIGOT, see *Pseudopyrellia cornicina*.

**brunnicornis** MACQUART, see *sericata*.

**brunicosa** DESVOIDY, see *sylvarum*.

**cæruleiviridis** MACQUART, see *sericata*.

**cæsar** LINNÉ, Fauna Suec., 451 (*Musca*).—Sweden: "habitat ubique in cadaveribus, carnibus et putridis." A common and widespread carrion fly.

FABRICIUS, Syst. Antl., 289 (id.).

MEIGEN, Syst. Besch., v, 51 (id.).

DESVOIDY, Myodaires, 452, 453 (*cæsar* and *lepida*).—Philadelphia; France and Nova Scotia.

MACQUART, Dipt. Exot., II, 2, 299, pl. XVIII, f. 5 (*parensis*): Suppl. III, 57 (*fraterna* and *consobrina*).—Para; N. A.; N. A.

FITCH, Trans. N. Y. State Agr. Soc., 1849, 801, popular account of "sheep maggots."

WALKER, List, IV, 879, oc. in Mass. and Martin Falls, Canada.

SCHINER, Fauna Austr., I, 589.

RONDANI, Esame Ditt. Brazil, sep. 17 (*Lucilia pfiniceps*).—Brazil.

OSTEN SACKEN, Berl. Ent. Zeitsch., XXXI, 1887, 20, abstract of Portchinsky's Russian work on habits of larvæ, etc.—valuable.

VAN DER WULP, Tijdschr. v. Ent., XXVI, 38; Biologia, Dipt., II, 297, bibliog., etc.—Durango, Mex.; Costa Rica.

TOWNSEND, Psyche, June, 1893, records supposed rearing from *Leucania unipuncta*.

GIGLIO-TOS, Ditt. del Mess., IV, 2, bibliog. and notes.—Orizaba, etc., Mex.

MOTTER, Jour. N. Y. Ent. Soc., VI, 223, oc. in human graves.

HOUGH, Zool. Bull., II, 288, notes and synonymy; Kans. Univ. Quart., IX, 203, oc. in S. A. and syn.

HOWARD, Proc. Wash. Acad. Sci., II, 563, figs. and habits; reared from human excrement.

MORGAN, Bull. 30, n. ser., Div. of Ent., 25, 1901, reared from *Melanoplus differentialis*.—Miss.

Common everywhere in North America, within the inhabited limits.

Note.—The species in Riley, Rept. U. S. Entomol., 1890, 249, should have been *Pseudopyrellia cornicina*.

**callipes** BIGOT, see *Chrysomyia*.

**carolinensis** DESVOIDY, see *Pseudopyrellia cornicina*.

**cluvia** WALKER, see *ruficornis*.

**compar** DESVOIDY, see *Pseudopyrellia cornicina*.

**cornicina** FABRICIUS, see *Pseudopyrellia*.

**flavigena** BIGOT, see *Chrysomyia*.

**fulvifacies** DESVOIDY, see *Phormia regina*.

**fulvinota** BIGOT, Annales, 1877, 251.—Mex.

BRAUER, Sitzungsbericht d. K. Akad., CVIII, 524, refers type to *Paralucilia*.

**heræa** WALKER, see *Pseudopyrellia cornicina*.

**insularis** WALKER, see *ruficornis*.

**iridicolor** BIGOT, Bull. Soc. Ent. France, 1887, 599 (*Somomyia*).—Cuba.

**macellaria** FABRICIUS, see *Chrysomyia*.

**meridensis** MACQUART, see *Pyrellia*.

- mexicana* MACQUART, Dipt. Exot., II, 3, 143, pl. XVIII, f. 7.—Mexico.
- mollis* WALKER, List, IV, 892 (*Phormia*).—Martin Falls, Canada.
- muralis* WALKER, List, IV, 888.—Martin Falls, Canada.
- mutabilis* BIGOT, Annales, 1887, 248 (*Somomyia*).—Mex.  
BRAUER, Sitzungsbericht d. K. Akad., CVIII, 523, confirms Osten Sacken in referring here,—examined type.
- nigriceps* MACQUART, Dipt. Exot., II, 3, 143.—Mex.
- nigrina* BIGOT, see *Calliphora*.
- nobilis* MEIGEN, Syst. Besch., v, 56 (*Musca*).—Europe.  
SCHINER, Fauna Austr., I, 590.  
MEINERT, Sætertryk af Ent. Meddelelser, I, 3 Heft, 1888, on larva in man's ear; transl. of, by Linell, in Ins. Life, v, 36.  
HOUGH, Ent. News, x, 66, oc. in the United States.
- pallidibasis* BIGOT, Annales, 1877, 247.—Mex.  
GIGLIO-TOS, Ditt. del Mess., IV, 4, notes.—Tuxpango, Mex.  
BRAUER, Sitzungsbericht d. K. Akad., CVIII, 524, confirms gen. ref. from type.
- philadelphica* DESVOIDY, see *Phormia regina*.
- pivicrus* THOMSON, see *Chrysomyia macellaria*.
- pilatei* HOUGH, Zool. Bull., II, 287, fig.—Tifton, Ga.
- præscia* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 3.—Tampico, Mex.
- proxima* WALKER, Dipt. Saund., 341 (*Musca*).—Cal.  
GIGLIO-TOS, Ditt. del Mess., IV, 4, oc. in Mexico.
- pueblensis* BIGOT, Annales, 1877, 250 (*Somomyia*).—Mex.
- putrida* FABRICIUS, Ent. Syst., IV, 316 (*Musca*); Syst. Antl., 228 (id.).—S. A.  
WIEDEMANN, Auss. Zweifl., II, 404.—S. A.  
JÆNNICKE, Neue Exot. Dipt., 4, oc. in Cuba.
- quieta* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 4.—Mex.
- regina* MEIGEN, see *Phormia*.
- ruficornis* MACQUART, Dipt. Exot., Suppl. I, 198.—S. A.  
WALKER, List, IV, 885 (*Musca chuvia*); Dipt. Saund., 340 (*Musca insularis*).—Both W. I.  
ROEDER, Stett. Ent. Zeit., 1885, 347, desc.—Porto Rico.  
WILLISTON, Trans. Ent. Soc. Lond., 1896, 367, syn. and oc.—St. Vincent, W. I.
- rufipalpis* JÆNNICKE, Neue Exot. Dipt., 67.—Ill.
- sayi* JÆNNICKE, see *sericata*.
- semiviolacea* BIGOT, Annales, 1877, 46 (*Somomyia*).—Porto Rico.  
BRAUER, Sitzungsbericht d. K. Akad., CVIII, 523, gen. ref. from type.
- sericata* MEIGEN, Syst. Besch., v, 53 and 55 (*Musca sericata* and *cærulescens*).—Europe.  
MACQUART, Dipt. Exot., Suppl. v, 113 (*cæruleiviridis*).—Baltimore.  
? MACQUART, Dipt. Exot., II, 3, 142 (*brunnicornis*).—Mexico. [J. M. A.]  
SCHINER, Fauna Austr., I, 590.  
JÆNNICKE, Neue Exot. Dipt., 67 (*sayi*).—Ill.  
BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 210, note on type of *sayi*.  
BRAUER, Sitzungsbericht d. K. Akad., CVIII, 522, note on type of *cæruleiviridis*.  
HOUGH, Zool. Bull., II, 288, syn. of *cæruleiviridis* and *sayi*.  
N. J.—Smith Cat.; Fla.—Johnson.

*soulouquina* BIGOT, Annales, 1877, 47 (*Somomyia*).—Hayti.

BRAUER, Sitzungsbericht d. K. Akad., CVIII, 523, gen. ref. from type.

*stigmatalis* THOMSON, see *Phormia regina*.

*surrepens* WALKER, Trans. Ent. Soc., n. ser., v, 312.—Mex.

*sylphida* BIGOT, Annales, 1877, 45 (*Somomyia*).—New Orleans.

BRAUER, Sitzungsber. d. Kaiserl. Akad., CVIII, 523, gen. ref. from type.

*sylvarum* MEIGEN, Syst. Besch., v, 53 (*Musca*).—Europe.

? DESVOIDY, Myodaires, 459 (*brunicosa*).—N. A. [Hgh., with a doubt.]

SCHINER, Fauna Austr., I, 591.

HOUGH, Biol. Bull., II, 287, oc. in N. A.; Zool. Bull., II, 288, syn.—Pa., S. D.

N. J.—Smith Cat.; Ida.—J. M. A.

*terræ-novæ* DESVOIDY, see *Phormia*.

*terræ-novæ* MACQUART, Dipt. Exot., Suppl. IV, 2, 251, pl. XXIII, f. I.—Newfoundland.

*violacea* MACQUART, Dipt. Exot., Suppl. II, 83.—Mexico.

BRAUER, Sitzungsber. d. K. Akad., CVIII, 522, refers to *Paralucilia*.

### PHORMIA.

DESVOIDY, Myodaires, 465, 1830.

HOUGH, Ent. News, x, 66, 1899, defined.

*regina* MEIGEN, Syst. Besch., v, 58 (*Musca*).—Europe.

DESVOIDY, Myodaires, 466 (*philadelphica*); 467 (*fukifacics*).—Philadelphia.

MACQUART, Dipt. Exot., Suppl. IV, 251, pl. XXIII, f. I (*Lucilia terræ-novæ*).—Newfoundland.

? WALKER, List, IV, 892 (*mollis*).—Martin Falls, Canada.

SCHINER, Fauna Austr., I, 589 (*Lucilia*).

JENNICKE, Neue Exot. Dipt., 67 (*Lucilia rufipalpis*).—Ill.

THOMSON, Eugen. Resa, 544 (*Lucilia stigmatalis*).—Cal.

HOUGH, Zool. Bull., II, 288, preceding synonymy; he also adds Bigot's *Somomyia rectinervis*, *rufigena*, and *rupicola*, but Brauer's examination of the types does not seem to bear this out (Sitzungsber. d. Kaiserl. Akad., CVIII, 521, et seq.).

N. J.—Smith Cat.; Montreal—Chagnon; Beulah, N. M.—Skinner.

*terræ-novæ* DESVOIDY, Myodaires, 467.—Newfoundland.

ZETTERSTEDT, Ins. Lapp., 657 (*Musca granlandica*); Dipt. Scand., IV, 1330 (id.).—Greenland.

STÆGER, Grœnl. Antl., 363 (*Calliphora granlandica* ZETT.).—Greenland.

GERSTÆCKER, Die Zweite Nordpohlfahrt, etc. (id.).

HOLMGREN, Ins. Nordgrœnl., 101 (id.).

RONDANI, Dipt. Ital. Prod., v, 196 (*Pollenia granlandica*).

HOUGH, Zool. Bull., II, 289, syn. and desc.—N. A., common.

HOWARD, Proc. Wash. Acad. Sci., II, 568, fig. and note on habits.

RIEDEL, Allgem. Zeitsch. f. Ent., VI, 152, oc. in Pomerania, common the whole season (*Calliphora granlandica*).

HENDEL, Wien. Ent. Zeit., XX, 30, doubtfully refers to *Avihospita*,—that is, to *Protocalliphora*.

N. J.—Smith Cat.; Alaska—Coquillett.

### PROTOCALLIPHORA.

HOUGH, Ent. News, x, 66, 1899.

HENDEL, Wien. Ent. Zeit., XX, 29, 1901 (*Avihospita*); syn. by Aldrich, op. cit., 68.

- azurea** FALLÉN, Acta Holmiæ, 1816, 245; Dipt. Suec., Muscides, 46 (both *Musca*).—Europe.  
 MEIGEN, Syst. Besch., v, 63 (id.).  
 DUFOUR, Annales Soc. Ent. France, 1845, III, pl. 3, reared from larvæ on nestlings of sparrow.  
 ROSSI, Verzeichniss d. Zweifl. Ins. Cæsterr., Wien, 1848, mentions Schef-fer rearing the species from larvæ on young larks.  
 SCHINER, Fauna Austr., I, 585 (*Calliphora*).  
 RONDANI, Dipt. Ital. Prod., v, 197 (*Pollenia*).  
 HOUGH, Zool. Bull., II, 289, fig.; very rare in N. A.  
 HENDEL, Wien. Ent. Zeit., XX, 29, references to parasitism of the species on young birds (*Avihospita*, n. gen.).
- chrysorrhœa** MEIGEN, Syst. Besch., v, 60 (*Musca*).—Europe.  
 SCHINER, Fauna Austr., I, 585 (*Calliphora*).  
 HOUGH, Zool. Bull., II, 289, very rare in N. A.  
 HENDEL, Wien. Ent. Zeit., XX, 29, thinks Meigen's desc. indicates a different species from Schiner's (*Avihospita*).  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 546, reared from young of swallow.

## SOMOMYIA.

- RONDANI, Dipt. Ital. Prod., IV, 9, 1861, change of name; op. cit., I, 90, 1856 (*Mya*, preoc.).  
*Note*.—This genus, as founded, and as used by Bigot, seems to have had no definite meaning.
- flavigena** BIGOT, see *Chrysomyia*.  
**iridicolor** BIGOT, see *Lucilia*.  
**rectinervis** BIGOT, see *Calliphora*.  
**rufigena** BIGOT, Bull. Soc. Ent. France, 1887, clxxxiii.—Rocky Mts.  
 BRAUER, Sitzungsber. d. K. Akad., CVIII, 521, says the type will form a new genus; oc in Ga.  
**rupicola** BIGOT, Bull. Soc. Zool. France, XII, 603.—Rocky Mts.  
 HOUGH, Zool. Bull., II, 289, makes a syn. of *Phormia regina*, but I think this is doubtful.  
**semiviolacea** BIGOT, see *Lucilia*.  
**soulouquina** BIGOT, see *Lucilia*.  
**sylphida** BIGOT, see *Lucilia*.  
**xanthorhina** BIGOT, see *Calliphora*.

## PSEUDOPYRELLIA.

- GIRSCHNER, Berl. ent. Zeitsch., XXXVIII, 306, 1893.  
 DESVOIDY, Dipt. Env. Paris, II, 799, 1863 (*Euphoria*, preoc.).  
 HOUGH, Biol. Bull., I, 26, 1899.
- cornicina** FABRICIUS, Spec. Ins., II, 438 (*Musca*); Ent. Syst., IV, 317 (id.); Syst. Antl., 289 (id.).—Europe.  
 FALLÉN, Muscides, 47 (*Musca*).  
 MEIGEN, Syst. Besch., v, 57 (*M. cesarion*).  
 DESVOIDY, Myodaires, 457 (*carolinensis* and *compar*).—Carolina and Philadelphia.  
 ZETTERSTEDT, Dipt. Scand., IV, 1316 (*Lucilia*).  
 SCHINER, Fauna Austr., I, 590 (id.).  
 VAN DER WULP, Tijdschr. v. Ent., IV, 80, oc. in N. A. (*Lucilia*); loc. cit., XXVI, 39 (id.); Biologia, Dipt., II, 289, oc. in Mexico and syn.

- BIGOT, Annales, 1877, 251 (*Somomyia argentifera*).—Mexico.  
 RILEY, Rept. U. S. Ent. for 1890, 248, pl. VII (*Lucilia casar*). [Howard.]  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 420, oc. of *carolinensis* in Mexico.  
 HOUGH, Biol. Bull., I, 27, figs. and syn.  
 HOWARD, Proc. Wash. Acad. Sci., II, 579, figs. early stages; larvæ breed abundantly in cowdung.  
 BRUES, Psyche, June, 1902, 354, the brilliant blue larvæ in cowdung.—Tex.  
 Common and widespread in the United States—J. M. A.

## PYRELLIA.

- DESVOIDY, Myodaires, 462, 1830.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 157, 1889; VI, 181, 1893.  
 HOUGH, Biol. Bull., I, 26, 1899; Kans. Univ. Quart., IX, 218, 1900, distinguishes this from *Morellia*.  
**basalis** WALKER, see *Morellia*.  
 ? **cadaverina** LINNÉ, Fauna Suec., 2d edit., 451 (*Musca*).—Europe; "habitat in cadaveribus."  
 MEIGEN, Syst. Besch., v, 59 (*Musca*).  
 SCHINER, Fauna Austr., I, 593.  
 FITCH, Survey, etc., 801, oc. in N. A.  
 HOUGH, Biol. Bull., I, 27, not seen, doubtful if it occurs in N. A.  
**cadaverum** KIRBY, Fauna Bor. Amer., Ins., 316 (*Musca*).—Arctic America.  
 Canad. Ent., XIII, 168, quotes orig. desc.  
**centralis** LOEW, see *Morellia violacea*.  
**cyanicolor** ZETTERSTEDT, Dipt. Scand., IV, 1323.—Europe.  
 LOEW, Cent., VIII, 63 (*setosa*).—Ill.  
 ? WALKER, Dipt. Saund., 347 (*Musca occidentis*).—U. S. [Hgh., with a doubt.]  
 HOUGH, Biol. Bull., I, 27, figs. and syn.; compared Loew's types with European specimens.  
**flora** BIGOT, Annales, 1878, 36.—Hayti.  
 BRAUER, Sitzungsber. d. K. Akad., CVIII, 527, gen. ref. confirmed.  
**frontalis** THOMSON, Eugen. Resa, 545.—Cal.  
**iris** BIGOT, Annales, 1878, 36.—Mex.  
 HOUGH, Biol. Bull., I, 30, notes; Kans. Univ. Quart., IX, 216. The references of Hough are not confirmed by Brauer.  
 BRAUER, Sitzungsber. d. K. Akad., CVIII, 527, confirms gen. ref. from type.  
**meridensis** MACQUART, Dipt. Exot., Suppl. I, 199 (*Lucilia*).—Merida, Yucatan.  
 BRAUER, Sitzungsber. d. K. Akad., CVIII, 522, gen. ref. from type.  
**obscuripes** BIGOT, Bull. Soc. Zool. France, 1887, XII, 616.—Mex.  
 BRAUER, Sitzungsber. d. K. Akad., CVIII, 520, type is unrecognizable.  
**occidentis** WALKER, see *cyanicolor*.  
**ochricornis** WIEDEMANN, Auss. Zweifl., II, 408 (*Musca*).—Brazil.  
 MACQUART, Dipt. Exot., II, 3, 149, pl. XX, f. 5.—Cuba.  
 BIGOT, in Sagra's Cuba, 821.—Cuba.  
 HOWARD, Proc. Wash. Acad. Sci., II, 580, note on habits.  
 Porto Rico—Roeder and Coquillett.  
**ochrifacies** DESVOIDY, see *Morellia*.

- sarcophagina** VAN DER WULP, *Biologia*, Dipt., II, 302, pl. VII, f. 20 (*Morellia*).—Vera Cruz and Tabasco, Mex.  
HOUGH, *Kans. Univ. Quart.*, IX, 218, oc. in Corumba, Brazil.
- scapulata** BIGOT, *Annales*, 1878, 35 and 36 (*scapulata* and *flora*).—Mexico and Hayti.  
GIGLIO-TOS, *Ditt. del Mess.*, IV, 7, oc. and note.—Mexico.  
VAN DER WULP, *Biologia*, Dipt., II, 300, oc. and notes.—Orizaba, etc., Mex.  
HOUGH, *Biol. Bull.*, I, 31, figs., desc. and syn. (*Morellia*).  
BRAUER, *Sitzungsber. K. Akad.*, CVIII, 527, confirms gen. ref. from types.
- scordalus** WALKER, *Trans. Ent. Soc.*, n. ser., v, 313.—Mex.
- specialis** WALKER, see *Morellia violacea*.
- suspicax** WALKER, see *Morellia bipuncta*.
- violacea** FABRICIUS, see *Morellia*.

#### MORELLIA.

- DESVOIDY, *Myodaires*, 405, 1830.
- VAN DER WULP, *Biologia*, Dipt., II, 301, 1896.
- HOUGH, *Biol. Bull.*, I, 26, 1899; *Kans. Univ. Quart.*, IX, 218, 1900, distinguishes between this and *Pyrellia*.
- basalis** WALKER, *Dipt. Saund.*, 347 (*Musca*).—Jamaica.  
HOUGH, *Biol. Bull.*, I, 30, makes a syn. of *Morellia violacea*; later, in *Kans. Univ. Quart.*, IX, 212, 1900, he inclines toward making it a syn. of *Morellia ochrifacies* ROND.
- bipuncta** WIEDEMANN, *Auss. Zweifl.*, II, 417 (*Musca*).—Brazil.  
? WALKER, *Trans. Ent. Soc.*, n. ser., v, 312 (*Pyrellia suspicax*).—Mex. [Hough, with a doubt.]  
VAN DER WULP, *Biologia*, Dipt., II, 299 (*Pyrellia suspicax*).—Guerrero and Orizaba, Mex.  
HOUGH, *Kans. Univ. Quart.*, IX, 216, notes.
- callimera** BIGOT, *Bull. Soc. Zool. France*, 1887, 615 (*Cyrtoneura*).—Mexico.  
GIGLIO-TOS, *Ditt. del Mess.*, IV, 12 (id.).—Mex.  
VAN DER WULP, *Biologia*, Dipt., II, 302, oc. and notes.—Guerrero, Mex.  
BRAUER, *Sitzungsber. K. Akad.*, CVIII, 526, refers type to *Cyrtoneura*.
- fulvipes** BIGOT, *Bull. Soc. Zool. France*, 1887, 613 (*Cyrtoneura*).—Mex.  
Gen. ref. by Wulp, in *Biologia*, Dipt., II, 311.  
BRAUER, *Sitzungsber. K. Akad.*, CVIII, 526, refers type to *Cyrtoneura*.
- micans** MACQUART, *Dipt. Exot.*, Suppl. v, 116 (*Cyrtoneura*).—Baltimore.  
BRAUER, *Sitzungsber. K. Akad.*, CVIII, 526, refers the type in Bigot's coll. to *Cyrtoneura*.  
HOUGH, *Biol. Bull.*, I, 29, figs. and pt. desc.; occurs all over the United States.  
HOWARD, *Proc. Wash. Acad. Sci.*, II, 573, figs. and habits; breeds in human excrement; *Canad. Ent.*, XXXIII, 44, oc. in Va., breeds in cowdung.  
N. J.—Smith Cat.; Montreal—Chagnon; Beulah, N. M.—Skinner; White Mts., N. H.—Slosson.
- nigriceps** BIGOT, see *Muscina*.
- ochrifacies** RONDANI, *Nuov. Ann. Sci. Nat. Bologna*, 1850, sep. 15.—Isle St. Sebastian.  
DESVOIDY, *Myodaires*, 463 (*Pyrellia violacea*, preoc.).  
? WALKER, *Dipt. Saund.*, 347 (*Pyrellia basalis*).—Jamaica.  
GIGLIO-TOS, *Ditt. del Mess.*, IV, 7, oc. in Mex. and notes.



- HOUGH, Kans. Univ. Quart., IX, 212, syn. of Walker, with a doubt, etc.  
**sarcophagina** VAN DER WULP, see *Pyrellia*.  
**scapulata** BIGOT, see *Pyrellia*.  
**violacea** FABRICIUS, Syst. Antl., 288 (*Musca*).—S. A.  
 WIEDEMANN, Auss. Zweifl., II, 409 (*Musca*).—S. A.  
 MACQUART, Dipt. Exot., Suppl. IV, 252, pl. XXIII, f. 7 (*Pyrellia maculipennata*); Suppl. I, 199, pl. XVII, f. 6 (*Pyrellia maculipennis*).—Brazil; Columbia and Brazil.  
 WALKER, Trans. Ent. Soc., n. ser., v, 212 (*Pyrellia specialis*).—Mex.  
 LOEW, Cent., VIII, 62 (*Pyrellia centralis*).—Cuba.  
 SCHINER, Novara, 304.  
 VAN DER WULP, Tijdschr. v. Ent., XXVI, 39 (*Cyrtoncurea*); Biologia, Dipt., II, 311, bibliog., etc.—Guadeloupe.  
 HOUGH, Biol. Bull., I, 30, syn. and figs.; Kans. Univ. Quart., IX, 215, revised synonymy and full discussion.  
 Porto Rico—Roeder.

## MESEMBRINA.

- MEIGEN, Syst. Besch., v, 10, 1826.  
 SCHINER, Fauna Austr., I, 582, 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 157, 1889; v, 391, 1891; VI, 180, 1893.  
 HOUGH, Biol. Bull., I, 26, 1899.  
**anomala** JÄNNICKE, see *Spilogaster*.  
**pallida** SAY, Jour. Acad. Sci. Phil., VI, 175; Compl. Works, II, 306.—Ind. Unrecognizable—Hough.  
**resplendens** WAHLBERG, K. Vetensk. Akad. Förh., 1844, 66.—Europe.  
 ? DESVOIDY, Myodaires, 401 (*latreillei*).—Nova Scotia. [Hough, with a doubt.]  
 LOEW, in Silliman's Journal, oc. in N. A.  
 HOUGH, Biol. Bull., I, 28, notes.  
 ? COQUILLET, Proc. Wash. Acad. Sci., II, 441, oc. in Alaska and Penn.; ident. with a doubt, as *latreillei*.  
 White Mts., N. H.—Slosson.

## MUSCA.

- LINNÉ, Syst. Nat., 10th ed., No. 222, 1758; Fauna Suec., 439, 1761.  
 MEIGEN, Syst. Besch., v, 49, 1826.  
 DESVOIDY, Myodaires, 394, 1830.  
 SCHINER, Fauna Austr., I, 593, 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 156, 1889; VI, 179, 1893.  
 HOUGH, Biol. Bull., I, 26, 1899.  
**atrifrons** BIGOT, Bull. Soc. Zool. France, 1887, 607.—Cuba, Mexico.  
 BRAUER, Sitzungsber. K. Akad., CVIII, 527, confirms gen. ref. from type.  
**cadaverum** KIRBY, see *Lucilia*.  
**cloacaris** O. FABRICIUS, Fauna Grœnl., 204.—Greenland.  
 SCHIÖDTE, Berl. Ent. Zeitsch., 1859, 153, may be *Scatophaga litorca* FALL.  
 LUNDBECK, Dipt. Grœnl., II, 310, notes (it is evidently unrecognizable).  
**corvina** FABRICIUS, Spec. Ins., II, 440; Ent. Syst., IV, 320; Syst. Antl., 294.—Europe.  
 DEGEER, Hist. Nat. Ins., VI, 41 (*autumnalis*). [Fabr.]  
 SCHRANK, Enum. Ins. Austr., 931 (*tau*).

- PANZER, Fauna Germ., LX, 13 (*nigripes*); CV, 13 (*ludifica*).  
 MEIGEN, Syst. Besch., v, 69.  
 SCHINER, Fauna Austr., I, 594.  
 WALKER, List, IV, 900, oc. in Nova Scotia.  
 HOUGH, Biol. Bull., I, 28, notes; not seen.
- domestica** LINNÉ, Syst. Nat., 10th ed., No. 54 under *Musca*, 1758; Fauna Suec., 453.—Europe; "larvæ in fimo equino." The House-fly.  
 FABRICIUS, Syst. Antl., 287.  
 MEIGEN, Syst. Besch., v, 67.  
 MACQUART, Dipt. Exot., II, 3, 153, 154 (*basilaris* and *analis*); Suppl. IV, 253 (*vicina*).—Brazil: Chili: America.  
 RONDANI, Esame ditt. Brasil., 18, 29, 1848 (*consanguinea*).—Brazil.  
 FITCH, Trans. N. Y. Agr. Soc., 1849, 803, pop.\* acct.  
 SCHINER, Fauna Austr., I, 594; Novara, 306.—Madeira, Cape of Good Hope, China, Australia, etc.  
 SNOW, Psyche, III, 340, 1882, oc. far from dwellings in west, etc.  
 ROEDER, Stett. Ent. Zeit., 1885, 347.  
 PACKARD, Proc. Boston Soc. Nat. Hist., XVI, 136–150, transformations, I pl.; the larvæ live in horse-dung.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., XXXI, 1887, 21, abstract of Portchinsky's important Russian paper on the larval habits, etc.  
 VAN DER WULP, Dipt. Sumatra Exped., 43; Tijdschr. v. Ent., XXVI, sep. 37; Biologia, Dipt., II, 294, bibliog., etc.—Mexico, Costa Rica, etc.  
 LUGGER, 2d Rept. Ent. Minn., 1896, 145–155, figs., life-history.  
 COQUILLET, Proc. U. S. N. M., XXII, 256, oc. in Porto Rico.  
 HOWARD and MARLATT, Bull. 4, n. ser., Div. of Ent., 43, figs. and biol., etc.  
 HOWARD, Bull. 10, n. ser., Div. of Ent., 63–65, biology, etc.; Farmers' Bull., 155, Dept. of Agr., figs. all stages; Proc. Wash. Acad. Sci., II, 569, figs. and extended notes on breeding habits (occasionally breeds in human excrement); Canad. Ent., XXXIII, 44, bred from cow-dung.  
 GIGLIO-TOS, Ditt. del Mess., IV, 7, bibl. and note.  
 HOUGH, Biol. Bull., I, 28, figs. and notes; Kans. Univ. Quart., IX, 219, oc. at Rio Janeiro.
- flavinervis** THOMSON, Eugen. Resa, 547.—Honolulu.  
 GIGLIO-TOS, Ditt. del Mess., IV, 8, oc. in Mex.
- flavipennis** BIGOT, Bull. Soc. Zool. France, 1887, 605.—Rocky Mts.  
 BRAUER, Sitzungsber. K. Akad., CVIII, 528, note on type, "*? domestica*."
- mortisequa** KIRBY, see *Cynomyia cadaverina*.
- occidentis** WALKER, Dipt. Saund., 332.—U. S.
- pusilla** MACQUART, Dipt. Exot., Suppl. III, 59.—Hayti.  
 BRAUER, Sitzungsber. K. Akad., CVIII, 527, note on type; it is not a *Musca*, very dirty, unrecognizable.
- roralis** O. FABRICIUS, Fauna Grœnl., 205, 164.—Grœnland.  
 LUNDBECK, Dipt. Grœnl., II, 310, notes; unrecognizable.
- sensifera** WALKER, Trans. Ent. Soc., n. ser., v, 314.—Mex.
- vivax** O. FABRICIUS, Fauna Grœnl., 206.—Greenland.  
 LUNDBECK, Dipt. Grœnl., II, 310, notes (type is a Syrphid, but unrecognizable).

#### GRAPHOMYIA.

- DESVOIDY, Myodaires, 403, 1830.  
 SCHINER, Fauna Austr., I, 581, 1862.  
 BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 156, 1889; VI, 179, 1893.

- contigua** WALKER, Dipt. Saund., 344 (*Musca*).—U. S.
- idessa** WALKER, List, iv, 908.—Martin Falls, Canada.
- maculata** SCOPOLI, Ent. Carn., 326 (*Musca*).—Europe.  
 FABRICIUS, Spec. Ins., II, 439 (*Musca vulpina*); Ent. Syst., IV, 314 (id.);  
 Syst. Ent., 292 (id.).
- DEGEER, Hist. Nat. Ins., VI, 84 (*Musca*).
- PANZER, Fauna German., XLIV, 22 (id.).
- FALLÉN, Muscides, 49 (id.).
- MEIGEN, Syst. Besch., V, 78 (id.).
- DESVOIDY, Myodaires, 404 (*americana*).—N. A. [Hough.]
- SCHINER, Fauna Austr., I, 582.
- ? WALKER, Dipt. Saund., 348 (*Musca stipata*).—Demerara. [Hough, with  
 a doubt.]
- SCHINER, Novara, 304 (*americana*, preoc.).—S. A.
- OSTEN SACKEN, Berl. Ent. Zeitsch., XXXI, 1887, 22, note on eggs, etc.
- HOUGH, Biol. Bull., I, 29, figs., syn., etc.; Kans. Univ. Quart., IX, 219, oc.  
 in Brazil, syn., etc.
- Alaska—Coquillett; Montreal—Chagnon; N. J.—Smith Cat.
- mexicana** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV,  
 9.—Mexico.
- VAN DER WULP, Biologia, Dipt., II, 300, pl. VII, f. 17, oc. and notes.—Guer-  
 rero and Tabasco, Mexico.
- serva** WALKER, Dipt. Saund. 349 (*Musca*).—U. S.

## SYNTHESIOMYIA.

- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 96, 110, etc., 1893.
- HOUGH, Biol. Bull., I, 26, 1899.
- brasiliانا** BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., VI, 96, 100.—  
 Brazil.
- HOUGH, Biol. Bull., I, 29, figs. and oc. in Fla. and Ga.  
 Citrus Co., Fla., in a cave—Johnson.

## STOMOXYS.

- GEOFFROY, Hist. Abr. d. Ins., II, 538, 1764.
- MEIGEN, Syst. Besch., IV, 158, 1824.
- SCHINER, Fauna Austr., I, 577, 1862.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 155, 1889; VI, 178,  
 1893.
- calcitrans** LINNÉ, Syst. Nat., 10th ed. (*Conops*); Fauna Suec., 467 (id.).—  
 Sweden. The Biting House-fly.
- FABRICIUS, Spec. Ins., 467; Ent. Syst., IV, 394 and 395 (*calcitrans* and  
*tescellata*); Syst. Antl., 280 and 281 (id.).
- DEGEER, Hist. Nat. Ins., VI, 39, pl. IV, f. 12-18 (*Musca pungens*).
- GEOFFROY, Hist. Abr. d. Ins., II, 539, pl. XVIII, f. 2.
- FALLÉN, Hæmatomyzides, 6.
- MEIGEN, Syst. Besch., IV, 160.
- DESVOIDY, Myodaires, 386, 387 (*sugillatrix*, *aculeata*, *pungens*, *dira* and  
*inimica*).—Brazil, France and N. A.
- MACQUART, Dipt. Exot., II, 3, 114.—Canary Ids.
- FITCH, Trans. N. Y. Agl. Soc., 1849, 803, popular acct.; oc. in United  
 States.
- SCHINER, Fauna Austr., I, 578; Novara, 311.—Europe, Hong Kong, Ba-  
 tavia, Ceylon and Sydney.

RONDANI, Arch. Zool., III, 32.

ROEDER, Stett. Ent. Zeit., 1886, 347.

PACKARD, Proc. Boston Soc. Nat. Hist., XVI, 136-150, pl., numerous references to the transformations.

VAN DER WULP, Biologia, Dipt., II, 292, bibliog. and oc. in Mexico.

GIGLIO-TOS, Ditt. del Mess., IV, 10, bibliog. and oc. in Mexico.

LUGGER, 2d Rept. Ent. Minn., 1896, 160-162, figs.

HOUGH, Biol. Bull., I, 21, figs. and desc.

HOWARD, Proc. Wash. Acad. Sci., II, 577, figs. and habits; breeds in fresh horse-dung.

WASHBURN, Bull. 77, Minn. Ex. Sta., 33, figs.

Very common throughout the inhabited parts of North America.

Porto Rico—Roeder and Coquillett.

**cybira** WALKER, List, IV, 1159.—Nova Scotia.

**parasita** FABRICIUS, Ent. Syst., IV, 394; Syst. Antl., 280.—N. A.

### HÆMATOBIA.

DESVOIDY, Myodaires, 388, 1830; Dipt. Env. Paris, II, 611, 1863 (the latter as *Priophora*).

MACQUART, Hist. Nat. Dipt., II, 242, 1835.

RONDANI, Dipt. Ital. Prod., V, 230, 1862 (*Lyperosia*).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 155, 1889; VI, 178, 1893.

**alcis** SNOW, Canad. Ent., XXIII, 88; 22d Rept. Ent. Soc. Ontario, 96.—N. Minn.; the adults attack the moose, in the dung of which the larvæ live.

**serrata** DESVOIDY, Myodaires, 389; Dipt. Env. Paris, II, 611 (the latter as *Priophora*).—S. France.

MACQUART, Hist. Nat. Dipt., II, 244.

RONDANI, Dipt. Ital. Prod., V, 230 (*Lyperosia*).

WILLISTON, Entom. Americana, V, 180 (*cornicola*).—Va.

LINTNER, Country Gentleman, Sept. 20, 1888, an unknown fly occurring on horns of cattle; Oct. 11, specimens received and sent to Osten Sacken; Nov. 29, determined as *H. serrata*, on authority of Kowarz.

LINTNER, 5th N. Y. Rept., 1889, 220-227, bibliog., habits, figs.; "The Horn Fly."—N. Y.

RILEY and HOWARD, Ins. Life, II, 60 (*cornicola*); 93, full biology, syn., etc.

*Note*.—It appears from the article just mentioned that this European species was first observed in New Jersey and Maryland, on cattle, in the summer and fall of 1887, although the first reference in print was by Lintner, supra, in 1888. Williston saw it from Pennsylvania in 1887 also. The subsequent spread of the fly was traced by frequent references in Insect Life, in the second and following volumes; the references may be found in the general index of the periodical. Other references which I have collected are mostly to brief notes; the principal ones I list.

WILLISTON, Amer. Nat., 1889, sep., 7 pp. and pl.

SMITH, Bull. 62, N. J. Expt. Sta.; Psyche, V, 343, figs., 1890.

LUGGER, 2d Rept. Ent. Minn., 1896, 162-166, pl. XII, f. 136.

RILEY, Dept. Agr. Rept., 1889, 345-348, pl. IV, V; life hist., etc.; 1891, 239, notes on spread; 1892, 159, same.

FLETCHER, Bull. 14, Cent. Exp. Farm, Ottawa, Canada; Trans. Royal Soc. Canada, Sec. ser., V, 229, notes decrease.

HERRICK, Bull. 53, Miss. Ex. Sta., 1900.

WASHBURN, Bull. 77, Minn. Ex. Sta., 31, fig.

HOUGH, Biol. Bull., 1, 22, figs.: comparison with *alcis*.

Generally distributed throughout the United States and Eastern Canada: it reached Idaho in 1901; the larvæ are found in fresh cow-dung.

#### HEMICHLORA.

VAN DER WULP, Biologia, Dipt., II, 303, 1896.

*vittigera* BIGOT, Bull. Soc. Zool. France, 1887, 613 (*Cyrtoncurea*).—Mexico.

? WIEDEMANN, Auss. Zweifl., II, 354 (*Idia viridis*).—N. A.

GIGLIO-TOS, Ditt. del Mess., IV, 13 (*Cyrtoncureina*).—Mex.

VAN DER WULP, Biologia, Dipt., II, 303, pl. VII, f. 21, oc. and notes.—Guerrero, Mex.; Guatemala.

WILLISTON, Manual, 143, may be *Idia viridis* WIED.

BRAUER, Sitzungsber. d. K. Akad., CVIII, 526, notes on Bigot's type,—refers it to the Anthomyidæ.

HOUGH, Biol. Bull., 1, 22, syn. of *viridis*, with a little doubt.

#### MYIOSPILA.

RONDANI, Dipt. Ital. Prod., I, 91, 1856 (*Myospila*).

SCHINER, Fauna Austr., I, 598, 1862 (id.).

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 156, 1889; VI, 179, 1893.

VAN DER WULP, Biologia, Dipt., II, 303, 1896.

*meditabunda* FABRICIUS, Spec. Ins., II, 444 (*Musca*); Syst. Antl., 297 (id.).—Europe.

MEIGEN, Syst. Besch., V, 79 (*Musca*).

SCHINER, Fauna Austr., I, 598.

? THOMSON, Eugen. Resa, 549 (*Cyrtoncurea quadrisetosa*).—Cal. [Hgh., with a doubt.]

OSTEN SACKEN, Berl. Ent. Zeitsch., XXXI, 22, note on eggs, from Portchinsky.

VAN DER WULP, Biologia, Dipt., II, 303, oc.—Durango, Orizaba and Guerrero, Mex.

COQUILLET, Proc. Wash. Acad. Sci., II, 441, oc. in Alaska.

HOUGH, Biol. Bull., 1, 23, figs.

HOWARD, Proc. Wash. Acad. Sci., II, 576, figs. and habits; reared from human excrement; Canad. Ent., XXXIII, 44, oc. in Va.; breeds abundantly in cow-dung.

Common throughout the United States.

#### MUSCINA.

DESVOIDY, Myodaires, 406, 1830.

BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., V, 391, 1891; VI, 179, 1893 (both *Pararicia*); syn. in index, VI, 235.

VAN DER WULP, Biologia, Dipt., II, 304, 1896.

HOUGH, Biol. Bull., 1, 24, 1899; table of species.

*assimilis* FALLÉN, Muscides, 56 (*Musca*).—Europe.

MEIGEN, Syst. Besch., V, 76 (*Musca casia*).

DESVOIDY, Myodaires, 408 (*Muscina fungivora* and perhaps *concolor*).

MACQUART, Dipt. Nord France, II (*Cyrtoncurea aperta*).

ZETTERSTEDT, Ins. Lapp., 660 (*Musca borealis*); Dipt. Scand., IV, 1350 (*Cyrtoncurea assimilis* and *casia*).

SCHINER, Fauna Austr., I, 597, 598 (id.).

- RONDANI, Dipt. Ital. Prod., v, 214, 216 (*Cyrtoncurea*).
- BIGOT, Bull. Soc. Zool. France, XII, 614 (*Cyrtoncurea anthomydea*).—Rocky Mts., N. A.
- STROBL, Dipt. Steiermark, II, 76 (*Cyrtoncurea*).
- GIGLIO-TOS, Ditt. del Mess., IV, 15 (*Cyrtoncurea anthomydea*).—Mex.
- VAN DER WULP, Biologia, Dipt., II, 311 (*Clinopera anthomydea*).—Mex.
- HOWARD, Proc. Wash. Acad. Sci., II, 577, oc. in "many different parts of the United States."
- BRAUER, Sitzungsber. d. K. Akad., CVIII, 526, notes on Bigot's type—related to *Phasiophana*, a South American genus.
- HOUGH, Biol. Bull., I, 25, syn. and oc. in U. S.—Rocky Mts.; figs., but no desc.
- N. J.—Smith Cat.; Montreal—Chagnon; Axton, N. Y.—M. and H.
- aurantiaca** HOUGH, Biol. Bull., I, 25, figs.—Tifton, Ga.
- fulvipes** BIGOT, Bull. Soc. Zool. France, 1887, 613 (*Cyrtoncurea*).—Mex.
- linea** VAN DER WULP, Biologia, Dipt., 304, pl. VII, f. 22.—Guerrero, Mex.
- mexicana** MACQUART, Dipt. Exot., II, 3, 158, pl. XXI, f. 9 (*Cyrtoncurea*).—Mex.
- GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 13 (id.).—Mex.
- VAN DER WULP, Biologia, Dipt., II, 311, gen. ref.
- nigriceps** BIGOT, Bull. Soc. Zool. France, 1887, 615 (*Cyrtoncurea*).—Rocky Mts.
- GIGLIO-TOS, Ditt. del Mess., IV, 13 (*Cyrtoncurea*).—Mex.
- VAN DER WULP, Biologia, Dipt., II, 311, refers to *Morellia*.
- BRAUER, Sitzungsber. d. K. Akad., CVIII, 526, refers type to *Pararicia*.
- omole** WALKER, List, IV, 930 (*Anthomyia*).—Martin Falls, Canada.
- STEIN, Die Walk. Anth., 203, 202, notes and syn. (*Pararicia*).
- pallidicornis** BIGOT, Bull. Soc. Zool. France, 1887, 614 (*Cyrtoncurea*).—Mexico.
- VAN DER WULP, Biologia, Dipt., II, 311, gen. ref.
- BRAUER, Sitzungsber. d. K. Akad., CVIII, 526, refers type to *Pararicia*.
- HOUGH, Kans. Univ. Quart., IX, 222.—Brazil.
- parilis** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 14 (both *Cyrtoncurea*).—Mexico.
- VAN DER WULP, Biologia, Dipt., II, 311, gen. ref.
- ? **recurva** THOMSON, Eugen. Resa, 548 (*Cyrtoncurea*).—Cal.
- similis** WALKER, List, IV, 930 (*Anthomyia*); 931 (*Anth. nigra*).—Martin Falls, Canada.
- STEIN, Die Walk. Anth., 202, 209, notes on types and syn.
- stabulans** FALLÉN, K. Vetenskap. Akad. Förh., 1816, 252 (*Musca*); Muscides, 52 (id.).—Sweden.
- WIEDEMANN, Zool. Mag., I, 79 (*M. cinerascens*).
- MEIGEN, Syst. Besch., v, 75 (id.).
- SCHINER, Fauna Austr., I, 597 (*Cyrtoncurea*). Larvæ have been reared from fungi and from lepidopterous larvæ.
- LABOULBENE, Bull. Soc. Ent. France, 1883, No. 14, larvæ in human stomach.
- RILEY, 4th Rept. Ent. Comm., 108, bred from pupæ of *Aletia xyliina*.
- RILEY, Rept. Dept. Agr., 1892, 167, pl. v, f. 4 (*Cyrtoncurea*), larvæ of destroy pupæ of elm leaf-beetle.
- VAN DER WULP, Tijdschr. v. Ent., XXVI, oc. in Argentina.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., v, 391, one of the types of *Pararicia*.
- BAKER, Ent. News, VI, 174, reared from rotting squash roots at Fort Collins, Col.
- HOUGH, Biol. Bull., I, 24, fig., etc.—U. S. everywhere.



- HOWARD, Proc. Wash. Acad. Sci., II, 574, fig. and habits; reared from human excrement (Coquillett doubts the vegetable feeding habit, but I have reared it from rotting radishes at Moscow, Idaho).
- texana** HOUGH, Biol. Bull., I, 25, figs.—Texas.
- tripunctata** VAN DER WULP, Biologia, Dipt., II, 305.—Guerrero, Morelos and N. Yucatan, Mexico.
- HOWARD, Proc. Wash. Acad. Sci., II, 576, note on habits.  
Porto Rico—Coquillett.
- vecta** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 14 (*Cyrtoneurina*).—Mexico.
- VAN DER WULP, Biologia, Dipt., II, 311, gen. ref.

## CLINOPERA.

- VAN DER WULP, Biologia, Dipt., II, 305, 1896, def. and table of species.
- anthomydea** BIGOT, see *Muscina assimilis*.
- digramma** VAN DER WULP, Biologia, Dipt., II, 308.—Guerrero and Orizaba, Mex.
- dorsilinea** VAN DER WULP, Biologia, Dipt., II, 308.—Guerrero, Mex.
- frontina** VAN DER WULP, Biologia, Dipt., II, 306.—Tabasco, Mex.
- gluta** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., IV, 15 (*Cyrtoneurina* in both).—Mexico.
- VAN DER WULP, Biologia, Dipt., II, 311, gen. ref.
- hieroglyphica** VAN DER WULP, Biologia, Dipt., II, 307, pl. VII, f. 23.—Guerrero and Tabasco, Mex.
- inuber** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 15 (both *Cyrtoneurina*).—Mexico.
- VAN DER WULP, Biologia, Dipt., II, 308, pl. VII, f. 24; oc., gen. ref., etc.—Tabasco, Mex.
- HOUGH, Biol. Bull., I, 25, figs., no desc.
- monstrata** VAN DER WULP, Biologia, Dipt., II, 309.—Guerrero, Mex.
- pellex** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 16 (both *Cyrtoneurina*).—Mex.
- VAN DER WULP, Biologia, Dipt., II, 311, gen. ref.
- polystigma** VAN DER WULP, Biologia, Dipt., II, 309, pl. VII, f. 25.—Guerrero and Vera Cruz, Mex.
- pterostigma** VAN DER WULP, Biologia, Dipt., II, 309.—Tabasco, Mex.
- uber** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 17 (both *Cyrtoneurina*).—Mexico.
- VAN DER WULP, Biologia, Dipt., II, 307.—Guerrero, Vera Cruz, and Tabasco, Mexico.

## CYRTONEURINA.

- GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., IV, 13, 1895.
- VAN DER WULP, Biologia, Dipt., II, regards this genus as unavailable. Without making any direct reference to it, he distributes the species among *Hemichlora*, *Muscina* and *Clinopera*. See also Hough, Biol. Bull., I, 24.

## HYADESIMYIA.

- BIGOT, Miss. du Cap Horn, VI, Zool. Dipt., 1888, 26.
- BRAUER and BERGENSTAMM, Zweifl. d. Kaiserl. Mus., IV, 161, may be an *Cestrid*.
- ? **grisea** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 8, f. 2.—Oaxaca, Mex. Doubtful if it be this genus.—J. M. A.

## ANTHOMYIDÆ.

Besides the tables of Schiner and Williston, the following literature may be consulted:

- BIGOT, *Annales*, 1882, 13, table of all genera.  
 HAGEN, *Canad. Ent.*, XIII, 43-51, publishes Meade's comments on the collection at Harvard, 1881.  
 LINTNER, 1st N. Y. Report, 168-172, valuable discussion of larval habits, with list of New York species.  
 TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 290, table of N. A. genera.  
 VAN DER WULP, *Biologia*, Dipt., II, 312, table of Mexican genera.  
 MEADE, *Desc. List Brit. Anthomyidæ*, London, 1897, table of genera.  
 HOUGH, *Ent. News*, x, 63, 1899, gives Girschner's definition of the family—not accepted herein.  
 COQUILLET, *Jour. N. Y. Ent. Soc.*, IX, 134, 1901, on the types of the genera.  
 SCHNABL, *Wien. Ent. Zeit.*, XXI, 127-135, 1902, discussion of the hypopygium in several genera.

## HYDROTÆA.

- DESVOIDY, *Myodaires*, 509, 1830.  
 SCHINER, *Fauna Austr.*, I, 613, 1862.  
 RONDANI, *Dipt. Ital. Prod.*, VI, 19, 1877.  
 VAN DER WULP, *Biologia*, Dipt., II, 322, 1896.  
 MEADE, *Descr. List Brit. Anth.*, 24, 1897.  
 STEIN, *Verh. Zool.-Bot. Ges.*, 1903, 285-337, mon. of European species.  
**acuta** STEIN, *Berl. Ent. Zeitsch.*, XLII, 167.—Ga. Montreal—Chagnon.  
**armipes** FALLÉN, *Muscides*, 75 (*Musca*).—Europe.  
 MEIGEN, *Syst. Besch.*, v, 138 (*Anthomyia*).  
 ZETTERSTEDT, *Dipt. Scand.*, IV, 1434 (*Aricia*).  
 SCHINER, *Fauna Austr.*, I, 616. Larvæ in cowdung.  
 LOWE, in *Silliman's Journal*, oc. in N. A.  
 RONDANI, *Dipt. Ital. Prod.*, VI, 23.  
 HAGEN, *Canad. Ent.*, XIII, 47, oc. in Mass. and Nebr.  
 MEADE, *Desc. List*, 27.  
 STEIN, *Berl. Ent. Zeitsch.*, XLII, 165, oc. in Ida., Kans., S. D., Mass.  
 HOWARD, *Canad. Ent.*, XXXIII, 44, oc. in Va.; breeds in cowdung.  
 N. J.—Smith Cat.; Montreal—Chagnon.  
**bispinosa** ZETTERSTEDT, *Dipt. Scand.*, IV, 1428 (*Aricia*).—N. Europe and Greenland.  
 HOLMGREN, *Ins. Nordgrœnl.*, 101 (id.).—Greenland.  
 SCHINER, *Fauna Austr.*, I, 615.  
 LUNDBECK, *Dipt. Grœnl.*, I, 309, oc. in Greenland.  
 Montreal—Chagnon; White Mts., N. H.—Slosson.  
**ciliata** FABRICIUS, *Ent. Syst.*, IV, 333 (*Musca*).—Europe.  
 FALLÉN, *Muscides*, 61 (*Musca spinipes*).  
 MEIGEN, *Syst. Besch.*, v, 159, 160 (*Anthomyia ciliata* and *bimacula*).  
 DESVOIDY, *Myodaires*, 517 (*Peronia rostrata*).  
 SCHINER, *Fauna Austr.*, I, 614; syn., etc.  
 STÆGER, *Grœnl. Antl.*, oc. in Greenland.  
 MEADE, *Desc. List*, 24.  
**dentipes** FABRICIUS, *Syst. Antl.*, 303 (*Musca*).—Europe.  
 FALLÉN, *Muscides*, 60 (*Musca*).  
 MEIGEN, *Syst. Besch.*, v, 144 (*Anthomyia*).

- ZETTERSTEDT, Dipt. Scand., IV, 1426 (*Aricia*).  
 SCHINER, Fauna Austr., I, 615; larvæ in decaying vegetable matter.  
 LOEW, in Silliman's Jour., oc. in N. A.  
 RONDANI, Dipt. Ital. Prod., VI, 21.  
 HAGEN, Canad. Ent., XIII, 47, oc. in Canada and Alaska.  
 VAN DER WULP, Biologia, Dipt., II, 323, oc. and syn.—Guerrero, Mex., and Costa Rica.  
 MEADE, Desc. List, 25.—England.  
 STEIN, Berl. Ent. Zeitsch., XLII, 165.—Ida., Ont., Ga., S. D.  
 HOWARD, Proc. Wash. Acad. Sci., II, 584, habits; reared from human excrement.—D. C., Md. N. J.—Smith Cat.; Montreal—Chagnon.
- fuscula** FALLÉN, in Chagnon's List, is probably a mistake for *Homalomyia fuscula*, q. v.
- impexa** LOEW, Besch. Eur. Dipt., III, 243.—Europe.  
 MEADE, Desc. List, 26.  
 STEIN, Berl. Ent. Zeitsch., XLII, 165, oc. in Mass. N. J.—Smith Cat.
- irritans** FALLÉN, Muscides, 62 (*Musca*).—Europe.  
 ZETTERSTEDT, Dipt. Scand., IV, 1431 (*Aricia*).  
 SCHINER, Fauna Austr., I, 617.  
 STEGER, Grœnl. Antl., 363, oc. in Greenland.  
 RONDANI, Dipt. Ital. Prod., VI, 24.  
 MEADE, Desc. List, 26.
- lata** WALKER, List, IV, 963 (*Eriphia*).—Martin Falls, Canada.  
 STEIN, Die Walk. Anth., 199, gen. ref.
- metatarsata** STEIN, Berl. Ent. Zeitsch., XLII, 166.—Mass., Pa.  
 HOWARD, Proc. Wash. Acad. Sci., II, 585, oc. in Md.; note.
- occulta** MEIGEN, Syst. Besch., V, 133 (*Anthomyia*); VII, 324 (*Lasiops*).  
 ZETTERSTEDT, Dipt. Scand., IV, 1486 (*Aricia*).  
 SCHINER, Fauna Austr., I, 614.  
 MEADE, Desc. List, 25.  
 STEIN, Berl. Ent. Zeitsch., XLII, 165, oc. in N. A.—III.  
 White Mts., N. H.—Slosson.
- stygia** MEIGEN, see *Limnophora*.
- succedens** STEIN, Die Walk. Anth., 212.—U. S.
- unispinosa** STEIN, Berl. Ent. Zeitsch., XLII, 165.—Ont., Col.

#### DRYMEIA.

- MEIGEN, Syst. Besch., V, 204, 1826.  
 SCHINER, Fauna Austr., I, 620, 1862.  
 HAGEN, Canad. Ent., XIII, 46, 1881, quotes Meade on the occurrence of a species in N. A.—Hudson Bay Terr.

#### ERIPHIA.

- MEIGEN, Syst. Besch., V, 206, 1826.  
 RONDANI, Dipt. Ital. Prod., VI, 31, 1877.  
 POKORNY, Wien. Ent. Zeit., XII, 53, 1893.  
 TOWNSEND, Trans. Amer. Ent. Soc., XIX, 292, notes.
- acela** WALKER, see *Lispa tentaculata*.  
**arelate** WALKER, see *Prosalpia*.  
**biquadrata** WALKER, see *Limnophora*.  
**ciliata** WALKER, see *Chortophila muscaria*.

*flavifrons* WALKER, see *Pogomyia*.

*grisea* WALKER, see *Prosalpia silvestris*.

? *lamnia* WALKER, List, iv, 964.—Martin Falls, Canada.

Not mentioned by Stein; almost certainly belongs to some other genus.

*lata* WALKER, see *Hydrotaea*.

*marginata* WALKER, see *Phorbia fusciceps*.

*pretiosa* WALKER, see *Prosalpia arelate*.

#### POGONOMYIA.

RONDANI, Dipt. Ital. Prod., vi, 32, 1877.

VAN DER WULP, Biologia, Dipt., ii, 334, 1896.

MEADE, Desc. List, 29, 1897.

? *alpicola* RONDANI, Dipt. Ital. Prod., vi, 32.—Italy.

MEADE, Desc. List, 29.

? STEIN, Berl. Ent. Zeitsch., XLII, 169.—Idaho; identified with a doubt.

*aterrima* VAN DER WULP, Biologia, Dipt., ii, 335, pl. VIII, f. 13.—Durango, Mex.

#### OPHYRA.

DESVOIDY, Myodaires, 516, 1830.

SCHINER, Fauna Austr., i, 619, 1862.

RONDANI, Dipt. Ital. Prod., vi, 34, 1877.

VAN DER WULP, Biologia, Dipt., ii, 323, 1896.

MEADE, Desc. List, 28, 1897.

*ænescens* WIEDEMANN, Auss. Zw., ii, 435 (*Anthomyia*).—New Orleans, La.; West Indies.

MACQUART, Dipt. Exot., Suppl. 1, 203.—Texas.

WILLISTON, Trans. Ent. Soc. Lond., 1896, 367.—St. Vincent, W. I.

STEIN, Berl. Ent. Zeitsch., XLII, 170, oc. in Ga.

Porto Rico—Roeder; Fla.—Johnson.

*argentina* BIGOT, Annales, 1885, 302.—Buenos Ayres, S. A.

GIGLIO-TOS, Ditt. del Mess., iv, 26, oc. in Orizaba and Tehuacan, Mex.

VAN DER WULP, Biologia, Dipt., ii, 323, note and oc.—Mexico City.

*grœnlandica* LUNDBECK, Dipt. Grœnl., ii, 281.—Greenland.

*leucostoma* WIEDEMANN, Zool. Mag., i, 82 (*Anthomyia*).—Europe.

MEIGEN, Syst. Besch., v, 160 (id.).

DESVOIDY, Myodaires, 516 (*nitida* and *pubescens*).

WALKER, List, iv, 956 (*Anthomyia opalia*).—Nova Scotia. [Stein.]

SCHINER, Fauna Austr., i, 620.

LOEW, in Silliman's Jour., oc. in N. A.

MEADE, Ent. Mo. Mag., 1878, 251, oc. in N. A.; Desc. List, 28.

STEIN, Berl. Ent. Zeitsch., XLII, 170, oc. in Kans., Ida., S. D., Ont., Mass., Ill., Col.

RONDANI, Dipt. Ital. Prod., vi, 35.

HOWARD, Proc. Wash. Acad. Sci., ii, 582, habits; reared from human excrement; Canad. Ent., XXXIII, 44, oc. in Va.; breeds in cowdung.—D. C., Va.

MOTTER, Jour. N. Y. Ent. Soc., vi, 223, oc. in human graves.

N. J.—Smith Cat.; Montreal—Chagnon; Province of Quebec—Fyles.

#### BRACHYOPHYRA.

GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., iv, 26, 1895.

*effrons* GIGLIO-TOS, locis citatis, f. 6.—Tuxpango, Mex.

## AZELIA.

DESVOIDY, Myodaires, 592, 1830.

MACQUART, Hist. Nat. Dipt., II, 329, 1835 (*Atomogaster*).

LOEW, Die Deutsche Arten d. Gatt. Azelia, in Ent. Miscellen, Breslau, 1874.

RONDANI, Dipt. Ital. Prod., VI, 37, 1877.

MEADE, Desc. List, 67, 1897.

**albicincta** FALLÉN (*Atomogaster*), see *Anthomyia*.

**cilipes** HALIDAY, Ann. Nat. Hist., II, 105.—Europe.

ZETTERSTEDT, Dipt. Scand., IV, 1592 (*Aricia stægeri*); Ins. Lapp., 685 (*A. triquetra* MCQ.).

RONDANI, Dipt. Ital. Prod., VI, 41.

MEADE, Ent. Mo. Mag., April, 1878, oc. in N. A. (*stægeri*); Desc. List, 68, syn.

STEIN, Berl. Ent. Zeitsch., XLII, 170, oc. in Pa.

**gibbera** MEIGEN, Syst. Besch., V, 152 (*Anthomyia*).—Europe.

MEADE, Desc. List, 69.

STEIN, Berl. Ent. Zeitsch., XLII, 170, oc. in N. A.—Ill.

## HOMALOMYIA.

BOUCHÉ, Naturgesch. d. Ins., I, 88, 1834.

SCHINER, Fauna Austr., I, 653, 1862.

RONDANI, Dipt. Ital. Prod., VI, 42, 1877.

VAN DER WULP, Biologia. Dipt., II, 331, 1896.

MEADE, Desc. List, 1897, 59.

STEIN, Berl. Ent. Zeitsch., XL, 1895, 141 pp., full monograph of European species.

? RILEY, Rept. Dept. Agr., 1892, 167, pl. v, f. 3, notes larva of, destroying pupæ of elm leaf-beetle; gen. ref. by Williston, with doubt.

**armata** MEIGEN, Syst. Besch., V, 139 (*Anthomyia*).—Europe.

ZETTERSTEDT, Dipt. Scand., IV, 1563 (*Aricia*).

SCHINER, Fauna Austr., I, 655.

STEIN, Berl. Ent. Zeitsch., XL, 66, 19.

MEADE, Desc. List, 63.

LUNDBECK, Dipt. Grœnl., II, 289, oc. in Greenland.

**brevis** RONDANI, Dipt. Ital. Prod., VI, 47.—Europe.

STEIN, Berl. Ent. Zeitsch., XL, 51; XLII, 176, oc. in Ga., and notes.

HOWARD, Proc. Wash. Acad. Sci., II, 580, figs. and habits; breeds abundantly in human excrement.—Wash., Va.

**canicularis** LINNÉ, Fauna Suecica, 2d edit., 454 (*Musca*).—Sweden.

FABRICIUS, Syst. Antl., 303 (id.).

MEIGEN, Syst. Besch., V, 143 (*Anthomyia*).

ZETTERSTEDT, Dipt. Scand., IV, 1573 (*Aricia*).

WALKER, List, IV, 951 (*Anthomyia isura*).—Nova Scotia. [Stein, from type.]

SCHINER, Fauna Austr., I, 654; Novara, 298.—Madeira, St. Paul Id., and the Nicobar Ids.

LOEW, Silliman's Jour., oc. in N. A.

BIGOT, Annales, 1885, 284, oc. in Buenos Ayres.

VAN DER WULP, Biologia. Dipt., II, 331, oc. and bibl.—Costa Rica.

MEADE, Desc. List, 63.

STEIN, Berl. Ent. Zeitsch., XL, 55; XLII, 171, oc. in Ida., Kans., S. D., Ont., Mass., Col., Pa., Ill.

- HOWARD, Proc. Wash. Acad. Sci., II, 581, habits; reared from human excrement.
- N. J.—Smith Cat.; White Mts., N. H.—Slosson; Greenland—Lundbeck; Axton, N. Y.—M. and H.
- corvina** VERRALL, Ent. Mo. Mag., XXVIII, 149, 1892.—England.  
MEADE, Desc. List, 65.  
STEIN, Berl. Ent. Zeitsch., XL, 102; XLII, 177, oc. in N. A.—S. D.
- dentata** BIGOT, Annales, 1885, 284.—Rocky Mts.
- depressa** STEIN, Berl. Ent. Zeitsch., XLII, 173.—Mass.
- fasciculata** LOEW, Berl. Ent. Zeitsch., XVII, 47, 51, 1873.—Europe.  
STEIN, Berl. Ent. Zeitsch., XL, 54.  
N. J.—Smith Cat.
- femorialis** STEIN, Berl. Ent. Zeitsch., XLII, 282.—N. A., no locality.
- femorata** LOEW, Wien. Ent. Monatsch., v, 42; Cent., x, 68.—Cuba.  
BIGOT, Annales, 1885, 268, note.  
STEIN, Berl. Ent. Zeitsch., XLII, 176, oc. in Ga. and Fla.  
St. John's R., Fla.—Johnson; "Bred in large numbers from the dead fresh-water shells."
- flavibasis** STEIN, Berl. Ent. Zeitsch., XLII, 171.—Ill.  
COQUILLET, Proc. Wash. Acad. Sci., II, 447, oc. in Alaska.
- flavivaria** COQUILLET, Proc. Wash. Acad. Sci., II, 446.—Metlakahla, etc., in Alaska.
- fuscata** FALLÉN, Muscides, 86 (*Musca*).—Europe.  
MEIGEN, Syst. Besch., v, 145 (*Anthomyia floricola*).  
ZETTERSTEDT, Dipt. Scand., IV, 1686 and VIII, 3310 (*Anthomyza*).  
SCHINER, Fauna Austr., I, 656 (*floricola*).  
LOEW, Berl. Ent. Zeitsch., XVII, 47, 52 (*obesa*); Cent., x, 69 (*tetracantha*).—Europe; U. S. [Stein.]  
RONDANI, Dipt. Ital. Prod., VI, 56 (*cilicrura*).  
MEADE, Brit. Anth., 1882, 202 and 205 (the latter *floricola*); Suppl., 1887; Desc. List, 61.  
STEIN, Berl. Ent. Zeitsch., XL, 25, full syn., desc., etc.  
See *Phorbia fusciceps*.
- glaucescens** ZETTERSTEDT, Dipt. Scand., IV, 1586 (*Aricia*).—Europe.  
RONDANI, Dipt. Ital. Prod., VI, 54 (*herniosa*).  
MEADE, Brit. Anth., 204 (*herniosa*); Desc. List, 66, syn.  
STEIN, Berl. Ent. Zeitsch., XL, 112; XLII, 171, oc. in S. D. and Ont.
- incisurata** ZETTERSTEDT, Ins. Lapp., 679 and 683 (*Anthomyza incisurata* and *impura*); Dipt. Scand., IV, 1577 (*Aricia*).—N. Europe.  
SCHINER, Fauna Austr., I, 656.  
RONDANI, Dipt. Ital. Prod., VI, 50 (*prostrata* ROSSI).  
MEADE, Ent. Mo. Mag., 1878, oc. in N. A. (quoted by O. S., Cat., 170); Brit. Anth., 1882, 202; Desc. List, 66.  
GIGLIO-TOS, Ditt. del Mess., IV, 27, note and oc. in Mex. (*prostrata*).  
STEIN, Berl. Ent. Zeitsch., XL, 115; XLII, 171, oc. in Minn.
- lævis** STEIN, Berl. Ent. Zeitsch., XLII, 174.—Mass.
- manicata** MEIGEN, Syst. Besch., v, 140 (*Anthomyia*).—Europe.  
DUFOUR, Annales Sci. Nat., 1838 (*Anthomyia paradoxalis*).  
ZETTERSTEDT, Ins. Lapp., 679 (*Anthomyza armillaris*); Dipt. Scand., IV, 1576 (*Aricia*).  
WALKER, List, IV, 951 (*Anthomyia acra*).—Martin Falls, Canada. [Stein.]  
LOEW, in Silliman's Jour., oc. in N. A.—Sitka; see also Hagen, Canad. Ent., XIII, 48.



- MEADE, Brit. Anthomyidæ, 203; Desc. List, 62.  
 STROBL, Anth. Steiermarks, 237.  
 STEIN, Berl. Ent. Zeitsch., XL, 39, syn., etc.  
**mexicana** BIGOT, Annales, 1885, 284.—Mexico.  
 GIGLIO-TOS, Ditt. del Mess., IV, 27, note.  
 VAN DER WULP, Biologia, Dipt., II, 332.—Guerrero, Mex.; Costa Rica.  
**minutipalpis** STEIN, Berl. Ent. Zeitsch., XL, 106; XLII, 283, oc.—Europe; Mass.  
**pellucida** STEIN, Berl. Ent. Zeitsch., XLII, 283.—Ga.  
**polychæta** STEIN, Berl. Ent. Zeitsch., XL, 108; XLII, 171, oc.—Europe; Mass.  
 ? WIEDEMANN, Zool. Mag., 82 (*Anthomyia lepida*).  
 SCHINER, Fauna Austr., I, 655 (*lepida* WIED.).  
**prostrata** ROSSI, see *incisurata*.  
**prunivera** WALSH, Amer. Entomologist, II, 137, larva and adult.—Ill.  
 Note.—In the same place, Walsh describes *H. leydi* and *H. wilsonii*, in the larval state only; I presume they can never be identified.  
**rupecula** BIGOT, Annales, 1885, 285.—Rocky Mts.  
**scalaris** FABRICIUS, Ent. Syst., IV, 332 (*Musca*); Syst. Antl., 305 (id.).—Europe.  
 MEIGEN, Syst. Besch., V, 141 (*Anthomyia*).  
 ZETTERSTEDT, Dipt. Scand., IV, 1575 (*Aricia*).  
 DUFOUR, Ann. di Sci. Nat., extr. 5, no. 2 (*Anth. manicata*). [Rond.]  
 DESVOIDY, Myodaires, 567 (*Faunia saltatrix*).  
 SCHINER, Fauna Austr., I, 654; larvæ reared from human excrement.  
 RONDANI, Dipt. Ital. Prod., VI, 55.  
 MEADE, Brit. Anth., 202; Desc. List, 63.  
 LOEW, in Silliman's Jour., oc. in N. A.  
 STEIN, Berl. Ent. Zeitsch., XL, 46, full desc. and syn.  
 HOWARD, Proc. Wash. Acad. Sci., II, 582, habits; reared from human excrement.  
 Widespread in North America—J. M. A.  
**serena** FALLÉN, Muscides, 76 (*Musca*).—Europe.  
 MEIGEN, Syst. Besch., V, 200 (*Anthomyia*).  
 ZETTERSTEDT, Ins. Lapp., 685 (*Anthomyza*); Dipt. Scand., IV, 1594 (*Aricia*).  
 OSTEN SACKEN, Cat., 170, oc. in N. A., on authority of "Loew in litt."  
 HAGEN, Canad. Ent., XIII, 48, identified from British Amer. by Loew.  
 MEADE, Brit. Anth., 204; Desc. List, 65.  
 STEIN, Berl. Ent. Zeitsch., XL, 100.  
**spathulata** ZETTERSTEDT, see *Calomyia*.  
**splendida** STEIN, Berl. Ent. Zeitsch., XLII, 170.—Ida.  
**subpellucens** ZETTERSTEDT, see *Calomyia*.  
**tetracantha** LOEW, see *fuscula*.  
**trimaculata** STEIN, Berl. Ent. Zeitsch., XLII, 176.—Jamaica.

#### CÆLOMYIA.

- HALIDAY, in Westwood's Introduction, II, 143, 1840.  
 SCHINER, Fauna Austr., I, 656, note, 1862.  
 MEADE, Brit. Anth., 1882.  
 STEIN, Berl. Ent. Zeitsch., XL, 12 and 133, 1895.  
**spathulata** ZETTERSTEDT, Dipt. Scand., IV, 1543 (*Aricia*).—N. Europe.  
 HALIDAY, in Westwood's Introduction, II, App., 143 (*mollissima*, without desc.).—Europe.  
 RONDANI, Dipt. Ital. Prod., VI, 52 (*Homalomyia mollissima*).  
 OSTEN SACKEN, Cat., 170, oc. in N. A., on authority of "Loew in litt."  
 MEADE, Brit. Anth., 224, 1882 (*mollissima*).

STROBL, Anth. Steiermarks, 238 (id.).

STEIN, Berl. Ent. Zeitsch., XL, 131.

**subpellucens** ZETTERSTEDT, Dipt. Scand., IV, 1561 (*Aricia*).—N. Europe.

OSTEN SACKEN, Cat., 170, oc. in N. A., on authority of "Loew in litt."  
(*Homalomyia*).

HAGEN, Canad. Ent., XIII, 48, identified by Loew from Sitka (id.).

STEIN, Berl. Ent. Zeitsch., XL, 134.

#### CHORISTOMMA.

STEIN, Berl. Ent. Zeitsch., XL, 138, 1895.

**pokorny** STEIN, Berl. Ent. Zeitsch., XL, 138; XLII, 284, oc.—Europe; La.

#### EURYOMMA.

STEIN, Ent. Nachrichten, XXV, 19, 1899.

**communis** WALKER, Dipt. Saund., 366 (? *Anthomyia*).—U. S.

STEIN, Ent. Nachrichten, XXV, 1899, 20 (*hispaniense*, from Spain); Die Walk. Anth., 193, syn. and gen. ref.

*Note*.—The *Pegomyia communis* WALKER, mentioned by Cockerell, Jour. N. Y. Ent. Soc., VI, 206, from New Mexico, is probably a different species, judging from the generic reference.

#### HYETODESIA.

RONDANI, Dipt. Ital. Prod., VI, 110, 1877.

DESVOIDY, Myodaires, 486 (*Aricia*, preoc.), 1830.

SCHINER, Fauna Austr., I, 599 (id.), 1862.

SCHNAEL, Horæ Soc. Ent. Ross., XX, 271-440; XXII, 378-486; XXIII, 313-347; XXIV, 493-501, 1887-1890, discussion of this and related genera (*Aricia*).

VAN DER WULP, Biologia. Dipt., II, 314, def. and table of Mexican spp., 1896.

MEADE, Desc. List, 4, 1897.

*Note*.—*Aricia parviceps*, *schinophora*, and *consors* are mentioned by Hagen, Canad. Ent., XIII, 44, as being thus labeled by Loew in his N. A. material. I take these to be manuscript names.

**abacta** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147, 1893; Ditt. del Mess., IV, 20.—Mexico.

VAN DER WULP, Biologia, Dipt., II, 316, oc. and note.—Guerrero, Mex.

White Mts., N. H.—Slosson.

**abdicta** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 21.—Mex.

**barpana** WALKER, List, IV, 933 (*Anthomyia*).—Nova Scotia.

STEIN, Die Walk. Anth., 188, redesc. from type (*Aricia*).

**bispinosa** ZETTERSTEDT, see *Hydrotæa*.

**brevis** STEIN, Berl. Ent. Zeitsch., XLII, 180 (*Aricia*).—Ill., Ark.

**brunneinervis** STEIN, Berl. Ent. Zeitsch., XLII, 183 (*Aricia*).—Idaho.

COQUILLET, Proc. Wash. Acad. Sci., II, 442, oc.; Psyche, Jan., 1901, oc.—Alaska and N. M.

**cærulescens** STEIN, Berl. Ent. Zeitsch., XLII, 187 (*Aricia*).—Idaho.

**cinerella** VAN DER WULP, Tijdschr. v. Ent., X, 150 (*Aricia*).—Wis.

**circulatrix** WALKER (*Aricia*), see *Spilogaster*.

**deleta** STEIN, Berl. Ent. Zeitsch., XLII, 178 (*Aricia*).—Ill., Pa.

? **deflorata** HOLMGREN, Ins. Nordgrœnl., 102 (*Aricia*).—Greenland.

*Note*.—According to Stein, Holmgren followed Zetterstedt in including all the black-legged Anthomyidæ in *Aricia*; hence it is doubtful whether this species belongs here.

**denudata** HOLMGREN, see *Limnophora*.

**dorsata** ZETTERSTEDT, Dipt. Scand., iv, 1472 (*Aricia*).—N. Europe.

HOLMGREN, Ins. Spetsb., 29; Ins. Nordgrœn., 101 (id.).—Spitzbergen, Greenland.

**errans** MEIGEN, Syst. Besch., v, 112 (*Anthomyia*).—Europe.

DESVOIDY, Myodaires, 484 (*Tremnia nigricornis*). [Schiner.]

SCHINER, Fauna Austr., i, 604 (*Aricia*).

N. J.—Smith Cat.

**fabricii** HOLMGREN, see *Chortophila*.

**frenata** HOLMGREN, see *Lasiops*.

**houghii** STEIN, Berl. Ent. Zeitsch., XLII, 177 (*Aricia*).—Canada.

N. J.—Smith Cat.

**icterica** HOLMGREN, see *Phorbia*.

**incerta** WALKER, see *lucorum*.

**insons** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 21.—Mex.

**longiseta** VAN DER WULP, Biologia, Dipt., II, 315.—Guerrero, Mex.

**lucorum** FALLÉN, Muscides, 55 (*Musca*).—Europe.

MEIGEN, Syst. Besch., v, 85 (*Anthomyia*).

DESVOIDY, Myodaires, 500 (*Mydina latifica*).

WALKER, List, iv, 928 (*Anthomyia pylone*); Dipt. Saund., 354 (*Anthomyia solita*).—Martin Falls, Canada; U. S. [Stein.]

? WALKER, Dipt. Saund., 354 (*Anthomyia incerta*).—U. S. [Stein, with doubt.]

SCHINER, Fauna Austr., i, 600 (*Aricia*).

RONDANI, Prod. Dipt. Ital., vi, 143.

COQUILLET, Proc. Wash. Acad. Sci., II, 442, oc. in Alaska.

STEIN, Berl. Ent. Zeitsch., XLII, 182, oc. in Idaho, Kans., Mass., Pa.

N. J.—Smith Cat.; Montreal—Chagnon.

*Note*.—The *Hycodestia pylone* mentioned in Mrs. Slosson's White Mts. list and in Smith's N. J. catalogue must have been an erroneous identification.

**luteva** WALKER, List, iv, 934 (*Anthomyia*).—Nova Scotia.

STEIN, Die Walk. Anth., 201, pt. desc. of type; refers to *Aricia*.

**marmorata** ZETTERSTEDT, Dipt. Scand., XIV, 6197 (*Aricia*).—N. Europe.

SCHINER, Fauna Austr., i, 601 (id.).

White Mts., N. H.—Slosson (det. Coquillett).

**mœsta** HOLMGREN, see *Chortophila*.

? **morio** ZETTERSTEDT, Dipt. Scand., iv, 1399 (*Aricia*).—N. Europe.

? LOEW, in Silliman's Jour., oc. in N. A.; refers to it as *Aricia morioides* ZETT., which does not exist, as far as I can learn.

**mulcata** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 20.—Mexico.

VAN DER WULP, Biologia, Dipt., II, 315 (may be the male of *proccdens* WALK.).—Guerrero, Mex.

**nitida** STEIN, Berl. Ent. Zeitsch., XLII, 185 (*Aricia*).—Ontario, Canada.

**orbitaseta** STEIN, Berl. Ent. Zeitsch., XLII, 186 (*Aricia*).—Idaho.

**orichalcea** STEIN, Berl. Ent. Zeitsch., XLII, 183 (*Aricia*).—Idaho.

**pallidula** COQUILLET, Proc. U. S. N. M., XXV, 122 (*Phaonia*).—S. Ga.

- parsura** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 20.—Mex.
- pauxilla** HOLMGREN, see *Limnophora*.
- plumbea** MEIGEN, Syst. Besch., v, 85 (*Anthomyia*).—Europe.  
SCHINER, Fauna Austr., I, 601 (*Aricia*).  
LUNDBECK, Dipt. Grœnl., I, 308, oc. in Greenland (id.).
- procedens** WALKER, Trans. Ent. Soc. Lond., v, 315 (*Aricia*).—Mex.  
GIGLIO-TOS, Ditt. del Mess., IV, 20, note.—Mex.  
VAN DER WULP, Biologia, Dipt., II, 315, pt. desc.—Guerrero, Mex.  
STEIN, Die Walk Anth., 205, type partly redescribed, but no longer recognizable.
- proxima** VAN DER WULP, Tijdschr. v. Ent., XII, 85 (*Aricia*).—Wis.  
? STEIN, Berl. Ent. Zeitsch., XLII, 187, doubtfully identified from Wash. (*Aricia*).
- pruinosa** MACQUART, Dipt. Exot., Suppl. I, 201 (*Aricia*).—Galveston, Tex.
- punctata** STEIN, Berl. Ent. Zeitsch., XLII, 182 (*Aricia*).—S. D., Col.
- ranunculi** HOLMGREN, see *Limnophora denudata*.
- rescita** WALKER, see *Spilogaster*.
- rubella** VAN DER WULP, Biologia, Dipt., II, 314, pl. VIII, f. I.—Guerrero, Mex.
- rugia** WALKER, List, IV, 923 (*Anthomyia*).—Martin Falls, Canada.  
STEIN, Die Walk Anth., 207, type redesc. (*Aricia*).  
White Mts., N. H.—Slosson.
- rufitibia** STEIN, Berl. Ent. Zeitsch., XLII, 181.—Ill., Kans., Ga., Pa., La. N. M.—Coquillett, Psyche, Jan., 1901.
- septentrionalis** STEIN, Berl. Ent. Zeitsch., XLII, 184.—Alaska.  
Common in Alaska—Coquillett.
- serva** MEIGEN, Syst. Besch., v, 86 (*Anthomyia*).—Europe.  
SCHINER, Fauna Austr., I, 601 (*Aricia*).  
N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- solita** WALKER, see *lucorum*.
- striata** STEIN, Berl. Ent. Zeitsch., XLII, 179 (*Aricia*).—Idaho.
- tarsalis** WALKER, see *Canosia*.
- tristicula** HOLMGREN, see *Anthomyia radicum*.
- ? **troëne** WALKER, List, IV, 936 (*Anthomyia*).—Nova Scotia.  
STEIN, Die Walk Anth., 215, type redesc.; gen. ref. with a doubt (*Aricia*).
- umbratica** MEIGEN, Syst. Besch., v, 88 (*Anthomyia*).—Europe.  
SCHINER, Fauna Austr., I, 605 (*Aricia*).  
RONDANI, Dipt. Ital. Prod., VI, 139.  
HOWARD, Canad. Ent., XXXIII, oc. Va.; breeds in cowdung.  
Montreal—Chagnon.
- vagans** FALLÉN, Muscides, 78 (*Musca*).—Europe.  
MEIGEN, Syst. Antl., v, 112 (*Anthomyia*).  
SCHINER, Fauna Austr., I, 604 (*Aricia*).  
White Mts., N. H.—Slosson (det. Coquillett).
- varipes** COQUILLET, Proc. Wash. Acad. Sci., II, 441.—Sitka, Yakutat, Kadiak and Popof Id., all in Alaska.
- villicrura** COQUILLET, Proc. Wash. Acad. Sci., II, 443.—Yakutat, etc., Alaska.

#### TRICOPHTHICUS.

- RONDANI, Dipt. Ital. Prod., IV, 9, 1861 (*Tricophthicus*); VI, 145, 1877.  
RONDANI, Dipt. Ital. Prod., I, 96, 1856 (*Trichops*, preoc.).  
SCHNABL, Horæ Soc. Ent. Ross., XXIV, 497.  
VAN DER WULP, Biologia, Dipt., II, 330, 1896.

**crenatus** BIGOT, Annales, 1885, 282.—Mex.

GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 28  
(*Lasiops mexicana*).—Orizaba, Mex.

VAN DER WULP, Biologia, Dipt., II, 331 (syn. on p. 347).—Guerrero, Mex.

**nigrifrons** WALKER, List, IV, 932 (*Anthomyia*).—Martin Falls, Canada.

STEIN, Die Walk. Anth., 203, type redesc.

*Note*.—In Mrs. Slosson's List, this species is mentioned as occurring in the White Mts., but is referred to *Aricia*; the correctness of the identification is doubtful.

#### LASIOPS.

MEIGEN, Syst. Besch., VII, 323, 1838.

RONDANI, Dipt. Ital. Prod., VI, 148, 1877.

KOWARZ, Mittheil. d. Münchener Ent. Ver., 1880, 123-140, revision of the European species.

VAN DER WULP, Biologia, Dipt., II, 337, 1896.

MEADE, Desc. List, 41, 1897.

**calvicrura** COQUILLET, Proc. Wash. Acad. Sci., II, 444.—Popof Id., Alaska.

**cunctans** MEIGEN, Syst. Besch., V, 133 (*Anthomyia*).—Europe.

SCHINER, Fauna Austr., I, 618.

White Mts., N. H.—Slosson (det. Coquillett).

**frenata** HOLMGREN, Ins. Nordgrönl. 103 (*Aricia*).—Greenland.

LUNDBECK, Dipt. Grönl., I, 310, oc. in Greenland, and gen. ref.

COQUILLET, Proc. Wash. Acad. Sci., II, 444, oc. at Muir Inlet, Alaska.

STEIN, Wien. Ent. Zeit., XXI, 58, type redesc.

**hirsutula** ZETTERSTEDT, Ins. Lapp., 673 (*Anthomyza*); Dipt. Scand., IV, 1494  
(*Aricia*).—N. Europe.

COQUILLET, Proc. Wash. Acad. Sci., II, 444, oc. in Popof Id., Alaska.

**mexicana** GIGLIO-TOS, see *Trichophthicus crenatus*.

#### MYDÆA.

DESVOIDY, Myodaires, 479, 1830.

VAN DER WULP, Biologia, Dipt., II, 316, def. and table of Mexican species, 1896.

MEADE, Desc. List, 14, 1897.

**concinna** VAN DER WULP, Biologia, Dipt., II, 317.—Guerrero, Mex.

**confinis** VAN DER WULP, Biologia, Dipt., II, 319.—Orizaba, Mex.

**diaphana** WIED., of Chagnon's List, see *Limnophora*.

**fasciventris** VAN DER WULP, Biologia, Dipt., II, 318.—Tabasco, Mex.

**flavicornis** COQUILLET, Proc. U. S. N. M., XXI, 123.—Quebec, Canada; St. Louis, Mo.

**leucocephala** VAN DER WULP, Biologia, Dipt., II, 318.—Tabasco, Mex.

**pansa** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 24  
(both *Spilogaster*).—Mex.

VAN DER WULP, Biologia, Dipt., II, 316, pl. VIII, f. 2.—Guerrero and N. Yucatan, Mex.

**obscura** VAN DER WULP, Biologia, Dipt., II, 317, pl. VIII, f. 3.—N. Yucatan, Mex.

**spermophilæ** TOWNSEND, Trans. Amer. Ent. Soc., XXII, 79.—Jamaica, from nestling of *Spermophila* sp.; notes on Anthomyidæ affecting young birds.

#### SPILOGASTER.

MACQUART, Hist. Nat. Dipt., II, 293, 1835.

RONDANI, Dipt. Ital. Prod., VI, 65, 1877.

- VAN DER WULP, *Biologia*, Dipt., II, 319, 1896, def. and table of Mexican species.  
 Recent papers on the European species:
- STEIN, *Berl. Ent. Nachricht.*, XIX, 1893.  
 MEADE, *Desc. List*, 17, 1897.  
 CZERNY, *Wien. Ent. Zeit.*, XX, 34, 1901.
- abdita** GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147; *Ditt. del Mess.*, IV, 23.—Mex.
- abiens** STEIN, *Berl. Ent. Zeitsch.*, XLII, 193.—Mass., Ontario.  
 N. J.—Smith Cat.
- amœba** STEIN, see *lysinoe*.
- angelicæ** SCOPOLI, *Ent. Carniolica*, 880 (*Musca*).—Europe.  
 GMELIN, *Syst. Nat.*, v, 2844 (*M. deceptoria*).  
 SCHRANK, *Ins. Austr.*, 932 (id.).  
 FALLÉN, *Muscides*, 78 (*Musca*).  
 MEIGEN, *Syst. Besch.*, v, 117 (*Anthomyia*).  
 SCHINER, *Fauna Austr.*, I, 612.  
 LOEW, in *Silliman's Jour.*, oc. in N. A.  
 RONDANI, *Dipt. Ital. Prod.*, VI, 85.  
 OSTEN SACKEN, *Berl. Ent. Zeitsch.*, XXXI, 25, note on eggs.
- ? **anomala** JÆNNICKE, *Neue Exot. Dipteren*, 69, pl. II, f. 4 (*Mesembrina*).—Cuba.  
 BRAUER and BERGENSTAMM, *Zweifel. d. Kaiserl. Mus.*, VI, 209, gen. ref., from type with a doubt.
- bysia** WALKER, *List*, IV, 936 (*Anthomyia*).—Nova Scotia.  
 STEIN, *Die Walk. Anth.*, 190, type redesc.
- carbonella** ZETTERSTEDT, *Dipt. Scand.*, IV, 1414 (*Aricia*).—N. Europe.  
 SCHINER, *Fauna Austr.*, I, 608.  
 White Mts., N. H.—Slosson (det. Coquillett).
- ? **circulatrix** WALKER, *Trans. Ent. Soc. Lond.*, v, 316 (*Aricia*).—Mexico.  
 STEIN, *Die Walk. Anth.*, 192, type redesc.; gen. ref. with a query.
- copiosa** VAN DER WULP, *Biologia*, Dipt., II, 321.—Guerrero, Mex.
- cothurnata** RONDANI, *Dipt. Ital. Prod.*, VI, 95.—Italy.  
 STEIN, *Berl. Ent. Zeitsch.*, XLII, 197, oc. in Idaho.
- crepuscularis** STEIN, *Berl. Ent. Zeitsch.*, XLII, 201.—Col.  
*Note.*—In Smith's N. J. Catalogue this species is placed as a synonym of Walker's *Anthomyia palposa*, but Stein has since ascertained from the type that the latter is a *Lispa*.
- demigrans** ZETTERSTEDT, *Dipt. Scand.*, IV, 1699 (*Anthomyia*).—N. Europe.  
 SCHINER, *Fauna Austr.*, I, 610.  
 N. J.—Smith Cat.
- diruta** STEIN, *Berl. Ent. Zeitsch.*, XLII, 188.—Pa.  
 N. J.—Smith Cat.
- discreta** VAN DER WULP, *Biologia*, Dipt., II, 322.—Guerrero, Mex.
- duplicata** MEIGEN, *Syst. Besch.*, v, 92 (*Anthomyia*).—Europe.  
 DESVOIDY, *Myodaires*, 498 (*Mydina nigripes*).  
 SCHINER, *Fauna Austr.*, I, 607.  
 RONDANI, *Dipt. Ital. Prod.*, VI, 101.  
 STEIN, *Berl. Ent. Zeitsch.*, XLII, 199, oc. in Ontario and Colorado.
- etesia** GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147; *Ditt. del Mess.*, IV, 23.—Tuxpango, Mex.
- fulviventris** BIGOT, *Annales*, 1885, 291.—Cal.
- fulva** BIGOT, *Annales*, 1885, 289.—Wash.



- fusca* STEIN, Berl. Ent. Zeitsch., XLII, 189.—Kans., Mass., Va., La.  
N. J.—Smith Cat.
- hilariformis* STEIN, Berl. Ent. Zeitsch., XLII, 196.—Va., Pa.
- humeralis* ZETTERSTEDT, Dipt. Scand., iv, 1697 (*Anthomyza*); xiv, 6284, oc. in N. Y.—N. Europe and New York.  
STEIN, Berl. Ent. Zeitsch., XLII, 192, oc. in Mass.  
N. J.—Smith Cat.
- limnophorina* STEIN, Berl. Ent. Zeitsch., XLII, 200.—Pa.
- lysinoë* WALKER, iv, 938 (*Anthomyia*).—Nova Scotia.  
STEIN, Berl. Ent. Zeitsch., XLII, 190 (*amaba*); Die Walk. Anth., 201, syn.—Ida., Mass., Ill. N. J.—Smith Cat. (*amaba*).
- meracula* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 24.—Mex.
- narina* WALKER, List, iv, 933 (*Anthomyia*).—Nova Scotia.  
STEIN, Die Walk. Anth., 202, pt. desc. of types.
- nigricans* STEIN, Berl. Ent. Zeitsch., XLII, 198.—Col.
- nigripennis* WALKER, List, iv, 929 (*Anthomyia*).—Martin Falls, Canada.  
STEIN, Die Walk. Anth., 203, type redesc.
- nitens* STEIN, Berl. Ent. Zeitsch., XLII, 199.—Mass.
- obscura* STEIN, Berl. Ent. Zeitsch., XLII, 197.—Pa.
- obscurinervis* STEIN, Berl. Ent. Zeitsch., XLII, 199.—Ga.; the male is described on p. 285 of the same work.
- pagana* FABRICIUS, Ent. Syst., iv, 326 (*Musca*); Syst. Antl., 288 (id.).—Europe.  
MEIGEN, Syst. Besch., v, 116 (*Anthomyia*).  
DESVOIDY, Myodaires, 480 (*Mydca scutellaris*).  
SCHINER, Fauna Austr., i, 611.  
RONDANI, Dipt. Ital. Prod., vi, 82.  
STEIN, Berl. Ent. Zeitsch., XLII, 192, oc. in Colorado.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson; Montreal—Chagnon.
- pansa* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 24.—Mex.
- parvula* VAN DER WULP, Biologia. Dipt., II, 321.—Guerrero, Mex.
- plumifer* BIGOT, Annales, 1885, 288.—Cuba.
- pubiceps* STEIN, Berl. Ent. Zeitsch., XLII, 194.—Idaho.
- refusa* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 22.—Tuxpango, Mex.  
White Mts., N. H.—Slosson (*Limnophora*).
- ? *rescita* WALKER, Trans. Ent. Soc., v, 315 (*Aricia*).—Mex.  
STEIN, Die Walk. Anth., 207, type redesc.; gen. ref. with a doubt.
- rubripalpis* VAN DER WULP, Biologia, Dipt., II, 320.—Guerrero and Morelos, Mex.; Costa Rica.
- scabra* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 25.—Mex.
- sera* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 25.—Mex.
- signatipennis* VAN DER WULP, Biologia, Dipt., II, 322, pl. VIII, f. 6.—Guerrero and Orizaba, Mex.
- signia* WALKER, List, iv, 939 (*Anthomyia*); 940 (*Anthomyia geldria*).—Nova Scotia.  
STEIN, Die Walk. Anth., 196, 208, types redesc., syn.
- soccata* WALKER, List, iv, 941 (*Anthomyia*).—Martin Falls, Canada.  
STEIN, Die Walk. Anth., 209, redesc.—“Is a *Spilogaster* or an *Aricia*.”
- socialis* STEIN, Berl. Ent. Zeitsch., XLII, 193 and 284.—Ga., N. C., La.

**terminalis** WALKER, Dipt. Saund., 356 (*Anthomyia*).—U. S.

*Note*.—Osten Sacken refers to this genus; it may be an oversight, however, as he does not indicate that his reference is different from Walker's.

**trigonota** VAN DER WULP, Biologia. Dipt., II, 320, pl. VIII, f. 4.—Nicaragua.

**uliginosa** FALLÉN, Muscides, 81 (*Musca*).—Europe.

MEIGEN, Syst. Besch., v, 121 (*Anthomyia*).

DESVOIDY, Myodaires, 492 (*Rohrella punctata*).

SCHINER, Fauna Austr., I, 609.

RONDANI, Dipt. Ital. Prod., VI, 77.

STEIN, Berl. Ent. Zeitsch., XLII, 192, oc. in Ill.

**uniseta** STEIN, Berl. Ent. Zeitsch., XLII, 192.—Conn., Mass., Ontario, Ill.

**urbana** MEIGEN, Syst. Besch., v, 118 (*Anthomyia*).—Europe.

DESVOIDY, Myodaires, 477 (*Fellca fera*).

SCHINER, Fauna Austr., I, 612.

LOEW, Silliman's Jour., oc. in N. A.

RONDANI, Dipt. Ital. Prod., VI, 86.

STEIN, Berl. Ent. Zeitsch., XLII, 196, oc. in Mass. and Pa.

N. J.—Smith Cat.; White Mts.—Slosson; Montreal—Chagnon.

**vespertina** FALLÉN, Muscides, 58 (*Musca*).—Europe.

MEIGEN, Syst. Besch., v, 107 (*Anthomyia*).

SCHINER, Fauna Austr., I, 608.

RONDANI, Dipt. Ital. Prod., VI, 93.

STEIN, Berl. Ent. Zeitsch., XLII, 199, oc. in Kans., S. D., Mass., Ga., Ontario, and Ill.

#### CHARADRELLA.

VAN DER WULP, Biologia, Dipt., II, 341, 1896.

**macrosoma** VAN DER WULP, loc. cit., pl. VIII, f. 16.—N. Yucatan, Mex.

#### LIMNOPHORA.

DESVOIDY, Myodaires, 517, 1830.

SCHINER, Fauna Austr., I, 621, 1862.

RONDANI, Dipt. Ital. Prod., VI, 103, 1877.

SCHNABL, Horæ Soc. Ent. Ross., XXIV, 495.

VAN DER WULP, Biologia, Dipt., II, 324, 1896, def. and table of Mexican species.

**æquifrons** STEIN, Berl. Ent. Zeitsch., XLII, 205.—Idaho, S. D.

N. J.—Smith Cat.

**anthrax** BIGOT, Annales, 1885, 274.—Mex.

**arcuata** STEIN, Berl. Ent. Zeitsch., XLII, 201 and 285.—Ga., La.

COQUILLET, Proc. U. S. N. M., XXII, 256, oc. in D. C. and Porto Rico.

HOWARD, Proc. Wash. Acad. Sci., II, 582, fig. and habits; bred from human excrement.—D. C. and Va.

**biquadrata** WALKER, List, IV, 963 (*Anthomyia*).—Martin Falls, Canada.

STEIN, Die Walk. Anth., 189, type redesc.

**compuncta** WIEDEMANN, Zool. Mag., I, 80, 1817 (*Anthomyia*).—Europe.

MEIGEN, Syst. Besch., v, 147 (*Anthomyia*).

SCHINER, Fauna Austr., I, 621.

RONDANI, Dipt. Ital. Prod., VI, 106.

COQUILLET, Dipt. of Commander Ids., 344, oc. in Bering Id.

**contractifrons** ZETTERSTEDT, Ins. Lapp., 683 (*Anthomyza*); 669 (var. of *A. arcuata*); Dipt. Scand., IV, 1463 (*Aricia*).—N. Europe.

STÆGER, Grœnl. Antl., oc. in Greenland (*Anthomyza arctica*).

LUNDBECK, Dipt. Grœnl., I, 311, oc. in Greenland.

- cyrtoneurina* STEIN, see *narona*.
- debilis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 369.—St. Vincent, W. I.
- delecta* VAN DER WULP, Biologia, Dipt., II, 325.—Guerrero, Mex.
- denudata* HOLMGREN, Ins. Spetsb., 30 (*Aricia*); Ins. Nordgrœnl., 101 (*Aricia denudata* and *ranunculi*).—Spitzbergen and Greenland.  
STEIN, Wien. Ent. Zeit., XXI, 57, type redesc.; syn.
- diaphana* WIEDEMANN, Zool. Mag., I, 81 (*Anthomyia*).—Europe.  
MEIGEN, Syst. Besch., v, 189 (id.).  
SCHINER, Fauna Austr., I, 623 (says that Fallén and Zetterstedt had the wrong species under this name).  
LOEW, in Silliman's Jour., oc. in N. A.  
Montreal—Chagnon (*Mydœa*); Axton, N. Y.—M. and H.
- discreta* STEIN, Berl. Ent. Zeitsch., XLII, 204.—Ill.
- exilis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 369.—St. Vincent, W. I.
- ? *exul* WILLISTON, Trans. Ent. Soc. Lond., 1896, 370, pl. XII, f. 122.—St. Vincent, W. I.; may be *Spilogaster*—Will.
- fumipennis* VAN DER WULP, Biologia, Dipt., II, 324, pl. VIII, f. 7.—Guerrero, Mex.
- limbata* BIGOT, Annales, 1885, 271.—Mexico and Chile.
- litorea* FALLÉN, Muscides, 63 (*Musca*).—Europe.  
ZETTERSTEDT, Dipt. Scand., IV, 1473 (*Aricia*).  
SCHINER, Fauna Austr., I, 622 (says that Meigen's species is different).  
White Mts., N. H.—Slosson (det. Coquillett).
- meraca* VAN DER WULP, Biologia, Dipt., II, 325.—Guerrero, Mex.
- narona* WALKER, List, IV, 945 (*Anthomyia*).—Fla.  
STEIN, Berl. Ent. Zeitsch., XLII, 203 (*cyrtoneurina*); Die Walk. Anth., 202, syn.—S. D., Kans., Minn., N. Dak.  
N. J.—Smith Cat.—“equals *Leucomelina garrula* G. T.?”
- nobilis* STEIN, Berl. Ent. Zeitsch., XLII, 207.—Alaska.  
Alaska, several places—Coq.
- normata* BIGOT, Annales, 1885, 272.—Mex.
- pauvilla* HOLMGREN, Ins. Spetsb., 32; Ins. Nordgrœnl., 101 (both *Aricia*).—Spitzbergen and Greenland.  
STEIN, Wien. Ent. Zeit., XXI, 61, type redesc.
- rufipes* BIGOT, Annales, 1885, 272.—Mex.
- socia* VAN DER WULP, Biologia, Dipt., II, 326.—Guerrero, Mex.
- stygia* MEIGEN, Syst. Besch., v, 155 (*Anthomyia*).—Europe.  
SCHINER, Fauna Austr., I, 624, no desc.—“Weibchen einer *Hydrotœa*?”  
LOEW, in Silliman's Jour., oc. in N. A.
- surda* ZETTERSTEDT, Dipt. Scand., IV, 1476 (*Aricia*).—Europe.  
RONDANI, Dipt. Ital. Prod., VI, 105.  
STEIN, Berl. Ent. Zeitsch., XLII, 208, oc. in Minn., Ida., S. D., Ontario.  
Montreal—Chagnon.
- triangulifera* ZETTERSTEDT, Ins. Lapp., 680 (*Anthomyza*); Dipt. Scand., IV, 1467 (*Aricia*).—N. Europe.  
STÆGER, Grœnl. Antl., 364, oc. in Greenland.
- trigonifera* ZETTERSTEDT, Ins. Lapp., 669 (*Anthomyza*); Dipt. Scand., IV, 1458 (*Aricia*).—N. Europe.  
STÆGER, Grœnl. Antl., 364, oc. in Greenland.
- umbrosa* VAN DER WULP, Biologia, Dipt., II, 326.—Costa Rica.

## LEUCOMELINA.

- MACQUART, Dipt. Exot., Suppl. IV, 261, 1850.  
BIGOT, Annales, 1888, 263, notes.

- VAN DER WULP, *Biologia*, Dipt., II, 326, def. and table of Mexican species, 1896.
- corvina* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147; *Ditt. del Mess.*, IV, 19.  
—Solco and Mexico City, Mex.
- VAN DER WULP, *Biologia*, Dipt., II, 328.—Mexico, common.
- deleta* VAN DER WULP, *Biologia*, Dipt., II, 329.—Guerrero, Mex.
- garrula* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147; *Ditt. del Mess.*, IV, 18.—Tuxpango, Mex.
- VAN DER WULP, *Biologia*, Dipt., II, 330, pl. VIII, f. 9.—Guerrero, Mex.  
Fla., several places—Johnson. See *Limnophora narona*.
- minuscula* VAN DER WULP, *Biologia*, Dipt., II, 330.—Vera Cruz and Guerrero, Mex.
- pica* MACQUART, *Dipt. Exot.*, Suppl. IV, 262, pl. XXIV, f. 3.—Brazil.  
GIGLIO-TOS, *Ditt. del Mess.*, IV, 18.—Solco and Orizaba, Mex.  
VAN DER WULP, *Biologia*, Dipt., II, 328, pl. VIII, f. 8.—Guerrero and Orizaba, Mex.  
BIGOT, *Annales*, 1885, 264 (*Limnophora* ? *pica*).
- sæva* WIEDEMANN, *Auss. Zw.*, II, 430 (*Anthomyia*).—Brazil.  
MACQUART, *Dipt. Exot.*, II, 3, 165, pl. XXII, f. 6 (*Limnophora elegans*).—Guiana.  
SCHINER, *Novara*, 300 (*Spilogaster*), syn.—S. A.  
VAN DER WULP, *Biologia*, Dipt., II, 329.—Guerrero and Tabasco, Mex.
- strigata* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 147; *Ditt. del Mess.*, IV, 19.—Solco, Mex.

#### PROBOSCIDOMYIA.

- BIGOT, *Bull. Soc. Ent. France*, 1883, 35; *Annales*, 1885, 266.  
TOWNSEND, *Trans. Amer. Ent. Soc.*, XIX, 293, 1893, part. quoted.
- siphonina* BIGOT, *Annales*, 1885, 267.—Rocky Mts.

#### ANTHOMYIA.

- MEIGEN, *Illiger's Mag.*, II, 281, 1803; *Syst. Besch.*, V, 81, 1826.  
SCHINER, *Fauna Austr.*, I, 633, 1862.  
RONDANI, *Dipt. Ital. Prod.*, VI, 150, 1877.  
MEADE, *Ent. Mo. Mag.*, 1882, 109; *Desc. List*, 42, 1897.
- acra* WALKER, see *Homalomomyia manicata*.
- æmene* WALKER, see *Hylemyia*.
- alaba* WALKER, see *Chortophila*.
- albicincta* FALLÉN, *Muscides*, 73 (*Musca*).—Europe.  
MEIGEN, *Syst. Besch.*, V, 161 (*Anthomyia*).  
SCHINER, *Fauna Austr.*, I, 648 (id.).  
OSTEN SACKEN, *Cat.*, 170, oc. in *Nebr. and Texas*, on authority of "Loew in litt." (*Atomogaster*).  
STEIN, *Berl. Ent. Zeitsch.*, XLII, 208, oc. in *Ida.*, S. D., *Mass.*, *Va.*, III.  
MEADE, *Desc. List*, 43.  
N. J.—*Smith Cat.*
- alcathoë* WALKER, see *Hylemyia*.
- alone* WALKER, see *Canosia ausoba*.
- anane* WALKER, *List*, IV, 927.—Martin Falls, Canada.  
STEIN, *Die Walk. Anth.*, 186, type is a female *Chortophila*, unrecognizable without the male. Hence the recorded occurrence of this species in N. J. (*Smith Cat.*) and Montreal (*Chagnon*) may be set down as erroneous.

- angustifrons MEIGEN, see *Phorbia fusciceps*.
- anthracina BIGOT, Annales, 1885, 298.—Rocky Mts.; may be a variety of *monticola*.
- apina WALKER, see *Prosalpia silvestris*.
- ausoba WALKER, see *Canosia*.
- badia WALKER, see *Phorbia*.
- barpana WALKER, see *Aricia*.
- brassicæ BOUCHÉ, see *Phorbia*.
- brixia WALKER, see *Eustalomyia*.
- bysia WALKER, see *Spilogaster*.
- campestris DESVOIDY, Myodaires, 585 (*Egle*).—Europe and N. A.—Philadelphia.
- ceparum MEIGEN, see *Phorbia*.
- communis WALKER, see *Euryomma*.
- dejeanii DESVOIDY, Myodaires, 558 (*Neria*).—Philadelphia.
- determinata WALKER, see *Phorbia muscaria*.
- donuca WALKER, see *Prosalpia silvestris*.
- dorsimaculata VAN DER WULP, Biologia, Dipt., II, 336.—Guerrero, Mex.
- ? dubia CURTIS, Ins. Ross's Exped., lxxix.—Arctic America.  
Gen. ref. with a query in O. S. Cat.
- elongata VAN DER WULP, Biologia, Dipt., II, 335, pl. VIII, f. 14.—Guerrero, Mex.
- geldria WALKER, see *Spilogaster signia*.
- idyla WALKER, List, IV, 948.—Martin Falls, Canada.  
STEIN, Die Walk. Anth., 197, says the types are a mixture of three species, one female *Hydrotæa*, one female *Ophyra leucostoma*, one unrecognizable.
- isura WALKER, see *Homalomyia canicularis*.
- lata WALKER, see *Canosia*.
- latitarsis ZETTERSTEDT, Dipt. Scand., v, 1754 (*Anthomyza*).—N. Europe.  
SCHINER, Fauna Austr., I, 635.  
HAGEN, Canad. Ent., XIII, 48 (identified by Meade from N. H. and N. Y.).  
White Mts., N. H.—Slosson.
- ? leucoprocta WIEDEMANN, Auss. Zweif., II, 433.—W. I.  
Gen. ref. with a query in O. S. Cat.
- lipsia WALKER, see *Hylemyia*.
- luteva WALKER, see *Hyetodesia*.
- lysinoë WALKER, see *Spilogaster*.
- micropteryx THOMSON, Eugen. Resa, 555.—Cal.
- monticola BIGOT, Annales, 1885, 297.—Rocky Mts.  
See also *anthracina*.
- mystacea COQUILLET, Proc. Wash. Acad. Sci., II, 447.—Juneau, Alaska.
- narina WALKER, see *Spilogaster*.
- narona WALKER, see *Limnophora*.
- nigra WALKER, see *Muscina similis*.
- nigrifrons WALKER, see *Trichophthicus*.
- nigripennis WALKER, List, IV, 929.—Martin Falls, Canada.
- ochripes THOMSON, Eugen. Resa, 553.—Cal.
- ochrogaster THOMSON, Eugen. Resa, 557.—Cal.
- oculifera BIGOT, Annales, 299.—Baltimore, Md.
- omole WALKER, see *Muscina*.
- opalial WALKER, see *Ophyra leucostoma*.
- palposa WALKER, see *Lispa*.
- perrima WALKER, see *Phorbia fusciceps*.

- pluvialis* LINNÉ, Syst. Nat., 10th ed. (*Musca*); Fauna Suec., 2d edit., 455 (id.).  
—Europe.  
DEGEER, Mém. Hist. Nat. Ins., vi, 14 (id.).  
FABRICIUS, Spec. Ins., II, 443 (id.); Ent. Syst., iv, 329 (id.); Syst. Antl., 304 (id.).  
FALLÉN, Muscides, 68 (id.).  
LATREILLE, Gen. Crust. et Ins., 346; Cons. Gén., 444.  
GEOFFROY, Ins., II, 529.  
MEIGEN, Syst. Besch., v, 163.  
SCHINER, Fauna Austr., I, 647.  
RONDANI, Dipt. Ital. Prod., vi, 155.  
MEADE, Ent. Mo. Mag., Apr., 1878, oc. in N. A.; Desc. List, 42.  
STEIN, Berl. Ent. Zeitsch., XLII, 208, oc. in Ida., Mass., La., Pa. N. J.—Smith Cat.
- pratricula* PANZER, Fauna German., CVIII, 12.—Europe.  
MEIGEN, Syst. Besch., v, 163.  
ZETTERSTEDT, Dipt. Scand., iv, 1559 (*Aricia praticola*).  
SCHINER, Fauna Austr., I, 648.  
MEADE, Desc. List, 43.  
N. J.—Smith Cat.
- protitra* WALKER, see *Sarcophaga*.
- pylone* WALKER, see *Hycyodesia lucorum*.
- radicum* LINNÉ, Fauna Suec., 2d edit., 454 (*Musca*); Syst. Nat., 12th edit., II, 992 (id.).—Europe; in the former he says, "Habitat in radicibus raphani."  
GMELIN, Syst. Nat., v, 2846 (id.).  
FABRICIUS, Spec. Ins., II, 443 (id.); Syst. Antl., 300 (id.).  
FALLÉN, Muscides, 72 (id.).  
WIEDEMANN, Zool. Mag., I, 78.  
MEIGEN, Syst. Besch., v, 168.  
SCHINER, Fauna Austr., I, 645.  
RONDANI, Dipt. Ital. Prod., vi, 157.  
MEADE, Desc. List, 43.  
American references:  
HOLMGREN, Ins. Nordgrœnl., 102 (*Aricia tristicula*).—Greenland. [Stein, Wien. Ent. Zeit., XXI, 64, from type.]  
MEADE, Ent. Mo. Mag., Apr., 1878, oc. in N. A.  
LINTNER, 1st N. Y. Rept., 191–194, bibl., desc., habits, etc.  
SLINGERLAND, Bull. 78, Cornell Ex. Station, full discussion and bibliography. Larvæ in roots of cabbage and radish; rare in N. A.  
STEIN, Berl. Ent. Zeitsch., XLII, 208, oc. in Ida., N. Y., Ont., Mass., Pa.  
COQUILLET, Proc. Wash. Acad. Sci., II, 447, oc. in Alaska.  
LUNDBECK, Dipt. Grœnl., II, 283, oc. in Greenland.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson; Province of Quebec—Fyles.
- raphani* HARRIS, see *Phorbia brassica*.
- rugiceps* MEIGEN, see *Phorbia*.
- rugia* WALKER, see *Hycyodesia*.
- scatophagina* ZETTERSTEDT, Ins. Lapp., 677 (*Anthomyza*); Dipt. Scand., iv, 1510 (*Aricia*).—N. Europe.  
STÆGER, Grœnl. Antl., oc. in Greenland.  
SCHINER, Fauna Austr., I, 637.
- segmentata* VAN DER WULP, Biologia, Dipt., II, 336.—Guerrero, Mex.
- sigma* WALKER, see *Spilogaster*.



- similis* WALKER, see *Muscina*.  
*similis* FITCH, Trans. N. Y. State Agl. Soc., 1855, xv, 533; 1st and 2d Repts., 1856, 301, desc. (all *Hylemyia*).—N. Y.  
 LINTNER, 1st N. Y. Rept., 202, notes.  
*soccata* WALKER, List, see *Spilogaster*.  
*spinosa* WALKER, List, iv, 926.—Martin Falls, Canada.  
 Type unrecognizable—Stein.  
*striolata* FALLÉN, of Stæger, see *Phorbia fugax*.  
*tarsata* VAN DER WULP, Tijdschr. v. Ent., x, 151, pl. v, f. 6.—Wis.  
*teate* WALKER, see *Hydrophoria*.  
*tinia* WALKER, see *Phorbia fusciceps*.  
*trifilis* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 28.—Coscom, Mex.  
*troëne* WALKER, see *Hycetodesia*.  
*uxama* WALKER, List, iv, 948.—Martin Falls, Canada.  
 STEIN, Die Walk. Anth., 215, type examined; is an unrecognizable female *Homalomyia*.  
*viana* WALKER, see *Phorbia fusciceps*.  
*zeæ* RILEY, see *Phorbia fusciceps*.

## HYDROPHORIA.

- DESVOIDY, Myodaires, 503. 1830.  
 RONDANI, Dipt. Ital. Prod., vi, 168, 1877.  
 VAN DER WULP, Biologia, Dipt., II, 332, 1896, def. and table of Mexican species.  
 MEADE, Desc. List, 29, 1897.  
*ambigua* FALLÉN, Muscides, 56 (*Musca*).—Europe.  
 MEIGEN, Syst. Beschr., v, 192 (*Anthomyia*).  
 ZETTERSTEDT, Dipt. Scand., XII, 4719 (*Aricia*).  
 SCHINER, Fauna Austr., I, 612 (*Spilogaster*).  
 RONDANI, Dipt. Ital. Prod., vi, 175.  
 STEIN, Berl. Ent. Zeitsch., XLII, 208, oc. in Mass. and Ill.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 447, oc. in Alaska.  
 ? *calopus* BIGOT, Annales, 1885, 275.—Mex. Query by Bigot.  
*collaris* VAN DER WULP, Biologia, Dipt., II, 333, pl. VIII, f. II.—Guerrero, Mex.  
*divisa* MEIGEN, Syst. Beschr., v, 99 (*Anthomyia*).—Europe.  
 ZETTERSTEDT, Dipt. Scand., IV, 1415 (*Aricia ambigua*, in part); XII, 4723 (*Aricia*).  
 SCHINER, Fauna Austr., I, 609 (*Spilogaster*).  
 RONDANI, Dipt. Ital. Prod., vi, 175 (under *ambigua*).  
 MEADE, Desc. List, 30.  
 STEIN, Berl. Ent. Zeitsch., XLII, 208.—Ida., Wash., Ill.  
*flavipalpis* VAN DER WULP, Biologia, Dipt., II, 334.—Guerrero, Mex.  
*nigricauda* BIGOT, Annales, 1885, 276.—Rocky Mts.  
 ? *pictipes* BIGOT, Annales, 1885, 275.—Mex. Query by Bigot.  
*plumosa* VAN DER WULP, Biologia, Dipt., II, 332.—Guerrero, Mex.  
*teate* WALKER, List, iv, 931 (*Anthomyia*).—Martin Falls, Canada.  
 STEIN, Die Walk. Anth., 213, type redesc.  
*transversalis* VAN DER WULP, Biologia, Dipt., II, 334, pl. VIII, f. 12.—Guerrero, Mex.

## HYLEMYIA.

- DESVOIDY, Myodaires, 550. 1830.  
 SCHINER, Fauna Austr., I, 626. 1862.

- RONDANI, Dipt. Ital. Prod., VI, 176, 1877.  
 VAN DER WULP, Biologia, Dipt., II, 337, 1896, def. and table of Mexican species.  
 MEADE, Descriptive List, 32, 1897.
- abrepta** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 30.—Mex.
- æmene** WALKER, List, IV, 937 (*Anthomyia*).—Nova Scotia.  
 STEIN, Die Walk. Anth., 186, pt. desc. of type.
- alcathoë** WALKER, List, IV, 937 (*Anthomyia*).—Nova Scotia.  
 BIGOT, Annales, 1885, 299 (*flavicaudata*).—Wash. [J. M. A.]  
 STEIN, Berl. Ent. Zeitsch., XLII, 211 (*strigata*).—Ida., Wash. [Syn. by Stein, from Walker's type.]  
 COQUILLET, Proc. Wash. Acad. Sci., II, 448, oc. in Alaska and N. H., and syn. of *strigata*, from desc.  
 Montreal—Chagnon.
- anane** WALKER, of the Smith Cat. and Chagnon's Montreal list, is a mistake, being an erroneous identification of *Anthomyia anane* WALKER, which is an unrecognizable *Phorbia*.
- angusta** STEIN, Berl. Ent. Zeitsch., XLII, 218 and 285.—Col. and Germany.
- brunneifrons** ZETTERSTEDT, Ins. Lapp., 690 (*Anthomyza*); Dipt. Scand., IV, 1660 (id.).—N. Europe.  
 LUNDBECK, Dipt. Grœnl., I, 313, oc. in Greenland.
- coarctata** FALLÉN, Muscides, 84 (*Musca*).—Europe.  
 MEIGEN, Syst. Besch., V, 130 (*Anthomyia*).  
 ZETTERSTEDT, Ins. Lapp., 666 (*Anthomyza*); Dipt. Scand., IV, 1644 (id.).  
 SCHINER, Fauna Austr., I, 629.  
 RONDANI, Dipt. Ital. Prod., VI, 195.  
 STEIN, Berl. Ent. Zeitsch., XLII, 215, oc. in Col.  
 MEADE, Desc. List, 37.
- deceptiva** FITCH, see *Phorbia fusciceps*.
- depressa** STEIN, Berl. Ent. Zeitsch., XLII, 214.—Pa.
- fabricii** HOLMGREN, of Coquillett, see *Phorbia*.
- flavicans** STEIN, Berl. Ent. Zeitsch., XLII, 213.—Idaho.
- flavicaudata** BIGOT, see *alcathoë*.
- frontata** ZETTERSTEDT, Ins. Lapp., 699 (*Anthomyza*); Dipt. Scand., 30, 1453 (*Aricia*).—N. Europe.  
 STÆGER, Grœnl. Antl., 363, oc. in Greenland.
- inornata** STEIN, Berl. Ent. Zeitsch., XLII, 220.—Mass.
- johnsoni** STEIN, Berl. Ent. Zeitsch., XLII, 215, 285.—Pa. and La.
- juvenilis** STEIN, Berl. Ent. Zeitsch., XLII, 211.—Pa.  
 HOWARD, Proc. Wash. Acad. Sci., II, 584, oc. in Md.; bred from human excrement.
- levipes** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 30.—Mex.
- linearis** STEIN, Berl. Ent. Zeitsch., XLII, 219.—Minn.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 449, oc. in Alaska.
- lipsia** WALKER, List, IV, 928 (*Anthomyia*); 971 (*Canosia substituta*).—Martin Falls, Canada; Mass.  
 STEIN, Berl. Ent. Zeitsch., XLII, 209, full desc.; Die Walk. Anth., 200, 211, syn.—Mass., Pa., Me., Ill.  
 N. J.—Smith Cat.: Montreal—Chagnon: White Mts., N. H.—Slosson.  
 Note.—The recognition of *substituta* as a *Caricca* from N. J. (Smith Cat.) and White Mts., N. H. (Slosson), is of course totally wrong.

*marginata* STEIN, Berl. Ent. Zeitsch., XLII, 221.—Col.

Sitka—Coquillett.

*monticola* VAN DER WULP, Biologia, Dipt., II, 338.—Guerrero, Mex.

*pici* MACQUART, Annales Soc. Ent. France, 1853, 657, pl. xx, f. 2 (*Aricia*).—San Domingo; the larva lives in a swelling on the wing of *Picus striatus*.

LOEW, Wien. Ent. Monatschr., v, 41 (*angustifrons*).—Cuba. [O. S. Cat., 167, on authority of "Loew in litt."]

*probata* WALKER, Trans. Ent. Soc., n. ser., v, 38.—Mex.

STEIN, Die Walk. Anth., 204, examined type; is a Tachinid near *Morinia*.

*relata* STEIN, Die Walk. Anth., 206.—U. S.

*rhodina* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 31.—Tuxpango, Mex.

*setiventris* STEIN, Berl. Ent. Zeitsch., XLII, 216.—Idaho.

*similis* FITCH, see *Anthomyia*.

*simplicis* COQUILLET, Proc. Wash. Acad. Sci., II, 450.—Sitka, Alaska.

*spiniventris* COQUILLET, Proc. Wash. Acad. Sci., II, 449.—Popof Id., Alaska.

*strigata* STEIN, see *alcathoë*.

"*tarsata* SIK." is a name mentioned by Hagen, Canad. Ent., XIII, 49, as given by Loew to specimens from N. Y. and Ill. in the collection at Harvard.

I do not know what it means.

*tenuirostris* VAN DER WULP, Biologia, Dipt., II, 337, pl. VIII, f. 15.—Guerrero, Mex.

*testacea* STEIN, Berl. Ent. Zeitsch., XLII, 208.—Idaho.

*urbica* VAN DER WULP, Biologia, Dipt., II, 338.—Mexico City.

*variata* FALLÉN, Muscides, 59 (*Musca*).—Europe.

MEIGEN, Syst. Besch., v, 97 (*Anthomyia*).

ZETTERSTEDT, Dipt. Scand., IV, 1418 (*Aricia*).

SCHINER, Fauna Austr., I, 628.

RONDANI, Dipt. Ital. Prod., VI, 188.

MEADE, Desc. List, 34.

STEIN, Berl. Ent. Zeitsch., XLII, 218, oc. in S. D., La., Ida., Mass., Ont., Va., Md.

#### EUSTALOMYIA.

KOWARZ, Verh. Zool.-Bot. Ges. Wien., 1873, 461.

MEADE, Desc. List, 37. 1897.

*brixia* WALKER, List, IV, 946 (*Anthomyia*).—Nova Scotia.

STEIN, Die Walk. Anth., 190, type redesc.; may be identical with *E. histrio* ZETT. of Europe.

*vittipes* ZETTERSTEDT, Dipt. Scand., IV, 1649 (*Anthomyza*).—N. Europe.

STEIN, Berl. Ent. Zeitsch., XLII, 222.—Pa.

N. J.—Smith Cat.

#### PROSALPIA.

POKORNY, Wien. Ent. Zeit., 1893, 54.

*arelate* WALKER, List, IV, 962 (*Eriphia*); 965 (*Eriphia pretiosa*).—Both Martin Falls, Canada.

STEIN, Die Walk. Anth., 187, 204, syn. and type redesc.

? COQUILLET, Proc. Wash. Acad. Sci., II, 451, oc. in Alaska, several places (*Eriphia*). Query by J. M. A.

*silvestris* FALLÉN, Muscides, 70 (*Musca*).—N. Europe.

ZETTERSTEDT, Dipt. Scand., IV, 1527 (*Aricia*).

? WALKER, List, IV, 927, 946, 962 (*Anthomyia apina*, *Anthomyia donuca*, *Eriphia grisea*).—Martin Falls, Canada; Nova Scotia; Martin Falls, Canada.

STEIN, Die Walk. Anth., 186, 195, 197, syn., with a little doubt in all the cases.

*Note.*—The *Hylemyia grisca* WALK., of Mrs. Slosson's White Mountain list, may not be the same species.

#### EREMOMYIA.

STEIN, Berl. Ent. Zeitsch., XLII, 223, 1898.

*apicalis* STEIN, Berl. Ent. Zeitsch., XLII, 227.—Idaho.

*cylindrica* STEIN, Berl. Ent. Zeitsch., XLII, 226.—Mass., Ind., Minn.

*humeralis* STEIN, Berl. Ent. Zeitsch., XLII, 224.—Ida., Ill.

*incompleta* STEIN, Berl. Ent. Zeitsch., XLII, 228.—Minn.

#### HAMMOMYIA.

RONDANI, Dipt. Ital. Prod., VI, 236, 1877.

CHARBONNIER, Ent. Mo. Mag., 1901, 48, discusses parasitism of European spp. of this genus on burrowing bees; see Hendel, Wien. Ent. Zeit., XX, 150.

*maculata* STEIN, Berl. Ent. Zeitsch., XLII, 228.—Idaho.

*unilineata* ZETTERSTEDT, Ins. Lapp., 675 (*Anthomyza*); Dipt. Scand., IV, 1518 (*Aricia*).—N. Europe.

SCHINER, Fauna Austr., I, 638 (*Anthomyia*).

STEIN, Berl. Ent. Zeitsch., XLII, 230, oc. in Idaho.

#### DOLICHOGLOSSA.

STEIN, Berl. Ent. Zeitsch., XLII, 230, 1898.

*americana* STEIN, loc. cit., and p. 286.—S. D.

#### PHORBIA.

DESVOIDY, Myodaires, 559, 1830.

MACQUART, Hist. Nat. Dipt., II, 323, 1835 (*Chortophila*).

RONDANI, Dipt. Ital. Prod., VI, 196, 1877 (id.).

VAN DER WULP, Biologia, Dipt., II, 339, 1896 (*Phorbia* and *Chortophila*).

MEADE, Desc. List, 43 and 47, 1897 (*Phorbia* and *Chortophila*).

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 293, 1892, notes.

*Note.*—Van der Wulp, and Meade following him, make a distinction between *Phorbia* and *Chortophila* in that the former has the abdomen narrow and depressed and in the latter it is cylindrical. Stein, however, in Berl. Ent. Zeitsch., XLII, 231, recognizes the equivalence of the two names, although adopting *Chortophila*, the later.

*acra* WALKER, of Mrs. Slosson's White Mt. list, is an error; see *Homalomyia manicata*.

*alaba* WALKER, List, IV, 948 (*Anthomyia*).—N. A.

STEIN, Die Walk. Anth., 186, pt. desc. of type (*Chortophila*).

*badia* WALKER, List, IV, 950 (*Anthomyia*).—Martin Falls, Canada.

STEIN, Die Walk. Anth., 188, type redesc. (*Chortophila*).

*betarum* LINTNER, 1st N. Y. Rept., 203, 209, fig. (*Chortophila*).—N. Y.; the larvæ mine in beet leaves.

*biciliata* COQUILLET, Proc. Wash. Acad. Sci., II, 451.—Berg Bay, Alaska.

*brassicæ* BOUCHÉ, Naturgesch. d. Garten-Insekten, 131, 1833; same, 1834, p. 73 (both *Anthomyia*).—Germany; larvæ in roots of cabbage.

MEIGEN, Syst. Besch., V, 165, 1826 (*Anthomyia floralis* FALLÉN).

MACQUART, Hist. Nat. Dipt., II, 326, 1835 (*Chortophila floccosa*).

- ZETTERSTEDT, Dipt. Scand., IV, 1536 (*Aricia floralis* MEIG. non FALLÉN).  
 HARRIS, Cat. Animals of Mass., 80, 1835; Ins. Inj. to Vegetation, 1841, 494 (*Anthomyia raphani*).—Mass.; larvæ in radishes.  
 CURTIS, Farm. Insects, 1860, 141, fig. (*Anthomyia radicum* LINNÉ).  
 SCHINER, Fauna Austr., I, 646 (*Anth. floralis* MEIG., from a Zetterstedt specimen).  
 FITCH, 11th N. Y. Rept., 59-61 and 40-43 (*Anth. raphani* and *brassicæ*).  
 LINTNER, 1st N. Y. Rept., 184-191, habits, figs., etc.; 5th Rept., 157, remedies.—N. Y.  
 RILEY, Dept. Agric. Rept., 1884, 319-321, life hist., etc.; pl. VIII, f. 5 (*Anthomyia*).  
 SLINGERLAND, Bull. 78, Cornell Univ. Ag'l Experiment Station, 1894: an admirable treatise on this insect from the biological, economic and systematic standpoints; many illustrations, full bibliography, etc. Perhaps the best entomological bulletin yet issued from an American agricultural experiment station.  
 MEADE, Desc. List Brit. Anth., 48 (*floccosa*).—England.  
 FLETCHER, Rept. Ent. and Bot., 1898, larvæ in turnips in Alberta.  
 STEIN, Berl. Ent. Zeitsch., XLII, 236, oc. in Ont. and Mass. (*Chortophila floccosa*).  
 CHITTENDEN, Bull. 33, n. ser., Div. of Ent., 80, larvæ in celery.  
*Note*.—This species, commonly called the Cabbage Maggot, infests in its larval stage the roots of cabbage, radish, cauliflower, turnip, winter cress, hedge mustard, celery, and doubtless other plants.  
**ceparum** MEIGEN, Syst. Besch., VI, 376, 1830 (*Anthomyia*).—Europe; larvæ infesting onions.  
 BOUCHÉ, Naturgeschichte d. Garten-Insekten, I, 73 (id.).  
 SCHINER, Fauna Austr., I, 643 (as syn. of *Anth. antiqua* MEIG.).  
 FITCH, 11th N. Y. Rept., 487-494 (sep. 31-38), habits, etc. (*Anthomyia*).—N. Y.  
 WALSH, Amer. Entomologist, II, 110, fig. 72 (id.).  
 LINTNER, 1st N. Y. Rept., 172-181, bibliog., habits, remedies, etc.  
 SLINGERLAND, Bull. 78, Cornell Univ. Ag'l Experiment Station, 495, figs.; biology, desc., etc.—N. Y.  
 SMITH, Ent. News, VIII, 101-104; habits, remedies, etc.  
 N. J.—Smith Cat. (*antiqua*).  
**cilicrura** RONDANI, see *fusciceps*.  
**[cilioraca**, mentioned by HAGEN, Canad. Ent., XIII, 50, as recognized from N. A. by Loew, must be only a misprint for *cilicrura*.]  
**cinerella** FALLÉN, Muscides, 77 (*Musca*).—N. Europe.  
 ZETTERSTEDT, Ins. Lapp., 686 (*Anthomyza*); Dipt. Scand., IV, 1611 (*Aricia*).  
 RONDANI, Dipt. Ital. Prod., VI, 220.  
 MEADE, Desc. List, 45 (*Chortophila*).  
 STEIN, Berl. Ent. Zeitsch., XLII, 235, oc. in Ia., Ida., S. D., Mass., Ont., Ill. (id.).  
 LUNDBECK, Dipt. Grœnl., II, 284, oc. in Greenland (id.).  
 WEBSTER, Canad. Ent., 1900, 212, reared from wheat plants in Ohio.  
 HOWARD, Proc. Wash. Acad. Sci., II, 583, fig. and habits; bred from human excrement in D. C. and Va.  
 N. J.—Smith Cat.; Montreal—Chagnon (both *Chortophila*).  
**fabricii** HOLMGREN, Ins. Nordgrœnl., 101 (*Aricia*).—Greenland.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 451, oc. in Alaska and White Mts. N. H. (*Hylemyia*).

LUNDBECK, Dipt. Grœnl., II, 285, oc. in Greenland.

STEIN, Wien. Ent. Zeit., XXI, 58, type redesc. (*Chortophila*).

**floccosa** MACQUART, see *brassicæ*.

**fugax** MEIGEN, Syst. Besch., v, 147 (*Anthomyia*).—Europe.

SCHINER, Fauna Austr., I, 646 (id.).

STÆGER, Grœnl. Antl., 355, 42 (*Anthomyia striolata* FALLÉN), oc. in Greenland.

SCHIÖDTE, Tillag til Rink's Grœnland, etc., 69, oc. in Greenland (id.).

STROBL, Anthomyidæ Steiermarks, 206 (*Anthomyia*).

LUNDBECK, Dipt. Grœnl., II, 284, syn., and oc. in Greenland.

**fusciceps** ZETTERSTEDT, Dipt. Scand., IV, 1552 (*Aricia*).—Denmark.

WALKER, List, IV, 949, 950, 951, 964, 966 (*Anthomyia tinia*, *perrima*, *viana*, *Eriphia marginata*, and ? *Dialyta cupreifrons*).—All Martin Falls, except *viana*, from Nova Scotia. Syn. by Stein, from types; that of *cupreifrons* is a little doubtful.

FITCH, Trans. N. Y. Agr. Soc., xv, 1855, 533; 1st and 2d Repts., 1856, 301, pl. I, f. 3 (*Hylemyia deceptiva*).—N. Y.

RONDANI, Att. Soc. Ital. Sci. Nat., IX, 1866, 165; Dipt. Ital. Prod., VI, 213 (*Chortophila cilicrura*).

RILEY, 1st Mo. Rept., 154, figs.; larvæ attack seed-corn when sprouting (*Anthomyia zeæ*).—N. J. Desc. quoted in Gen. Index to Mo. Repts., p. 89.

RILEY, 9th Mo. Rept., 92, figs.; larvæ live on eggs of Rocky Mt. locust (*Anthomyia radicum*, var. *calopteni*).—Minn.

? RILEY, PACKARD, and THOMAS, 1st Rept. U. S. Ent. Comm., 285–289, figs. and desc.; larvæ devour eggs of Rocky Mt. locust. Referred to *angustifrons* MEIG., which Rondani (Dipt. Ital. Prod., VI, 216) regards as the first name of *fusciceps*.

HAGEN, Canad. Ent., XIII, 49, reports *Hylemyia deceptiva* in the Harvard collection.

LINTNER, 1st N. Y. Rept., 199–202, fig. and notes (*Phorbia* ? *deceptiva* and *zeæ*); 181–184, habits, fig., etc. (*cilicrura*).

HOWARD, Ins. Life, VI, 372, records as *parasite of Loxostege sticticalis*, the sugar-beet web-worm (mentioned as *P. fuscipes*, corrected Ins. Life, VII, 278); VII, 429, note on injury to wax beans by larvæ, in Wis.

COQUILLET, Ins. Life, VI, 372, syn. of *deceptiva*, from type.

SLINGERLAND, Bull. 78, Cornell Univ. Experiment Station, 499–502, habits, syn., etc.; larvæ feed in cabbage, radish, onion, beans, potatoes, and hedge mustard.

HOWARD, Proc. Wash. Acad. Sci., II, 584, habits; reared from human excrement.—D. C., Va., Md.

CHITTENDEN, Bull. 33, n. ser., Div. of Ent., 84, figs., affecting the planted seed of beans and peas.

CHITTENDEN, Bull. 43, Div. of Ent., 68–70, biol., figs., etc. (*Pegomyia*). The Seed-Corn Maggot. Also lives in roots of beet.

N. J.—Smith Cat.; Montreal—Chagnon; White Mts. N. H.—Slosson; Fla.—Johnson; Beulah, N. M.—Skinner.

*Notc.*—The *Phorbia perrima* from White Mts., in Mrs. Slosson's list, must be an erroneous determination.

**fuscisquama** VAN DER WULP, Biologia, Dipt., II, 340.—Guerrero, Mex.

**icterica** HOLMGREN, Ins. Nordgrœnl., 102 (*Aricia*).—Greenland.

LUNDBECK, Dipt. Scand., II, 286.—Greenland.

**lævis** STEIN, Berl. Ent. Zeitsch., XLII, 231 (*Chortophila*).—Mass.

N. J.—Smith Cat. (id.).



- latipennis** ZETTERSTEDT, Ins. Lapp., 676 (*Anthomyza*); Dipt. Scand., IV, 1509 (*Aricia*).—N. Europe.  
STEIN, Berl. Ent. Zeitsch., XLII, 235, oc. in Mass. and Pa. (*Chortophila*).
- lupini** COQUILLET, Ent. News, XII, 206.—Los Angeles Co., Cal.; bred from stems of *Lupinus albus*.
- mæsta** HOLMGREN, Ins. Nordgrœnl., 102 (*Aricia*).—N. Greenland.  
LUNDBECK, Dipt. Grœnl., II, 286.—Greenland.  
STEIN, Wien. Ent. Zeit., XXI, 59, type redesc. (*Chortophila*); occurs also at Genthin, Prussia.
- morosa** VAN DER WULP, Biologia, Dipt., II, 339.—Mexico City.
- muscaria** FABRICIUS, Ent. Syst., IV, 395 (*Stomyxys*); Syst. Antl., 282 (id.).—Europe.  
ZETTERSTEDT, Ins. Lapp., 683 (*Anthomyza brevicornis*); Dipt. Scand., IV, 1534 (*Aricia brevicornis*). [Stein.]  
SCHINER, Fauna Austr., I, 644 (*Anthomyia*).  
WALKER, List, IV, 954 and 961 (*Anthomyia determinata* and *Eriphia ciliata*).—Nova Scotia and Martin Falls, Canada. [Stein, from the types.]  
MEADE, Desc. List, 51.  
STEIN, Berl. Ent. Zeitsch., XLII, 236, recognizes a specimen from N. A. (Vancouver Id.?) ; Die Walk. Anth., 192, 195, syn. (*Chortophila*).
- planipalpis** STEIN, Berl. Ent. Zeitsch., XLII, 234 (*Chortophila*).—Idaho.
- platyura** MEIGEN, Syst. Besch., V, 171 (*Anthomyia*).—Europe.  
SCHINER, Fauna Austr., I, 645; the larvæ have been bred from the bulb of a species of *Allium*.  
COQUILLET, Psyche, Jan., 1901, 150, oc. in N. M.; "Hitherto reported as occurring over the greater part of the United States, east of Idaho and Kans."  
Beulah, N. M.—Skinner.
- pretiosa** WALKER, of Coquillett, see *Prosalpia arlate*.
- prisca** VAN DER WULP, Biologia, Dipt., II, 340.—Durango, Patzcuaro, and Jalisco, Mex.
- rubivora** COQUILLET, Canad. Ent., XXIX, 162.—Ithaca, N. Y.; the larvæ boring in the stems of the cultivated raspberry.  
LINTNER, 11th N. Y. Rept., 170 (*Anthomyia* sp.?), same habits.  
SLINGERLAND, Bull. 126, Cornell Univ. Expt. Station, 54-60, life hist.  
BRITTON, Rept. Conn. Ex. Station for 1902, 167, pl. XIV, biology, etc.—Conn.
- ruficeps** ZETTERSTEDT, Ins. Lapp., 698 (*Anthomyza*); Dipt. Scand., V, 1770 (id.).—N. Europe.  
MEIGEN, Syst. Besch., V, 177 (*Anthomyia*).  
SCHINER, Fauna Austr., I, 644 (id.).  
STÆGER, Grœnl. Antl., 366, oc. in Greenland (id.).  
WEBSTER, Canad. Ent., 1900, 212, reared from young wheat plants in Ohio.
- spinipes** BIGOT, Annales, 1885, 279 (*Chortophila*).—Rocky Mts.
- stlemba** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 29 (*Chortophila*).—Mex.
- substriata** STEIN, Berl. Ent. Zeitsch., XLII, 233 (*Chortophila*).—Ida., Mass., Pa.

#### HYLEPHILA.

- RONDANI**, Dipt. Ital. Prod., VI, 233, 1877.
- silvestris** FALLÉN, Muscides, 70 (*Musca*).—Europe.  
ZETTERSTEDT, Ins. Lapp., 682 (*Anthomyza murina*); Dipt. Scand., IV, 1454 and 1527 (*Aricia decrepita* and *silvestris*). [Stein, from Zetterstedt's types.]

COQUILLET, Proc. Wash. Acad. Sci., II, 452, oc. at Kukak Bay, Popof Id., and Kadiak, Alaska.

**PEGOMYIA.**

DESVOIDY, Myodaires, 598, 1830 (*Pegomya*).

MACQUART, Hint. Nat. Dipt., II, 350. 1835.

MEADE, Ent. Mo. Mag., 1882, July, p. 13; Desc. List, 53, 1897.

LINTNER, 1st N. Y. Rept., 181, 1882.

TOWNSEND, Trans. Amer. Ent. Soc., XIX, 293, notes.

*affinis* STEIN, Berl. Ent. Zeitsch., XLII, 239 (as *vicina* LINTNER); 286 (corrected and name changed).—Pa., Va., Ill.

*bicolor* WIEDEMANN, Zool. Mag., I, 77 (*Anthomyia*).—Europe.

FALLÉN, Muscides, 91 (*Musca*).

MEIGEN, Syst. Besch., v, 185 (id.).

ZETTERSTEDT, Dipt. Scand., v, 1773 (*Anthomyza*).

SCHINER, Fauna Austr., I, 635 (*Anthomyia*).

RONDANI, Dipt. Ital. Prod., VI, 205 (*Chortophila*).

STEIN, Berl. Ent. Zeitsch., XLII, 239, oc. in Wash.

*calyprata* WEBSTER, Canad. Ent., XXX, 19, reared from leaf-mining larva in *Rumex* sp. ZETTERSTEDT, Dipt. Scand., v, 1775 (*Anthomyza*).—N. Europe.

STEIN, Berl. Ent. Zeitsch., XLII, 237.—Wash., Minn., Mass., Pa., Ill.

*communis* WALKER, see *Euryomma*.

? *conformis* FALLÉN, Muscides, 82 (*Musca*).—Europe.

MEIGEN, Syst. Besch., v, 180 (*Anthomyia*).

LUNDBECK, Dipt. Grœnl., II, 287, doubtfully reported from Greenland.

*costalis* STEIN, Berl. Ent. Zeitsch., XLII, 243.—S. D.

COQUILLET, Proc. Wash. Acad. Sci., II, 451, oc. in Saldovia and Kukak Bay, Alaska. N. M.—Coq.

*debilis* STEIN, Die Walk. Anth., 195.—U. S.

*finitima* STEIN, Berl. Ent. Zeitsch., XLII, 241.—S. D., Ill.

*flavifrons* WALKER, List, IV, 966 (*Eriphia*).—Martin Falls, Canada.

STEIN, Die Walk. Anth., 196. is a female *Pegomyia*, unrecognizable without the male.

*latitarsis* ZETTERSTEDT, Dipt. Scand., v, 1754 (*Anthomyza*).—N. Europe.

SCHINER, Fauna Austr., I, 635 (*Anthomyia*).

RONDANI, Dipt. Ital. Prod., VI, 161 (*Anthomyia*).

MEADE, Desc. List, 47.

STEIN, Berl. Ent. Zeitsch., XLII, 249, oc. in Mass.

N. J.—Smith Cat.

*nitidula* COQUILLET, Trans. Amer. Ent. Soc., XXIX, 103.—Beulah, N. M.

*rufescens* STEIN, Berl. Ent. Zeitsch., XLII, 238.—Ontario, Canada.

*ruficeps* STEIN, Berl. Ent. Zeitsch., XLII, 286.—La.

*setosa* STEIN, Berl. Ent. Zeitsch., XLII, 247.—Idaho.

*spinossissima* STEIN, Berl. Ent. Zeitsch., XLII, 242.—Kans.

*trilineata* STEIN, Berl. Ent. Zeitsch., XLII, 245.—S. D.

*trivittata* STEIN, Berl. Ent. Zeitsch., XLII, 246.—Mass., Wash.

*unicolor* STEIN, Berl. Ent. Zeitsch., XLII, 236.—Pa. N. J.—Smith Cat.

*vicina* LINTNER, 1st N. Y. Rept., 203-211, fig., habits, etc.; larvæ mine in beet leaves.—N. Y.

? RILEY and HOWARD, Insect Life, III, 470, note. Query by J. M. A.

HOWARD, Ins. Life, VII, 379, fig. and life hist., same habit.—N. Y. and Cal.

FORBES, Bull. 60, Ill. Expt. Station, 407, fig. and notes; larvæ mining leaves of sugar beets.

PETTIT, Bull. 175, Mich. Expt. Station, July, 1899, notes and original fig.; repeated in Annual Rept. Mich. Expt. Station for 1899, 135.—Mich. FORBES, 21st Ill. Rept., 59–61. fig.

CHITTENDEN, Bull. 43, Div. of Ent., 50–52, life hist., figs., etc.

*Notc.*—Stein's description of the species, Berl. Ent. Zeitsch., XLII, 239, turned out to be based on specimens of what he afterwards called *affinis* (loc. cit., p. 286). The latter species had been to some extent distributed among American collections by Mr. Coquillett, under the name of *vicina*.

#### PENTACRICIA.

STEIN, Berl. Ent. Zeitsch., XLII, 249, 1898.

*aldrichii* STEIN, loc. cit.—Kans., Ga., Ill.

#### CHIROZIA.

RONDANI, Dipt. Ital. Prod., VI, 238, 1876.

MEADE, Desc. List, 77, 1897.

*capito* COQUILLET, Proc. U. S. N. M., XXV, 123.—Manumuskine, N. J.

*glauca* COQUILLET, Proc. Wash. Acad. Sci., II, 452.—Farragut Bay, Alaska.

*idahensis* STEIN, Berl. Ent. Zeitsch., XLII, 251.—Idaho.

*thinobia* THOMSON, of Coquillett, see *Scatophaga*.

#### HOPLOGASTER.

RONDANI, Dipt. Ital. Prod., VI, 246, 1877.

*nigritarsis* STEIN, Berl. Ent. Zeitsch., XLII, 252.—N. Y. N. J.—Smith Cat.

#### TETRACHÆTA.

STEIN, Berl. Ent. Zeitsch., XLII, 254, 1898.

*unica* STEIN, loc. cit.—Mass.

#### PHYLLOGASTER.

STEIN, Berl. Ent. Zeitsch., XLII, 256, 1898.

*cordyluroides* STEIN, loc. cit.—Fla., Mass.

#### CARICEA.

DESVOIDY, Myodaires, 530, 1830.

RONDANI, Dipt. Ital. Prod., VI, 272, 1877.

MEADE, Desc. List, 70, 1897.

SCHNABL, Horæ Soc. Ent. Ross., XXIV, 495, 1890, as a subgenus of *Canosia*; op cit., XXXVI, 170, 1902.

STEIN, Berl. Ent. Zeitsch., XLII, 257, 1898.

*Notc.*—There is much difference of opinion as to the essential characters which distinguish this from *Canosia*; some good authorities do not regard it as distinct. Until the species have been adequately studied with reference to the decisive points, it seems hardly possible to avoid confusion.

*albicornis* MEIGEN, Syst. Besch., V, 220 (*Canosia*).—Europe.

SCHINER, Fauna Austr., I, 664 (id.).

White Mts., N. H.—Slosson; det. by Coq.

*antica* WALKER, Dipt. Saund., 367 (*Canosia*).—U. S.

STEIN, Die Walk. Anth., 186, says the type is broken, but apparently the same as his *insignis*.

N. J.—Smith Cat.; Fla., several places—Johnson.

*insignis* STEIN, Berl. Ent. Zeitsch., XLII, 257.—Fla.

See *antica*.

- fuscopunctata* MACQUART, of Slosson's and Johnson's lists, see *Canosia*.  
 ? *intacta* WALKER, Dipt. Saund., 369 (*Canosia?*).—U. S.  
 Montreal—Chagnon.
- nana* ZETTERSTEDT, Dipt. Scand., iv, 1716 (*Anthomyza*).—N. Europe.  
 SCHINER, Fauna Austr., i, 667 (*Canosia*).  
 RONDANI, Dipt. Ital. Prod., vi, 274.  
 STEIN, Berl. Ent. Zeitsch., XLII, 259.—Mich., Ia., Mass., La.
- tigrina* FABRICIUS, Spec. Ins., II, 444 (*Musca*); Syst. Antl., 297 (id.).—Europe.  
 ZETTERSTEDT, Dipt. Scand., iv, 1712 (*Anthomyza*).  
 WALKER, List, iv, 1970 (*Canosia sexmaculata*).—Martin Falls, Canada.  
 SCHINER, Fauna Austr., i, 663 (*Canosia*).  
 STEIN, Die Walk. Anth., 208, syn.

### CÆNOSIA.

- MEIGEN, Syst. Besch., v, 210, 1826.  
 SCHINER, Fauna Austr., i, 662, 1862, inclusive of *Caricca*.  
 RONDANI, Dipt. Ital. Prod., vi, 253, 1877.  
 VAN DER WULP, Biologia, Dipt., II, 343, def. and table of Mexican spp., 1896.  
 MIK, Wien. Ent. Zeit., XIV, 296–300, pl., describes a European species breeding in flowers of *Trollius*.  
 Compare also the species of *Caricca*, some of which may be better placed here.
- albifrons* ZETTERSTEDT, see *Limnospila*.  
*antennalis* STEIN, Berl. Ent. Zeitsch., XLII, 272.—Ga.  
*antica* WALKER, see *Caricca*.  
*atrata* WALKER, see *lata*.  
*aurifrons* STEIN, see *ausoba*.  
*ausoba* WALKER, List, xv, 938 (*Anthomyia*); 941 (*Anthomyia alone*).—Nova Scotia; Martin Falls, Canada. [Stein.]  
 STEIN, Berl. Ent. Zeitsch., XLII, 260 (*aurifrons*); Die Walk. Anth., syn.—Ont., Mass., Pa., Ill.  
 N. J.—Smith Cat.; Montreal—Chagnon.
- bicolor* BIGOT, Annales, 1885, 302 (*Dialyta*).—Mex.  
 GIGLIO-TOS, Ditt. del Mess., iv, 33, note.—Tuxpango, Mex.
- bistriata* VAN DER WULP, Biologia, Dipt., II, 345.—Orizaba and Tabasco, Mex.  
*calopyga* LOEW, Cent., x, 71.—Pa.  
 STEIN, Berl. Ent. Zeitsch., XLII, 272, oc. in Ill.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson (the latter *Caricca*).
- canescens* STEIN, see *lata*.  
*femoralis* VAN DER WULP, Biologia, Dipt., II, 345.—Guerrero, Orizaba, Mexico City and Vera Cruz, Mex.  
*flavicoxa* STEIN, Berl. Ent. Zeitsch., XLII, 271.—Ill.  
 HOWARD, Canad. Ent., XXXIII, 44, oc. Va.; bred from cow-dung.
- flavifrons* STEIN, Berl. Ent. Zeitsch., XLII, 261.—Ga.  
*flavipes* WILLISTON, Trans. Ent. Soc. Lond., 1896, 370.—St. Vincent, W. I.  
*flavipes* (bis) STEIN, Berl. Ent. Zeitsch., XLII, 268 and 288.—Mass., Ga.  
 According to Stein, this comes very near to *lata* (his *canescens*), so that the preoccupation may be immaterial, if it prove a synonym.
- fuscopunctata* MACQUART, Dipt. Exot., Suppl. iv, 2, 270.—N. A.  
 See note to *ovata*.  
*geniculata* FALLÉN, Muscides, 89 (*Musca*).—Europe.

- ZETTERSTEDT, Dipt. Scand., iv, 1720 (*Anthomyza*).  
 SCHINER, Fauna Austr., i, 665.  
 MEADE, Desc. List, 75.  
 STEIN, Berl. Ent. Zeitsch., XLII, 267, oc. in N. A.—No locality.  
 AXTON, N. Y.—M. and H.
- hypopygialis** STEIN, Berl. Ent. Zeitsch., XLII, 268.—Mass., Ga., Ill.  
**incisurata** VAN DER WULP, Tijdschr. v. Ent., XII, 84.—Wis.  
**insularis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 371, pl. XII, f. 123.—St. Vincent, W. I.
- intacta** WALKER, see *Dexiopsis lacticipennis*.
- lata** WALKER, Dipt. Saund., 368 and 369 (*lata* and *atrata*).—U. S.  
 STEIN, Berl. Ent. Zeitsch., XLII, 265 (*cancscens*).—Mass. to Fla. and Ida.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 445, oc. in Alaska, and syn. of Stein.  
 HOWARD, Canad. Ent., XXXIII, 44, oc. in Va.; bred from cow-dung.  
 STEIN, Die Walk. Anth., 187, 199, partially confirms from types the identity of *lata* and *atrata*, which the descriptions certainly indicate, as far as they can be trusted.  
 N. J.—Smith Cat. (*cancscens*); White Mts., N. H.—Slosson (*Caricca*); Fla.—Johnson.
- macrocera** VAN DER WULP, Biologia, Dipt., II, 344, pl. VIII, f. 17.—Guerrero, Mex.  
**modesta** LOEW, Cent., x, 72.—Wash.
- nivea** LOEW, Cent., x, 70.—Pa.  
 STEIN, Berl. Ent. Zeitsch., XLII, 272, oc. in Pa.  
 White Mts., N. H.—Slosson (*Caricca*); N. J.—Smith Cat.; Fla.—Johnson.
- nudiseta** STEIN, Berl. Ent. Zeitsch., XLII, 273.—Mass.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- oscillans** VAN DER WULP, Biologia, Dipt., II, 344.—Guerrero, Mex.
- ovata** STEIN, Berl. Ent. Zeitsch., XLII, 263 and 288.—Ga., Ill., La.  
*Note*.—I do not agree with Mr. Coquillett in calling this a synonym of *fuscopunctata*; the named specimens returned to me by Stein, through Dr. Hough, are not the same species which Coquillett determined as *fuscopunctata* for Dr. Nason, and sent by him to me. I should call *fuscopunctata* unrecognizable.
- pacifera** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., IV, 31.—Tuxpango, Mex.
- pallipes** STEIN, Berl. Ent. Zeitsch., XLII, 270.—Ont., Ill.  
 HOWARD, Proc. Wash. Acad. Sci., II, 585, oc. in Va. and note.
- punctulata** VAN DER WULP, Biologia, Dipt., II, 343.—Guerrero and Patzcuaro, Mex.
- ? **pygmæa** ZETTERSTEDT, Dipt. Scand., iv, 1721 (*Anthomyza*).—N. Europe.  
 MEADE, Ent. Mo. Mag., Apr., 1878, oc. in N. A., with a slight doubt.
- sexmaculata** WALKER, see *Caricca tigrina*.
- ? **sexnotata** MEIGEN, Syst. Besch., v, 213.—Europe.  
 SCHINER, Fauna Austr., I, 665.  
 MEADE, Desc. List, 75.  
 STEIN, Berl. Ent. Zeitsch., XLII, 263.—Wash.: recognized with a doubt,—may be a new species.
- solita** WALKER, Dipt. Saund., 368.—Martin Falls, Canada.  
 CHITTENDEN, Bull. 27, n. ser., Div. of Ent., adult reported as feeding on adults of *Sciara inconstans* in greenhouses; also observed to feed on adults of *Gymnopternus spectabilis*.

- White Mts., N. H.—Slosson; St. Augustine and Ormond, Fla.—Johnson.  
 ? *spinosa* WALKER, List. iv, 967.—Martin Falls, Canada.  
 STEIN, Die Walk. Anth., 210, type redesc.; scarcely a *Canosia*.  
*substituta* WALKER, see *Hylomyia lipsia*.  
*tarsalis* WALKER, Dipt. Saund., 355 (*Anthomyia*).—U. S.  
 STEIN, Die Walk. Anth., 213, type redesc.  
*tenuicornis* VAN DER WULP, Biologia, Dipt., II, 343.—Vera Cruz, Mex.  
*tibialis* STEIN, Berl. Ent. Zeitsch., XLII, 275.—Ga., Pa., Ill., La.  
*triangula* FALLÉN, Muscides, 74, 82 (*Musca*).—Europe.  
 ZETTERSTEDT, Ins. Lapp., 685 (*Anthomyia*); Dipt. Scand., iv, 1482 (*Aricia*).  
 SCHINER, Fauna Austr., I, 664.  
 MEADE, Desc. List, 74.  
 LUNDBECK, Dipt. Greenl., II, 289, oc. in Greenland.  
*tricincta* LOEW, see *Cordylura*.  
*triseta* STEIN, Berl. Ent. Zeitsch., XLII, 262.—Mass. N. J.—Smith Cat.  
*uvens* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 32.—  
 Mex.  
*varicornis* COQUILLET, Proc. U. S. N. M., XXII, 256.—Porto Rico.  
*verna* FABRICIUS, Syst. Ent., iv, 330 (*Musca*); Syst. Antl., 304 (id.).—Europe.  
 COQUEBERT, Illustr., 106, pl. XXIV, f. 2 (*Musca*).  
 MEIGEN, Syst. Besch., v, 214.  
 SCHINER, Fauna Austr., I, 666.  
 WEBSTER, Canad. Ent., 1900, 213, oc. in Ohio; det. Coquillett.  
 White Mts., N. H.—Slosson.  
*vitilis* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 147; Ditt. del Mess., iv, 32.—  
 Tuxpango, Mex.

#### DEXIOPSIS.

- POKORNY, Verh. Zool.-Bot. Ges., 1893, 533.  
*basalis* STEIN, Berl. Ent. Zeitsch., XLII, 259.—Ill.  
*lacteipennis* ZETTERSTEDT, Dipt. Scand., iv, 1722 (*Anthomyza*).—N. Europe.  
 ? WALKER, Trans. Ent. Soc., n. ser., v, 318 (*Canosia intacta*).—N. A.  
 STEIN, Berl. Ent. Zeitsch., XLII, 259 (*Lisopcephala*), oc. in S. D., Kans.,  
 La., Wash., Ga., Mass., Col., Ill.  
 STEIN, Die Walk. Anth., 198, syn. of Walker, with a doubt.  
 N. J.—Smith Cat.; Montreal—Chagnon.  
*Note.*—The *Canosia intacta* of Mrs. Slosson's list, from the White Mts.,  
 is probably an error of identification.

#### LIMNOSPILA.

- SCHNABL, Wien. Ent. Zeit., XXI, 111, 1902.  
*albifrons* ZETTERSTEDT, Dipt. Scand., VIII, 330f (*Aricia*).—N. Europe.  
 ? RONDANI, Dipt. Ital. Prod., VI, 267 (*Canosia obscuripes*). [Syn. by  
 Schnabl, with a doubt.]  
 STEIN, Berl. Ent. Zeitsch., XLII, 276 (*Canosia*).—Mass.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 446, oc. in Alaska.

#### DIALYTA.

- MEIGEN, Syst. Besch., v, 208, 1826.  
 SCHINER, Fauna Austr., I, 656, 1862.  
*bicolor* BIGOT, see *Canosia*.  
*cupreifrons* WALKER, see *Phorbia fusciceps*



## SCHENOMYZA.

HALIDAY, Ent. Mo. Mag., 1, 106, 1838.

RONDANI, Dipt. Ital. Prod., vi, 239, 1877.

VAN DER WULP, Biologia, Dipt., II, 346, brief diagnosis, 1896.

MEADE, Desc. List Brit. Anth., 78, 1897.

**chrysostoma** LOEW, Cent., IX, 86.—N. H.

STEIN, Berl. Ent. Zeitsch., XLII, 277, oc. in Ont., Mass., Ill.

N. J.—Smith Cat.

**dorsalis** LOEW, Cent., x, 73.—D. C.

STEIN, Berl. Ent. Zeitsch., XLII, 288.—La.

N. J.—Smith Cat.; Ohio—Webster; Beulah, N. M.—Skinner.

**pulicaria** VAN DER WULP, Biologia, Dipt., II, 346, pl. VIII, f. 18.—Guerrero, Mex.

## LISPA.

LATREILLE, Précis caract. gén. Ins., 169, 1796.

MEIGEN, Syst. Besch., v, 224, 1826 (*Lispe*).

LOEW, Stett. Ent. Zeit., 1847, 23 (*Lispe*).

SCHINER, Fauna Austr., I, 658, 1862 (*Lispe*).

RONDANI, Dipt. Ital. Prod., VI, 282, 1877.

VAN DER WULP, Biologia, Dipt., II, 342 (*Lispe*), 1896.

MEADE, Desc. List Brit. Anth., 69, 1897.

**albitarsis** STEIN, Berl. Ent. Zeitsch., XLII, 277.—Kans., Ga., Mass., Pa., Ill., La.

**consanguinea** LOEW, Wien. Ent. Monatsch., II, 8.—Europe.

SCHINER, Fauna Austr., I, 661.

OSTEN SACKEN, Cat., 171, oc. in Texas, on authority of "Loew in litt."

See also references under *tentaculata*.

**flavicincta** LOEW, Stett. Ent. Zeit., VIII, 27.—Europe.

OSTEN SACKEN, Cat., 171, oc. in Hudson Bay Terr., on authority of "Loew in litt."

**hispidia** WALKER, List, IV, 971.—Martin Falls, Canada.

White Mts., N. H.—Slosson.

**nasoni** STEIN, Berl. Ent. Zeitsch., XLII, 280.—S. D., Ga., Ill., La.

**nigromaculata** STEIN, see *palposa*.

**palposa** WALKER, List, IV, 926 (*Anthomyia*).—Martin Falls, Canada.

? WALKER, List, IV, 972 (*simillima*).—Martin Falls, Canada. [Stein, with a doubt.]

STEIN, Die Walk. Anth., 203, 209, syn.

*Note*.—The *Mydæa palposa* of Mrs. Slosson's list is a mistake.

**rufitibialis** MACQUART, Dipt. Exot., II, 3, 168, pl. XXII, f. 7.—Brazil or Chile.

COQUILLET, Proc. U. S. N. M., XXII, 256, oc. in Porto Rico.

**serotina** VAN DER WULP, Biologia, Dipt., II, 342.—Vera Cruz, Tabasco and Mexico City, Mex.

**sociabilis** LOEW, Cent., II, 72.—D. C.

STEIN, Berl. Ent. Zeitsch., XLII, 281.—Mass.

White Mts., N. H.—Slosson; Col.—J. M. A.

**tentaculata** DEGEER, Mém. Hist. Nat. Ins., VI, 42 (*Musca*).—Europe.

LATREILLE, Gen. Crust. et Ins., IV, 347.

FALLÉN, Muscides, 93.

MEIGEN, Syst. Besch., v, 226, pl. XLV, f. 15.

MACQUART, Hist. Nat. Dipt., II, 314.

ZETTERSTEDT, Dipt. Scand., v, 1796.

WALKER, Ins. Brit., II, 147; List, IV, 962 (*Eriphia accla*).—England; Martin Falls, Canada. [Syn. by Stein, with a doubt.]

- SCHINER, Fauna Austr., I, 660.  
 VAN DER WULP, Tijdschr. v. Ent., XI, 1868, pl. II, f. 6.  
 RONDANI, Dipt. Ital. Prod., VI, 289.  
 MEADE, Desc. List, 69.  
 KOWARZ, Wien. Ent. Zeit., XI.  
 WILLISTON, Dipt. of Death Valley Exped., 257, bibliog.; oc. in New England, Mich., S. D., and Cal.  
 STEIN, Berl. Ent. Zeitsch., XLII, 281, explains difference between this and *consanguinea*.—Ida., S. D., Kans., Wash.  
 SCHNABL, Wien. Ent. Zeit., XXI, 66, difference between this and some European species, including *consanguinea*, described and figured.
- uliginosa** FALLÉN, Muscides, 93.—Europe.  
 LOEW, Stett. Ent. Zeit., VIII, 24.  
 SCHINER, Fauna Austr., I, 661.  
 RONDANI, Dipt. Ital. Prod., VI, 292.  
 MEADE, Ent. Mo. Mag., XIV, 252, oc. in N. A.; Desc. List, 70.  
 KOWARZ, Wien. Ent. Zeit., XI.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 368, oc. in St. Vincent, W. I.  
 VAN DER WULP, Biologia, Dipt., II, 342, oc. at Patzcuaro and Mexico City, Mex.  
 STEIN, Berl. Ent. Zeitsch., XLII, 280, oc. in Ida., Pa., Ont., Ill.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson; Fla.—Johnson.

#### FUCELLIA.

- DESVOIDY, Annales Soc. Ent. France, 1841, 269.  
 HALIDAY, Ann. Nat. Hist., 1838 (*Halithca*, preoc.).  
 SCHINER, Fauna Austr., II, 15, 1864.  
 BECKER, Berl. Ent. Zeitsch., XXXIX, 80, 1894.
- ariciiformis** HOLMGREN, Ins. Nordgrönl., 103 (*Scatophaga*).—Greenland.  
 LUNDBECK, Dipt. Grönl., II, 292, fig.—Greenland.
- fucorum** FALLÉN, Scatomyzides, 5 (*Scatomyza*).—Europe.  
 MEIGEN, Syst. Besch., v, 253 (*Scatophaga*).  
 ZETTERSTEDT, Dipt. Scand., v, 1982 (*Scatomyza*).  
 SCHINER, Fauna Austr., II, 15.  
 CURTIS, Ins. Ross's Exped., LXXX, oc. in Arctic America.  
 STEGER, Grönl. Antl., oc. in Greenland.  
 COQUILLET, Dipt. of Commander Ids., 344; Proc. Wash. Acad. Sci., II, 453.—Commander Ids.; Alaska, various places.  
 HOWARD, Proc. Wash. Acad. Sci., II, 599, oc. in Ga. and Porto Rico.  
 N. J.—Smith Cat.; Fla.—Johnson; Greenland—Lundbeck.
- Note.*—This species is common on sea-beaches, about sea-weeds and other refuse.
- intermedia** LUNDBECK, Dipt. Grönl., II, 291, fig.—Greenland.

#### SCATOPHAGIDÆ.

- BECKER, Berl. Ent. Zeitsch., XXXIX, 77-196, 1894, monograph of the European portion of the family.  
 COQUILLET, Jour. N. Y. Ent. Soc., VI, 161, 1898, table of genera.
- Note.*—Some of the species placed in *Scatophaga* and *Cordylura* may belong to the smaller genera; it has been impossible for me to make a thorough generic revision of the species.

## CORDYLURA.

- FALLÉN, Specim. ent., nov. Dipt., etc., 1810.  
 MEIGEN, Syst. Besch., v, 229, 1826.  
 SCHINER, Fauna Austr., II, 1, 1864.  
 RONDANI, Dipt. Ital. Prod., VII, 11, 1866.  
 BECKER, Berl. Ent. Zeitsch., XXXIX, 88, 1894.  
 VAN DER WULP, Biologia, Dipt., II, 348, 1898, table of Mexican species.
- acuticornis** LOEW, Cent., IX, 94.—Huds. Bay Terr.  
**adusta** LOEW, Cent., III, 41.—N. J. White Mts., N. H.—O. S.  
**æa** WALKER, List, IV, 978.—Martin Falls, Canada.  
**albibarba** LOEW, Cent., IX, 96.—White Mts., N. H.  
**angustifrons** LOEW, Cent., III, 45.—Wis.  
**bicolor** WALKER, List, IV, 974.—Martin Falls, Canada.  
**bimaculata** LOEW, see *Parallelomma varipes*.  
**brevicornis** VAN DER WULP, Biologia, Dipt., II, 349, pl. IX, f. 1.—Guerrero, Mex.  
**capillata** LOEW, Cent., X, 77.—White Mts., N. H.  
 St. Augustine, Fla.—Johnson (*Cleigastra*).  
**carbonaria** WALKER, List, IV, 1047 (*Lissa*).—N. Y.  
 White Mts., N. H.—Slosson. Gen. ref. by Coquillett.  
**cincta** LOEW, Cent., III, 47.—D. C.  
**confusa** LOEW, Cent., III, 43.—Fort Resolution, Huds. Bay Terr.  
 WALKER, List, IV, 972 (*pubera* LINN.).—Martin Falls, Canada. [O. S.]  
**cornuta** LOEW, Cent., III, 48.—English River, Canada. White Mts., N. H.—O. S.  
**cupricrus** WALKER, List, IV, 974.—Martin Falls, Canada.  
**flavipennis** WALKER, List, IV, 975.—Martin Falls, Canada.  
**flavipes** LOEW, Cent., III, 46.—Wis.  
**fulvibarba** LOEW, Cent., X, 76.—Fort Resolution, Canada.  
**gagatina** LOEW, Cent., IX, 93.—Canada.  
**gilvipes** LOEW, Cent., III, 49.—English R., Canada.  
**glabra** LOEW, Cent., IX, 90.—White Mts., N. H.  
**gracilipes** LOEW, Cent., IX, 87.—White Mts., N. H. N. J.—Smith Cat.  
**hæmorrhoidalis** MEIGEN, see *Microprosopa*.  
**imperator** WALKER, List, IV, 975.—Martin Falls, Canada.  
**impudica** REICHE, Bull. Soc. Ent. France, 1857, 77 (*Anthomyia*).—Greenland.  
 LOEW, Berl. Ent. Zeitsch., 1858, 347, gen. ref.  
**inermis** LOEW, Cent., IX, 88.—White Mts., N. H.  
**latifrons** LOEW, Cent., IX, 92.—Middle States. N. J.—Smith Cat.  
**longa** WALKER, List, IV, 976.—Martin Falls, Canada.  
**lutea** LOEW, Cent., X, 75.—Sitka.  
**megacephala** LOEW, Cent., IX, 94.—D. C.  
**munda** LOEW, Cent., IX, 91.—Fort Resolution, Canada.  
 White Mts.—Slosson.  
**nana** LOEW, Cent., V, 94.—Canada. White Mts., N. H.—Slosson (*Scatophaga*).  
**nebulosa** COQUILLET, Jour. N. Y. Ent. Soc., VI, 164.—Algonquin, Ill.  
**pallida** FALLÉN, Scatomyzides, 8.—Europe.  
 MEIGEN, Syst. Besch., v, 242.  
 ZETTERSTEDT, Ins. Lapp., 726; Dipt. Scand., v, 2008.  
 VAN DER WULP, Tijdschr. v. Ent., XXVI, 48, oc. in N. A.—Quebec.  
**pictipennis** LOEW, Wien. Ent. Monatsch., VIII, 22.—Siberia and N. A.  
**pleuritica** LOEW, Cent., III, 42.—English R., Canada.  
 Mass., Conn.—O. S.; White Mts., N. H.—Slosson; N. J.—Smith Cat.;  
 Montreal—Chagnon.  
**præusta** LOEW, Cent., V, 93.—Canada.

- COQUILLETT, Proc. Wash. Acad. Sci., II, 456, oc. at Berg Bay, Alaska and Franconia, N. H.—N. J.—Smith Cat.
- ? *qualis* SAY, Jour. Acad. Sci. Phil., VI, 176; Compl. Works, II, 366.—Ind. OSTEN SACKEN, Cat., 173, note by Loew. "Cannot be *Cordylura*."
- rufina* VAN DER WULP, Biologia, Dipt., II, 349, pl. IX, f. 2.—Guerrero, Mex. This may be the same as *Scatophaga rceses* GIGLIO-TOS, which Wulp suspects to be a *Cordylura*.—Wulp, loc. cit.
- scapularis* LOEW, Cent., IX, 89.—English R., Canada.
- setosa* LOEW, Wien. Ent. Monatsch., IV, 81; Cent., III, 44.—D. C. N. J.—Smith Cat.
- slossonæ* COQUILLETT, Jour. N. Y. Ent. Soc., VI, 164.—White Mts., N. H., and Mass.
- tenuior* WALKER, List, IV, 977.—Martin Falls, Canada.
- terminalis* LOEW, Cent., III, 39.—Pa.
- tricincta* LOEW, Cent., IX, 83 (*Canosia*).—White Mts., N. H. OSTEN SACKEN, Cat., 173, gen. ref. by "Loew in litt."
- variabilis* LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 326.—Mass. COQUILLETT, Proc. Wash. Acad. Sci., II, 456, oc. in Alaska and from "N. H. to N. C., and westward to Texas and Col."
- varipes* WALKER, see *Parallelomma*.
- vicina* VAN DER WULP, Biologia, Dipt., II, 350.—Guerrero, Mex.
- vittipes* LOEW, Cent., X, 74.—Sitka. COQUILLETT, Proc. Wash. Acad. Sci., II, 456, oc. in Alaska, several places. Hudsonian Zone, N. M.—Cockerell.
- volucricaput* WALKER, List, IV, 977.—Martin Falls, Canada. White Mts., N. H.—Slosson (*Hydromyza*).
- unilineata* ZETTERSTEDT, see *Mcgophthalma*.

## ACICEPHALA.

- COQUILLETT, Jour. N. Y. Ent. Soc., VI, 163, 1898.
- pilosella* COQUILLETT, Jour. N. Y. Ent. Soc., VI, 163.—Col. and Reno, Nev.
- politica* COQUILLETT, Jour. N. Y. Ent. Soc., VI, 163.—Col.

## PARALLELOMMA.

- BECKER, Berl. Ent. Zeitsch., XXXIX, 94, 1894.
- varipes* WALKER, List, IV, 1046 (*Lissa*).—Ohio. LOEW, Wien. Ent. Monatsch., IV, 81 (*Cordylura bimaculata*); Cent., III, 40 (id.).—Ill., Wis. [O. S.] VAN DER WULP, Tijdschr. v. Ent., X, 152, pl. V, f. 7, 9 (*Cordylura maculipennis*).—Wis. [Loew, Zeitsch. f. Ges. Naturwiss., XXXVI, 116.] Generic reference by Hough, in specimens sent me. N. J.—Smith Cat.; Montreal—Chagnon.

## CHÆTOSA.

- COQUILLETT, Jour. N. Y. Ent. Soc., VI, 163, 1898.
- punctipes* MEIGEN, Syst. Besch., V, 239 (*Cordylura punctipes* and *flavipes*).—Europe. ZETTERSTEDT, Dipt. Scand., V, 2046 (*Cordylura*). SCHINER, Fauna Austr., II, 10 (*Cleigastra*). BECKER, Berl. Ent. Zeitsch., XXXIX, 158 (*Trichopalpus*). COQUILLETT, Jour. N. Y. Ent. Soc., VI, 163, generic relations, oc. in N. A., etc.—Minn., Col.

## ORTHOCHÆTA.

BECKER, Berl. Ent. Zeitsch., xxxix, 101, 1894 (*Orthachæta*).

- pilosa** ZETTERSTEDT, Ins. Lapp., 732; Dipt. Scand., v, 2064 (*Cordylura*).—Europe.  
SCHINER, Fauna Austr., II, 12 (*Clicgastra*).  
COQUILLET, Proc. Wash. Acad. Sci., II, 456, oc. in N. A.—Metlakahtla,  
Alaska.

## MEGOPHTHALMA.

BECKER, Berl. Ent. Zeitsch., xxxix, 105, 1894 (*Megaphthalma*).

- unilineata** ZETTERSTEDT, Ins. Lapp., 727; Dipt. Scand., v, 2010 (both *Cordylura*).  
—Europe.  
BECKER, Berl. Ent. Zeitsch., xxxix, 107.  
OSTEN SACKEN, Cat., 173, oc. in Sitka, Alaska (*Cordylura*).

## HEXAMITOCERA.

BECKER, Berl. Ent. Zeitsch., xxxix, 107, 1894.

- cornuta** WALKER, List, IV, 1047 (*Lissa*).—Martin Falls, Canada.  
COQUILLET, Proc. Wash. Acad. Sci., II, 456, oc. and gen. ref.—Yakutat,  
Alaska.  
**flavida** COQUILLET, Proc. U. S. N. M., xxiii, 612.—Franconia, N. H.  
**vittata** COQUILLET, Jour. N. Y. Ent. Soc., VI, 165.—Col.

## PSELAPHEPHILA.

BECKER, Berl. Ent. Zeitsch., xxxix, 122, 1894.

- similis** COQUILLET, Proc. U. S. N. M., xxv, 124.—Beverly, Mass.

## HYDROMYZA.

FALLÉN, Hydromyzides, I, 1823.

SCHINER, Fauna Austr., II, 1864.

BECKER, Berl. Ent. Zeitsch., xxxix, 132, 1894.

- confluens** LOEW, Cent., III, 50.—English R., Canada.

## POGONOTA.

BECKER, Berl. Ent. Zeitsch., xxxix, 1894, 138 and 141 (*Pogonota* and  
*Okenia*).

COQUILLET, Proc. Wash. Acad. Sci., II, 456, 1900, unites the preceding.

- kincaidi** COQUILLET, Proc. Wash. Acad. Sci., II, 455.—Popof Id., Alaska.

## MICROPROSOPA.

BECKER, Berl. Ent. Zeitsch., xxxix, 147, 1894.

- hæmorrhoidalis** MEIGEN, Syst. Besch., v, 237 (*Cordylura*).—Europe.

ZETTERSTEDT, Ins. Lapp., 731 and 732 (*Cordylura hæmorrhoidalis* and *pallipes*); Dipt. Scand., v, 2042, 2047, 2049 (*C. lividipes*, *hæmorrhoidalis*,  
and *pallipes*).

STÆGER, Grœnl. Antliater, 366, oc. in Greenland.

OSTEN SACKEN, Cat., 172, oc. on White Mts., N. H.

BECKER, Berl. Ent. Zeitsch., xxxix, 149, syn. and desc.

LUNDBECK, Dipt. Grœnl., II, 290, oc. in Greenland (*Clicgastra*).

## OPSIOMYIA.

COQUILLET, Jour. N. Y. Ent. Soc., VI, 162, 1898.

- palpalis** COQUILLET, loc. cit.—White Mts., N. H.

## SPATHIOPHORA.

RONDANI, Dipt. Ital. Prod., 1, 99, 1856 (*Spaziophora*); VII, pt. 1, 7 (id.).

BECKER, Berl. Ent. Zeitsch., XXXIX, 158, 1894.

I have an undetermined species from South Haven, Mich.

## SCATOPHAGA.

MEIGEN, Illig. Mag., II, 277, 1803; Syst. Besch., v, 246, 1826.

FALLÉN, Scatomyzides, 2, 1819 (*Scatomyza*).

DESVOIDY, Myodaires, 629, 1830 (*Scatina*).

SCHINER, Fauna Austr., II, 15, 1864.

BECKER, Berl. Ent. Zeitsch., XXXIX, 161, 1894.

VAN DER WULP, Biologia, Dipt., II, 348, 1898.

*ariciiformis* HOLMGREN, see *Fucellia*.

*bicolor* WALKER, List, IV, 982.—Martin Falls, Canada.

White Mts., N. H.—Slosson (*Scatina*).

*canadensis* WALKER, Trans. Ent. Soc., n. ser., IV, 218.—Canada.

White Mts., N. H.—Slosson.

*cænosa* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158; Ditt. del Mess., IV, 34.—

Popocatepetl, Mex., 3,800 meters.

*trinita* COQUILLET, Proc. U. S. N. M., XXIII, 612.—Bering Id.

*dasythrix* BECKER, Berl. Ent. Zeitsch., XXXIX, 173.—Bering Straits.

COQUILLET, Dipt. Commander Ids., 345, oc. on Bering Id.

? *diadema* WIEDEMANN, Auss. Zw., II, 448.—Montevideo, S. A.

? RONDANI, Archiv., etc., Canestrini, III, fasc. 1, p. 35, oc. in Labrador.

Query by J. M. A.

*estotilandica* RONDANI, Archiv., etc., Canestrini, III, fasc. 1, p. 35 (*Scatina*).—

Labrador.

*exotica* WIEDEMANN, Auss. Zw., II, 448.—New Orleans, La.

COQUILLET, Proc. U. S. N. M., XXII, 257, oc. in Porto Rico.

*frigida* COQUILLET, Proc. Wash. Acad. Sci., II, 454.—Kukak Bay and Popof Id.,

Alaska.

*furcata* SAY, Jour. Acad. Sci. Phil., III, 98, 1823 (*Pyropha*); Compl. Works, II,

85 (id.).—Mo.

MEIGEN, Syst. Besch., v, 252, 1826 (*squalida*); VII, 342 (*nigricans* MACQ.).

—Europe. [Coq.]

MACQUART, Hist. Nat. Dipt., II, 395 (*nigricans*).

ZETTERSTEDT, Ins. Lapp., 733 (*Cordylura fuscipennis*); Dipt. Scand., v,

1973, and 1975 (the latter *fuscincervis*).

CURTIS, in Ross's Expedition, LXXX (*apicalis*).—Arctic America. [Coq.]

SCHINER, Fauna Austr., II, 18 (*squalida*).

BECKER, Berl. Ent. Zeitsch., XXXIX, 172 (*squalida*).

TOWNSEND, Canad. Ent., XXIII, 153 (*Cleigastrea suisterci*).—D. C.; larvæ  
in swine dung. [Coq.]

HOWARD, Proc. Wash. Acad. Sci., II, 598, figs. and habits; reared from  
human excrement.—D. C., W. Va.

White Mts., N. H.—Slosson; Brit. Col. and Alaska—Coquillett; Green-  
land—Lundbeck; Montreal—Chagnon.

*intermedia* WALKER, List, IV, 980.—Nova Scotia.

COQUILLET, Dipt. Commander Ids., 345, oc. on Bering Id.; Proc. Wash.  
Acad. Sci., II, 454, oc. in Alaska, Me., and Mass.

White Mts., N. H.—Slosson.

*Note*.—Walker's description of *intermedia* seems unrecognizable to me.



- islandica** BECKER, Berl. Ent. Zeitsch., xxxix, 175.—Labrador and Iceland.  
COQUILLET, Dipt. Commander Ids., 345, oc. on Copper Id.; Proc. Wash. Acad. Sci., II, 454, oc. in Alaska.
- lanata** LUNDBECK, Dipt. Grœnl., II, 294.—Greenland.
- litorea** FALLÉN, Scatomyzides, 4.—Europe.  
MEIGEN, Syst. Besch., v, 254.  
ZETTERSTEDT, Ins. Lapp., 722; Dipt. Scand., v, 1975.  
SCHINER, Fauna Austr., II, 18.  
O. FABRICIUS, Fauna Grœlandica, 203 (? *Musca stercoraria*).—Greenland. [Lundbeck.]  
STÆGER, Grœnl. Antl., 366, oc. in Greenland.  
HOLMGREN, Ins. Spetsb., 34; Ins. Nordgrœnl., 103 (*nigripes*).—Greenland. [Lundbeck.]  
BECKER, Berl. Ent. Zeitsch., xxxix, 172.  
LUNDBECK, Dipt. Grœnl., II, 296, oc. in Greenland, syn., etc.
- merdaria** FABRICIUS, Ent. Syst., IV, 344 (*Musca*); Syst. Antl., 306.—Europe.  
MEIGEN, Syst. Besch., v, 249.  
DESVOIDY, Myodaires, 628 (*claripennis*). [Becker.]  
MACQUART, Hist. Nat. Dipt., II, 294.  
ZETTERSTEDT, Dipt. Scand., v, 1970.  
SCHINER, Fauna Austr., II, 18.  
BECKER, Berl. Ent. Zeitsch., xxxix, 169.  
White Mts., N. H.—Slosson; Montreal—Chagnon.
- nigripes** HOLMGREN, see *litorea*.
- nubifera** COQUILLET, Proc. U. S. N. M., xxiii, 612.—Pt. Barrow, Alaska.
- pallida** WALKER, List, IV, 981.—Martin Falls, Canada.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- pubescens** WALKER, List, IV, 982.—Martin Falls, Canada.
- reses** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, 158; Ditt. del Mess., IV, 34.—Mex. See *Cordylura rufina*.
- stercoraria** LINNÉ, Fauna Suecica, 2d edit., p. 458, No. 1861 (*Musca*).—Europe; "habitat ubique in stercore humano, equino, bovino."  
RÉAUMUR, Mém. Hist. Ins., IV, 118, pl. xxvi.  
DEGEER, Mém. Hist. Ins., VI, 42.  
FABRICIUS, Spec. Ins., II, 449 (*Musca*); Ent. Syst., IV, 345 (id.); Syst. Antl., 307 (id.).  
MEIGEN, Syst. Besch., v, 248.  
MACQUART, Hist. Nat. Dipt., II, 393.  
ZETTERSTEDT, Ins. Lapp., 721; Dipt. Scand., v, 1968.  
SCHINER, Fauna Austr., II, 18.  
LOEW, in Silliman's Jour., oc. in N. A.  
BECKER, Berl. Ent. Zeitsch., xxxix, 169, syn., etc.  
COQUILLET, Dipt. Commander Ids., 345, oc. on Copper Id., Alaska; Proc. Wash. Acad. Sci., II, 453, oc. in Alaska. "almost cosmopolitan."  
HOWARD, Proc. Wash. Acad. Sci., II, 599, note on.  
Montreal—Chagnon; White Mts., N. H.—Slosson; N. J.—Smith Cat.; Axton, N. Y.—M. and H.
- suilla** FABRICIUS, Ent. Syst., IV, 343 (*Musca*); Syst. Antl., 206.—Europe.  
FALLÉN, Scatomyzides, 5, var.  
DESVOIDY, Myodaires, 625 (*nemorosa*).  
MEIGEN, Syst. Besch., v, 250 (*spurca*).  
ZETTERSTEDT, Ins. Lapp., 721 (*glabrata*); Dipt. Scand., v, 1965 and 1967 the latter *spurca*).

SCHINER, Fauna Austr., II, 17 (*spurca*).

BECKER, Berl. Ent. Zeitsch., XXXIX, 167, syn., etc.

COQUILLET, Proc. Wash. Acad. Sci., II, 454, oc. in Alaska, N. H., Col., Wash., and Canada.

Beulah, N. M.—Skinner.

**thinobia** THOMSON, Eugenes Resa, 563.—Cal.

*Note*.—Coquillett records this from Alaska, but he has evidently made a mistake, as he puts it under *Chirosia*, and Thomson says the cheeks are scarcely narrower than the eyes.

**vittata** VAN DER WULP, Biologia, Dipt., II, 350.—Mexico City, Mex.

**vulpina** COQUILLET, Jour. N. Y. Ent. Soc., VI, 162.—Pt. Barrow, Alaska.

#### PLETHOCHÆTA.

COQUILLET, Proc. U. S. N. M., XXIII, 613, 1901.

**varicolor** COQUILLET, Proc. U. S. N. M., XXIII, 614.—Delaware Co., Pa.

#### PYCNOGLOSSA.

COQUILLET, Proc. U. S. N. M., XXIII, 613, 1901.

**flavipennis** COQUILLET, Proc. U. S. N. M., XXIII, 613.—Washington.

### HETERONEURIDÆ.

KERTÉSZ, Annales Mus. Nat. Hung., I, 1903, 566, table of genera of the world.

#### HETERONEURA.

FALLÉN, Agromyzides, 2, 1823.

MEIGEN, Syst. Besch., VI, 126, 1830.

SCHINER, Fauna Austr., II, 37, 1864.

WILLISTON, Trans. Ent. Soc. Lond., 1896, 386, table of St. Vincent species, 1896.

CZERNY, Wien. Ent. Zeit., XXII, 61, 1903, revision of genus and family.

**albimanus** MEIGEN, Syst. Besch., VI, 128.—Europe.

SCHINER, Fauna Austr., II, 38, desc. and biology; larvæ reared from trunk of a decayed willow, in Europe.

LOEW, in Silliman's Jour., oc. in N. A.

CZERNY, Wien. Ent. Zeit., XXII, 69, 81, biology and desc.

N. J.—Smith Cat.

**concinna** WILLISTON, Trans. Ent. Soc. Lond., 1896, 387.—St. Vincent, W. I.

CZERNY, Wien. Ent. Zeit., XXII, 101, orig. desc. and notes.

**flavipes** WILLISTON, Trans. Ent. Soc. Lond., 1896, 387, pl. XIII, f. 135.—St. Vincent, W. I.

CZERNY, Wien. Ent. Zeit., XXII, 101, quotes orig. desc.; notes.

? **latifrons** LOEW, Wien. Ent. Monatsch., IV, 82; Cent., IV, 93.—D. C.

CZERNY, Wien. Ent. Zeit., XXII, 99, quotes desc.; genus doubtful.

N. J.—Smith Cat.

**lumbalis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 388.—St. Vincent, W. I.

CZERNY, Wien. Ent. Zeit., XXII, 103, quotes desc.

**melanostoma** LOEW, Cent., V, 97.—N. Y.

CZERNY, Wien. Ent. Zeit., XXII, 77, quotes desc.

*Note*.—The "*Heteroneura flavifacies* Coq. MS." of Smith's N. J. Cat. is the female of this. [Coq. in litt.]

- pictipes* ZETTERSTEDT, Dipt. Scand., XII, 4816.—Europe.  
 CZERNY, Wien. Ent. Zeit., XXII, 80.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- pleuralis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 387.—St. Vincent, W. I.  
 CZERNY, Wien. Ent. Zeit., XXII, 102, quotes desc.
- spectabilis* LOEW, see *Clusia lateralis*.
- valida* WILLISTON, Trans. Ent. Soc. Lond., 1896, 388, pl. XIII, f. 136.—St. Vincent, W. I.  
 CZERNY, Wien. Ent. Zeit., XXII, 102, quotes desc.; notes.
- ? *xanthops* WILLISTON, Trans. Ent. Soc. Lond., 1896, 386.—St. Vincent, W. I.  
 CZERNY, Wien. Ent. Zeit., XXII, 100, quotes desc.; genus doubtful.

## CLUSIA.

- HALIDAY, Ann. Nat. Hist., II, 188, 1838.  
 SCHINER, Fauna Austr., II, 36, 1864.  
 CZERNY, Wien. Ent. Zeit., XXII, 86, 1903.
- ? *flava* MEIGEN, Syst. Besch., VI, 46.—Europe.  
 CZERNY, Wien. Ent. Zeit., XXII, 88.  
 Doubtfully recorded from N. J. in Smith Cat.
- lateralis* WALKER, List, IV, 1095 (? *Helomyza*).—N. A.  
 LOEW, Wien. Ent. Monatsch., IV, 82 (*Heteroneura spectabilis*); Cent., IV, 92 (id.).—D. C. [Czerny, from Walker's type.]  
 CZERNY, Wien. Ent. Zeit., XXII, 89.  
 Montreal—Chagnon; doubtfully reported from N. J. in Smith Cat., as *Clusia spectabilis*. Province of Quebec—Fyles (*H. spectabilis*).

## PERATOCHÆTUS.

- RONDANI, Dipt. Ital. Prod., I, 119, 1856; Bull. Ent., VI, 1874, 8.  
 SCHINER, Novara, 236, 1868 (*Heterochroa*, in part).  
 CZERNY, Wien. Ent. Zeit., XXII, 1903, 96.
- ornatus* JOHNSON, Proc. Acad. Nat. Sci., 1895, 306 (*Heterochroa*).—Drayton's Id., Fla.  
 CZERNY, Wien. Ent. Zeit., XXII, 97, quotes desc.; gen. ref.

## HELOMYZIDÆ.

- LOEW, Zeitschr. f. Ent. zu Breslau, 1859, 1–80, monograph of the family in Europe.

## HELOMYZA.

- FALLÉN, Heteromyzides, 3, 1820.  
 RONDANI, Dipt. Ital. Prod., I, 102, 1856.  
 LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 17.  
 SCHINER, Fauna Austr., II, 23, 1864.  
 RILEY and HOWARD, Ins. Life, II, 374, notes on a species found in caves in Indiana.  
 VAN DER WULP, Biologia, Dipt., II, 350, table of Mexican species.
- apicalis* LOEW, Cent., II, 86.—D. C.
- assimilis* LOEW, Cent., II, 87.—Huds. B. Terr.
- borealis* BOHEMAN, of Holmgren, see *Leria gniculata*.
- distigma* VAN DER WULP, Biologia, Dipt., II, 352, pl. IX, f. 5.—Guerrero, Mex.
- fasciata* WALKER, List, IV, 1094.—Nova Scotia.

- iniens* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158; Ditt. del Mess., IV, 35. f. 9, 10.—Mex.  
 VAN DER WULP, Biologia, Dipt., II, 352, pl. IX, f. 3.—Guerrero, Mex.
- lateralis* WALKER, see *Clusia*.
- latericia* LOEW, Cent., II, 89.—Conn. White Mts., N. H.—Slosson.
- limbata* THOMSON, Eugenes Resa, 569.—Cal.  
 Osten Sacken states that this name is preoccupied.
- longipennis* LOEW, Cent., II, 90.—N. Y. N. J.—Smith Cat.
- polystigma* VAN DER WULP, Biologia, Dipt., II, 353, pl. IX, f. 6.—Guerrero, Mex.
- punctulata* VAN DER WULP, Biologia, Dipt., II, 352, pl. IX, f. 4.—Guerrero, Mex.
- quinquepunctata* SAY, Jour. Acad. Sci. Phil., III, 101; Compl. Works, II, 86.—  
 Cow Id., Missouri River.  
 WIEDEMANN, Auss. Zw., II, 588.  
 LOEW, Cent., II, 88 (*plumata*).—N. Y. [J. M. A.]  
 N. J.—Smith Cat.; Montreal—Chagnon.
- tibialis* ZETTERSTEDT, see *Leria*.
- tincta* WALKER, List, IV, 1092.—Nova Scotia.  
 Beulah, N. M.—Skinner.
- zetterstedti* LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 63.—Europe.  
 OSTEN SACKEN, Cat., 175, oc. in N. A., "Loew in litt."  
 COQUILLET, Proc. Wash. Acad. Sci., II, 457, oc. in Alaska, Brit. Amer.,  
 and White Mts., N. H.  
 Beulah, N. M.—Skinner.

## ALLOPHYLIA.

- LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 43.
- lævis* LOEW, Cent., II, 85.—English River, Canada.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.

## SCOLIocENTRA.

- LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 43.
- fraterna* LOEW, Cent., III, 51.—Sitka.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 457, oc. in Alaska, Brit. Col., and  
 Mt. Washington, N. H. (*Leria*).
- helvola* LOEW, Cent., II, 80.—Ill. N. J.—Smith Cat.; Montreal—Chagnon.

## ANOROSTOMA.

- LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 47.
- marginata* LOEW, Cent., II, 81.—English River, Canada.  
 Beulah, N. M.—Skinner.
- opaca* COQUILLET, Proc. U. S. N. M., XXIII, 614.—Los Angeles Co., Cal.

## ECOTHEA.

- HALIDAY, in Westwood's Introduction to Classif. of Ins., II, App., 145, 1840.
- LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 54.
- fenestralis* FALLÉN, Heteromyzides, 5 (*Helomyza*).—Europe.  
 MEIGEN, Syst. Besch., VI, 56 (id.).  
 HALIDAY, in Westwood's Introd., II, App., 145.  
 LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 54.  
 SCHINER, Fauna Austr., II, 30 (*Leria*).  
 OSTEN SACKEN, Cat., 176, oc. in N. A., "Loew in litt."—N. Y.  
 Montreal—Chagnon.

## TEPHROCHLAMYS.

LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 72.

**rufiventris** MEIGEN, Syst. Besch., vi, 58 (*Helomyza*).—Europe.

LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 77.

OSTEN SACKEN, Cat., 176, oc. in N. A., "Loew in litt."—Canada.

HOWARD, Proc. Wash. Acad. Sci., II, 600, oc. in Newport, Ore.

Montreal—Chagnon; White Mts., N. H.—Slosson.

## LERIA.

DESVOIDY, Myodaires, 653, 1830.

MACQUART, Hist. Nat. Dipt., II, 412, 1835 (*Blepharoptera*).

LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 57 (*Blepharoptera*).

SCHINER, Fauna Austr., II, 28.

OSTEN SACKEN, Cat., 175 (*Blepharoptera*).

MIK, Wien. Ent. Zeit., XVII, 65, larvæ of a European species in bee-hives.

*Note*.—A list of the Arthropoda, including Diptera, found in the caves of Europe was published by Simon, Bedel, and Ganglbauer in Mittheilungen d. Section f. Naturkunde des Oesterreichischen Touristen-Club, Zweite Jahrgang, Wien, 1890.

**biseta** LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 62 (*Blepharoptera*).—Europe.

OSTEN SACKEN, Cat., 175, oc. at Sitka.—"Loew in litt."

White Mts., N. H.—Slosson.

**carolinensis** DESVOIDY, Myodaires, 629 (*Scatophaga*); Ann. Soc. Ent. France, 1841, 258, footnote, gen. ref.—Carolina.

**cineraria** LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 67 (*Blepharoptera*); Cent., II, 83 (*B. armipes*).—Europe; Huds. Bay Terr. [O. S. Cat., 175.]

**defessa** OSTEN SACKEN, Bull. Geol. Surv., III, No. 1, p. 168, footnote and figs. (*Blepharoptera*).—Col., Ky., Ind.; inhabits caverns.

ALDRICH, 21st Rept. Geol. Ind., 1896, 188, same habit; notes (*Blepharoptera*).—Ind.

**discolor** LOEW, Cent., x, 78 (*Blepharoptera*).—White Mts., N. H.

**geniculata** ZETTERSTEDT, Ins. Lapp., 767 (*Helomyza*); Dipt. Scand., VI, 2451 (id.).—N. Europe.

STÆGER, Grœnl. Antl., 366, 1845, oc. in Greenland.

HOLMGREN, Ins. Nordgrœnl., 104, oc. in same; also refers part of his specimens to *Helomyza borealis* BOHEMAN, according to Lundbeck.

LUNDBECK, Dipt. Grœnl., II, 298, oc. in Greenland, etc.

**humeralis** ZETTERSTEDT, Ins. Lapp., 767; Dipt. Scand., VI, 2455 (both *Helomyza*).—N. Europe.

LUNDBECK, Dipt. Grœnl., II, 297, oc. in Greenland.

**iners** MEIGEN, Syst. Besch., VI, 57 (*Helomyza*).—Europe.

LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 63 (*Blepharoptera*); Silliman's Jour., oc. in N. A.

**latens** ALDRICH, 21st Rept. Geol. Indiana, 1896, 188 (*Blepharoptera*).—Indiana, in caverns.

**leucostoma** LOEW, Cent., III, 54 (*Blepharoptera*).—Sitka.

COQUILLET, Proc. Wash. Acad. Sci., II, 457, oc. in Alaska and White Mts., N. H.

**lutea** LOEW, Cent., III, 52 (*Blepharoptera*).—Sitka. Province of Quebec—Fyles.

**pectinata** LOEW, Cent., x, 79 (*Blepharoptera*).—Texas.

HUBBARD, Proc. Ent. Soc. Wash., IV, 362, found in Arizona in upper burrows of desert rodents.

- HOWARD, Proc. Wash. Acad. Sci., II, 600, note and oc.—Newport, Ore.  
 MELANDER, Psyche, 1902, 328, captured at Austin, Texas, in bottle traps in  
 nests of *Pogonomyrmex molefaciens* BUCKLEY.  
**pubescens** LOEW, Cent., II, 82 (*Blepharoptera*).—Mass.  
 ALDRICH, 21st Rept. Geol. Ind., 1896, 188 (id.).—Indiana, in cavern.  
 N. J.—Smith Cat.  
**specus** ALDRICH, 21st Rept. Geol. Ind., 1896, 189 (*Blepharoptera*).—Indiana, in  
 caverns.  
**tibialis** ZETTERSTEDT, Ins. Lapp., 767 (*Helomyza*); Dipt. Scand., VI, 2456 (id.).—  
 N. Europe.  
 STÆGER, Grœnl. Antl., 366 (id.), oc. in Greenland.  
 HOLMGREN, Ins. Nordgrœnl., 104 (id.); Ent. Tidskr., IV, 177 (id.), oc. in  
 Greenland and Nova Zembla.  
 LUNDBECK, Dipt. Grœnl., II, 297, oc. in Greenland, etc.  
**tristis** LOEW, Berl. Ent. Zeitsch., 1862, 225 (*Blepharoptera*).—Lake Winnipeg.  
 COQUILLET, Dipt. of Commander Ids., 345, oc. in Commander Ids., Alaska.  
 N. J.—Smith Cat.

#### HETEROMYZA.

- FALLÉN, Heteromyzides, I, 1820.  
 LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 70.  
 SCHINER, Fauna Austr., II, 33, 1864.  
 COLLIN, Ent. Mo. Mag., 1901, 106 and 113, two articles; full discussion,  
 which is reviewed by Hendel, Wien. Ent. Zeit., 1901, 151.  
**? buccata** FALLÉN, Heteromyzides, 2.—Europe.  
 MEIGEN, Syst. Besch., VI, 47.  
 SCHINER, Fauna Austr., II, 34.  
 LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 70, does not belong to *Heteromyza*.  
 WALKER, List, IV, 1088, oc. in Nova Scotia.  
*Note.*—Collin and Hendel (vide supra) do not agree as to the proper  
 genus to receive this species. As in all probability Walker was wrong in  
 recognizing it from Nova Scotia, it seems unnecessary to discuss the  
 question.  
**eriphides** WALKER, List, IV, 1088.—Martin Falls, Canada.  
**flavipes** WALKER, List, IV, 1089.—Martin Falls, Canada.  
**fusca** MACQUART, Dipt. Exot., II, 3, 263, pl. XXV, f. 12.—N. A.

#### BORBORIDÆ.

##### APTILOTUS.

- MIK, Wien. Ent. Zeit., XVII, 206, 1898; XIX, 71, 1900.  
**politus** WILLISTON, Dipt. of Death Valley Exped., 1893, 259 (*Apterina*).—Death  
 Valley, S. Cal.  
 MIK, Wien. Ent. Zeit., 1900, 71, refers with a doubt to this genus, on the  
 authority of Williston, in litt.  
 COQUILLET, Proc. Acad. Sci. Wash., II, 464, oc. at Farragut Bay, Alaska.  
 Beulah, N. M.—Skinner.

##### LIMOSINA.

- MACQUART, Hist. Nat. Dipt., II, 571, 1835.  
 SCHINER, Fauna Austr., II, 327, 1864.  
 RONDANI, Bull. Soc. Ent. Ital., XII, 17, 1880.



- WILLISTON, Trans. Ent. Soc. Lond., 1896, 431, table of St. Vincent species.
- albigennis** RONDANI, Bull. Soc. Ent. Ital., XII, 39.—Europe.
- HOWARD, Proc. Wash. Acad. Sci., II, 595, fig. and habits; bred from cowdung.—D. C., Va., W. Va., Md.
- HOWARD, Canad. Ent., XXXIII, 44, bred from cowdung.
- aldrichi** WILLISTON, Dipt. of Death Valley Exped., 259.—Argus Mts., Cal.
- atra** ADAMS, Kans. Univ. Sci. Bull., II, 223.—Douglass Co., Kans.
- crassimanus** HALIDAY, Ent. Mag., III, 328.—Europe.
- STENHAMMAR, Mon. Copromyz., 376.
- ZETTERSTEDT, Ins. Lapp., 771; Dipt. Scand., VI, 2503 (*pygmaea*).
- DUFOUR, Annales Soc. Ent. France, 1839 (*lugubris*).
- SCHINER, Fauna Austr., II, 329, syn. and desc.
- WEBSTER, Canad. Ent., 1900, 213, oc. in N. A.—Ohio.
- HOWARD, Proc. Wash. Acad. Sci., II, 595, fig., etc.—D. C., Md., W. Va.
- dolorosa** WILLISTON, Trans. Ent. Soc. Lond., 1896, 432.—St. Vincent, W. I.
- fontinalis** FALLÉN, Dipt. Suec., Suppl. II, p. 16 (*Copromyza*).—Europe.
- STENHAMMAR, Mon. Copromyz., 371.
- MACQUART, Hist. Nat. Dipt., II, 571.
- SCHINER, Fauna Austr., II, 329.
- JOHNSON, Proc. Acad. Nat. Sci. Phil., 1895, 340, oc. in N. A.—St. Augustine, Fla.
- HOWARD, Proc. Wash. Acad. Sci., II, 595, oc. and habits; reared from human excrement.—D. C., Va.
- Porto Rico—Coquillett; White Mts., N. H.—Slosson.
- illota** WILLISTON, Trans. Ent. Soc. Lond., 1896, 434, pl. XIV, f. 164 (*Borborus*).—St. Vincent, W. I.
- limosa** MEIGEN, Syst. Besch., VI, 207, pl. LXII, f. 20 (*Borborus*).—Europe.
- DESVOIDY, Myodaires, 802 (*Nerca riparia*).
- STENHAMMAR, Mon. Copromyz., 379.
- SCHINER, Fauna Austr., II, 329.
- N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.
- lugubris** WILLISTON, Trans. Ent. Soc. Lond., 1896, 433, pl. XIV, f. 162.—St. Vincent, W. I. Porto Rico—Coquillett.
- perparva** WILLISTON, Trans. Ent. Soc. Lond., 1896, 433, pl. XIV, f. 161.—St. Vincent, W. I. Porto Rico—Coquillett.
- pumila** WILLISTON, Trans. Ent. Soc. Lond., 1896, 432, pl. XIV, f. 160.—St. Vincent, W. I.
- scutellaris** WILLISTON, Trans. Ent. Soc. Lond., 1896, 432.—St. Vincent, W. I.
- setigera** ADAMS, Kans. Univ. Sci. Bull., II, 223.—Douglass Co., Kans., and Magdalena Mts., N. M.
- stygia** COQUILLET, Amer. Naturalist, XXXI, 384, 1897.—Mammoth Cave, Ky., in decaying fungus (*Coprinus*).
- tenebrarum** ALDRICH, 21st Rept. Geol. Ind., 1896, 190, fig.—Ind., in caverns.
- venalicia** OSTEN SACKEN, Cat., 263 (*Borborus*).—Cuba and Africa; supposed to have been introduced into Cuba by the slave trade.
- WILLISTON, Trans. Ent. Soc. Lond., 1896, 434, pl. XIV, f. 163 (id.).—St. Vincent, W. I., and Brazil.
- COQUILLET, Proc. U. S. N. M., XXII, 269, oc. in Porto Rico and Biscayne Bay, Fla.

## BORBORUS.

- MEIGEN, Illig. Mag., II, 276, 1803; Syst. Besch., VI, 198, 1830.
- FALLÉN, Heteromyzides, 5, 1820 (*Copromyza*).

- ZETTERSTEDT, Dipt. Scand., vi, 2475, 1847 (id.).  
 SCHINER, Fauna Austr., ii, 320, 1864.  
 RONDANI, Bull. Soc. Ent. Ital., xii, 6, 1880.  
**annulus** WALKER, List, iv, 1129.—York Factory and Martin Falls, Canada.  
 Popof Id., Alaska—Coquillett.  
**carolinensis** DESVOIDY, Myodaires, 811 (*Scatophora*).—Carolina.  
**equinus** FALLÉN, Heteromyzides, 6 (*Copromyza*).—Europe.  
 STENHAMMAR, Mon. Copromyz., 340 (id.).  
 DESVOIDY, Myodaires, 807 (*Spharocera communis, fuliginosus, and copri-*  
*vora*).  
 HALIDAY, Ent. Mag., iii, 335, 1836, larva and puparium.  
 SCHINER, Fauna Austr., ii, 323, syn. and desc.  
 LOEW, in Silliman's Jour., oc. in N. A.  
 RONDANI, Bull. Soc. Ent. Ital., xii, 11.  
 HOWARD, Proc. Wash. Acad. Sci., ii, 594, habits.  
 Everywhere abundant on horse-dung, in which the larvæ live.  
**geniculatus** MACQUART, Hist. Nat. Dipt., ii, 567.—Europe.  
 HALIDAY, Ent. Mag., iii, 325 (*ater*).  
 STENHAMMAR, Mon. Copromyz., 356, 98.  
 SCHINER, Fauna Austr., ii, 322.  
 HOWARD, Proc. Wash. Acad. Sci., ii, 594, oc. in N. A.—N. H., D. C., Md.,  
 W. Va.  
 Hudsonian Zone, N. M.—Cockerell.  
**illotus** WILLISTON, see *Limosina*.  
**venalicus** OSTEN SACKEN, see *Limosina*.

#### SPHÆROCERA.

- LATREILLE, Hist. Nat. Crust. et Ins., xiv, 391, 1804.  
 SCHINER, Fauna Austr., ii, 325, 1864.  
 RONDANI, Bull. Soc. Ent. Ital., xii, 12, 1880.  
**bimaculata** WILLISTON, Trans. Ent. Soc., 435, pl. xiv, f. 165.—St. Vincent, W. I.  
**pusilla** FALLÉN, Heteromyzides, 8 (*Copromyza*).—Europe.  
 MEIGEN, Syst. Besch., vii, 407 (*Borborus crenatus*; the *Borborus pusillus*  
 of vi, 206, is a different species, according to Schiner).  
 STENHAMMAR, Mon. Copromyz., 435.  
 ZETTERSTEDT, Ins. Lapp., 770 (*Copromyza*); Dipt. Scand., vi, 2489 (*Cop-*  
*renata*); 2490 (*Cop. pusilla*).  
 SCHINER, Fauna Austr., ii, 326, syn. and desc.  
 RONDANI, Bull. Soc. Ent. Ital., xii, 14, 1880.  
 HOWARD, Proc. Wash. Acad. Sci., ii, 596, habits; reared from human ex-  
 crement.—D. C.  
**subsultans** FABRICIUS, Spec. Ins., ii, 444 (*Musca*); Syst. Antl., 264 (*Calobata*).  
 —Europe.  
 FALLÉN, Heteromyzides, 7 (*Copromyza*).  
 MEIGEN, Syst. Besch., vi, 200, pl. LXII, f. 17.  
 DESVOIDY, Myodaires, 809 (*Lordatia merdarum, stercoraria, cadaverina,*  
*and necrophaga*).  
 SCHINER, Fauna Austr., ii, 326, syn. and desc.  
 RONDANI, Bull. Soc. Ent. Ital., xii, 13.  
 HOWARD, Proc. Wash. Acad. Sci., ii, 596, oc. in N. A., fig. and habits;  
 Canad. Ent., xxxiii, 44, oc. and habits.—D. C., reared from human  
 excrement: Va., reared from cow-dung.  
 Montreal—Chagnon; White Mts., N. H.—Slosson.

## PHYCODROMIDÆ.

## CÆLOPA.

- MEIGEN, Syst. Besch., vi, 194, 1830.  
 STENHAMMAR, Copromyz. Scand., 1853.  
 SCHINER, Fauna Austr., ii, 319, 1864.  
**frigida** FALLÉN, Hydromyzides, 6.—Europe.  
 SCHINER, Fauna Austr., ii, 319.  
 HAGEN, Canad. Ent., xvii, 140, oc. in Mass.; breeds in dead and probably living seaweed on ocean beach.  
 COQUILLET, Dipt. of Commander Ids., 345, oc. in Alaska; Proc. Wash. Acad. Sci., ii, 460, same.  
**parvula** HALIDAY, Ent. Mag., i, 167.—Europe.  
 ZETTERSTEDT, Dipt. Scand., vi, 2473 (*nitidula*).  
 STENHAMMAR, Copromyz. Scand., 6 (*nitidula*).  
 SCHINER, Fauna Austr., ii, 320, desc. and syn.  
 OSTEN SACKEN, Cat., 197, oc. in N. A. (id.).  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 460, oc. in Kadiak, Alaska (id.).

## SCIOMYZIDÆ.

## SCIOMYZA.

- FALLÉN, Sciomyzides, ii, 1820.  
 LOEW, Mon. N. A. Dipt., i, 104, 1862.  
 SCHINER, Fauna Austr., ii, 44, 1864.  
 VAN DER WULP, Biologia, Dipt., ii, 354, table of Mexican species, 1898.  
**albocostata** FALLÉN, Sciomyzides, 12.—Europe.  
 ZETTERSTEDT, Dipt. Scand., v, 2098.  
 SCHINER, Fauna Austr., ii, 47.  
 LOEW, Silliman's Jour., oc. in N. A.  
 White Mts., N. H.—Slosson.  
**antica** WALKER, Dipt. Saund., 400.—U. S.  
**apicata** LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 331.—Ft. Resolution, Canada.  
**glabricula** FALLÉN, Sciomyzides, 15.—Europe.  
 MEIGEN, Syst. Besch., vi, 13.  
 ZETTERSTEDT, Dipt. Scand., v, 2091.  
 STÆGER, in Krøyer's Tidskr., i, 40 (*angustipennis*). [Schiner.]  
 SCHINER, Fauna Austr., ii, 44.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 458, oc. in Popof Id., Alaska.  
**guttata** COQUILLET, Proc. U. S. N. M., xxiii, 615.—Texas.  
**humilis** LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 330.—Texas.  
 St. Augustine, Fla.—Johnson.  
**infuscata** VAN DER WULP, Biologia, Dipt., ii, 355, pl. ix, f. 7.—Guerrero, Mex.  
**longipes** LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 328.—White Mts., N. H.  
**luctifera** LOEW, Cent., i, 71; Mon. N. A. Dipt., i, 107.—Pa.  
**nana** FALLÉN, Sciomyzides, 15.—Europe.  
 MEIGEN, Syst. Besch., vi, 18.  
 MACQUART, Hist. Nat. Dipt., ii, 408.  
 ZETTERSTEDT, Dipt. Scand., v, 2109.  
 SCHINER, Fauna Austr., ii, 49.  
 LOEW, Mon. N. A. Dipt., i, 104, oc. in N. A., etc.—Middle States.  
 VAN DER WULP, Biologia, Dipt., ii, 355, pl. ix, f. 8, oc. at Mexico City.

- N. J.—Smith Cat.; White Mts., N. H.—Slosson; Montreal—Chagnon;  
 Fla.—Johnson; Ida.—J. M. A.  
*nigripalpus* WALKER, List, iv, 1068.—Martin Falls, Canada.  
*obscuripennis* BIGOT, see *Physogenua vittata*.  
*obtusa* FALLÉN, Sciomyzides, 13.—Europe.  
 MEIGEN, Syst. Besch., vi, 12.  
 ZETTERSTEDT, Dipt. Scand., v, 2099.  
 SCHINER, Fauna Austr., ii, 47.  
 LOEW, Mon. N. A. Dipt., i, 105, oc. in N. A., etc.—Ill. N. J.—Smith Cat.  
*parallela* WALKER, Dipt. Saund., 401.—U. S.  
*pubera* LOEW, Mon. N. A. Dipt., i, 106.—Middle States. Seattle—J. M. A.  
*serena* VAN DER WULP, Biologia, Dipt., ii, 356.—Mexico City and Vera Cruz.  
*squalens* VAN DER WULP, Biologia, Dipt., ii, 356, pl. ix, f. 10.—Mexico City.  
*strigata* VAN DER WULP, Biologia, Dipt., ii, pl. ix, f. 9.—Vera Cruz and Mexico  
 City.  
*tenuipes* LOEW, Cent., x, 80.—Middle States.  
*trabeculata* LOEW, Cent., x, 81.—Texas.  
*transducta* WALKER, Trans. Ent. Soc., n. ser., v, 320.—N. A.  
*vittata* HALIDAY, Ent. Mag., 1833.—Europe.  
 OSTEN SACKEN, Cat., 177, oc. in N. A. on authority of "Loew in litt."  
*Note*.—I have not succeeded in tracing this species any farther than  
 the data of the O. S. catalogue.

#### ACTORA.

- MEIGEN, Syst. Besch., v, 403, 1826.  
 ZETTERSTEDT, Dipt. Scand., vi, 2468, 1847.  
 SCHINER, Fauna Austr., ii, 40, 1864.  
 ? *ferruginea* WALKER, List, iv, 1066.—Nova Scotia.  
*Note*.—This probably goes near *Scatophaga*; it has oral vibrissæ.

#### HETEROCHEILA.

- RONDANI, Dipt. Ital. Prod., i, 104, 1856 (*Heterostoma*, preoc.); ii, 13, 1857  
 (changed to *Heterocheila*); Atta Soc. Ital. Sci. Nat., xi, 1868, 154  
 (changes again to *Erocheila*, because *Heterocheila* resembles other gen-  
 eric names).  
 LOEW, Zeitsch. f. Ent. zu Breslau, 1859, 10 (*Edoparca*).  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 458, notes; accepts *Edoparca*.  
*glaucu* COQUILLET, Proc. Wash. Acad. Sci., ii, 458 (*Edoparca*).—Metlakahtla  
 and Farragut Bay, Alaska.

#### DRYOMYZA.

- FALLÉN, Sciomyzides, 15, 1820.  
 MEIGEN, Syst. Besch., v, 255, 1826.  
 ZETTERSTEDT, Dipt. Scand., v, 2081, 1846.  
 SCHINER, Fauna Austr., ii, 39, 1864.  
*aristalis* COQUILLET, Proc. U. S. N. M., xxiii, 617.—Ottawa, Canada.  
*convergens* WALKER, List, iv, 983.—Nova Scotia.  
*maculiceps* WALKER, Trans. Ent. Soc., n. ser., v, 319.—Mex.  
*pallida* DAY, see *Neuroctena anilis*.  
*simplex* LOEW, Mon. N. A. Dipt., i, 128.—Middle States.

#### NEUROCTENA.

- RONDANI, Prodrôme Dipt. Ital., vii, pt. 3, 9, 1869.  
*anilis* FALLÉN, Sciomyzides, 16 (*Dryomyza*).—Europe.

DESVOIDY, Myodaires, 619 (*Dryope liturata*).

MEIGEN, Syst. Besch., v, 257 (*Dryomyza*).

ZETTERSTEDT, Dipt. Scand., v, 2082 (id.).

SCHINER, Fauna Austr., II, 39, 1864.

LOEW, Mon. N. A. Dipt., I, 128, oc. in N. A.

DAY, Canad. Ent., 1881, 89 (*Dryomyza pallida*).—Conn. [Will.]

COQUILLET, Proc. Wash. Acad. Sci., II, 457, oc. in Alaska, N. J., N. H., Wash.

N. J.—Smith Cat.; Montreal—Chagnon.

**fumida** COQUILLET, Proc. U. S. N. M., XXIII, 616.—Beulah, N. M.  
Beulah, N. M.—Skinner.

#### TETANOCERA.

DUMÉRIE, Mag. Encyclopédique, IV, 433, 1798 (see Osten Sacken, Verh. Zool.-Bot. Ges., 1900, 450, where the original is quoted, etc.).

LATREILLE, Gen. Crust. et Ins., IV, 350, 1809.

MEIGEN, Syst. Besch., VI, 31, 1826.

ZETTERSTEDT, Dipt. Scand., v, 2122, 1846.

SCHINER, Fauna Austr., II, 52, 1864.

VAN DER WULP, Biologia, Dipt., II, 357, 1897, table of Mexican species.

**acuticornis** VAN DER WULP, Biologia, Dipt., II, 358, pl. IX, f. 13.—N. Sonora, Mex.

**ambigua** LOEW, Cent., v, 95.—Me.

**arcuata** LOEW, Wien. Ent. Monatsch., III, 292; Mon. N. A. Dipt., I, 115.—Middle States.

N. J.—Smith Cat.; White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.

**bosicii** DESVOIDY, Myodaires, 608.—Carolina.

LOEW, Mon. N. A. Dipt., I, 108, said to be unrecognizable.

NEEDHAM, Bull. 47, N. Y. State Mus. Nat. Hist., 575, identified from Saranac Inn, N. Y.

**canadensis** MACQUART, Dipt. Exot., II, 3, 181, pl. XXIV, f. 5.—Canada.  
Beulah, N. M.—Skinner.

**clara** LOEW, Mon. N. A. Dipt., I, 109.—Trenton Falls, N. Y.

DAY, Canad. Ent., XIII, 85, note and oc.—Mass., Conn.

N. J.—Smith Cat.; Saranac Inn, N. Y.—Needham.

**combinata** LOEW, Wien. Ent. Monatsch., III, 295; Mon. N. A. Dipt., I, 116.—Middle States.

DAY, Canad. Ent., XIII, 85, notes and oc.—Mass., Conn., Pa.

U. S. and Canada—O. S.; Montreal—Chagnon; N. J.—Smith Cat.

**costalis** LOEW, Mon. N. A. Dipt., I, 118.—Ill. White Mts., N. H.—Slosson.

**flavescens** LOEW, Stett. Ent. Zeit., VIII, 123; Wien. Ent. Monatsch., III, 291; Mon. N. A. Dipt., I, 113.—Carolina.

OSTEN SACKEN, Cat., 177, note.—West. N. Y.; may be only a larger *arcuata*.

N. J.—Smith Cat.; White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.

**lineata** DAY, Canad. Ent., XIII, 88.—Conn.

**montana** DAY, Canad. Ent., XIII, 87.—Wyo.

**pallida** LOEW, Wien. Ent. Monatsch., III, 294; Mon. N. A. Dipt., I, 113.—Middle States.

N. J.—Smith Cat.; Montreal—Chagnon.

**pectoralis** WALKER, Trans. Ent. Soc., n. ser., v, 321.—Mex.

**pictipes** LOEW, see *unbrarum*.

**plebeia** LOEW, Mon. N. A. Dipt., I, 120.—Middle States.

- DAY, *Canad. Ent.*, XIII, 87, note and oc.—Wash.  
 Atlantic States and Canada—O. S.; White Mts., N. H.—Slosson; N. J.—  
 Smith Cat.; Montreal—Chagnon; Axton, N. Y.—M. and H.; Province  
 of Quebec—Fyles.
- plumifera* VAN DER WULP, *Biologia*, Dipt., II, 359.—Durango, Mex.
- plumosa* LOEW, *Stett. Ent. Zeit.*, VIII, 201; *Wien. Ent. Monatsch.*, III, 296; *Mon.  
 N. A. Dipt.*, I, 121.—Sitka; Middle States.
- MACQUART, *Dipt. Exot.*, II, 3, 180, pl. XXIV, f. 7 (*vicina*, preoc.).—Phila-  
 delphia. [Lw.]
- WALKER, *List*, IV, 1086 (*struthio*).—Martin Falls, Canada; N. A. [Lw.]  
 DAY, *Canad. Ent.*, XIII, 87, note and oc.—Conn.
- COQUILLET, *Proc. Wash. Acad. Sci.*, II, 457, oc. in Alaska, Cal., and U. S.  
 generally. N. J.—Smith Cat.; White Mts., N. H.—Slosson; Beulah,  
 N. M.—Skinner.
- pubescens* DAY, *Canad. Ent.*, XIII, 86.—Wash.
- rotundicornis* LOEW, *Cent.*, I, 70; *Mon. N. A. Dipt.*, I, 123.—North Red. R.; Eng-  
 lish R., Canada. White Mts., N. H.—Slosson.
- saratogensis* FITCH, 1st N. Y. Rept., 772.—N. Y.  
 LOEW, *Wien. Ent. Monatsch.*, III, 256; *Mon. N. A. Dipt.*, I, 119.—Middle  
 States.  
 Atlantic States and Canada—O. S.; Montreal—Chagnon; N. J.—Smith  
 Cat.; White Mts., N. H.—Slosson; Saranac Inn, N. Y.—Needham;  
 Axton, N. Y.—M. and H.
- setosa* COQUILLET, *Proc. U. S. N. M.*, XXIII, 615.—New Bedford and Barnstable,  
 Mass.; Ga.
- sparsa* LOEW, *Mon. N. A. Dipt.*, I, 117.—Middle States.  
 N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.
- spinicornis* LOEW, *Cent.*, VI, 86.—Cuba.  
 St. Augustine and Ormond, Fla., and Jamaica—Johnson.
- spreta* VAN DER WULP, *Biologia*, Dipt., II, 358.—Jalisco and Mexico City, Mex.
- straminata* VAN DER WULP, *Biologia*, Dipt., II, 357, pl. IX, f. 11.—Guerrero, Mex.
- triangularis* LOEW, *Cent.*, I, 69; *Mon. N. A. Dipt.*, I, 122.—North Red. R.; Eng-  
 lish R., Canada. White Mts., N. H.—Slosson.
- umbrarum* LINNÉ, *Fauna Suecica*, 458, no. 1864 (*Musca*).—Europe.  
 MEIGEN, *Syst. Besch.*, VI, 39 (*Dictya*).  
 SCHINER, *Fauna Austr.*, II, 56.  
 LOEW, *Wien. Ent. Monatsch.*, III, 292 (*pictipes*); *Mon. N. A. Dipt.*, I, 111  
 (id.).—D. C.  
 DAY, *Canad. Ent.*, XIII, 85, note and oc.—Conn., Pa., Kans., Wash. (id.).  
 GIGLIO-TOS, *Ditt. del Mess.*, IV, 38, notes.—Morelia, Mex. (id.).  
 VAN DER WULP, *Biologia*, Dipt., II, 357, pl. IX, f. 12 (id.).—Mexico, sev-  
 eral places.  
 NEEDHAM, *Bull.* 47, N. Y. State Mus. Nat. Hist., 580, pl. XIV, f. 9-14 (id.),  
 life hist.; the larvæ float at surface of water in creeks, among vegeta-  
 tion. Colored figs. of larva, puparium, and adult.—Adirondacks, N. Y.  
 KERTÉSZ, *Termész. Füzetek*, 1901, 419, asserts absolute identity of *pictipes*  
 with *umbrarum*; places in his genus *Monochatophora*.  
 Montreal—Chagnon; White Mts., N. H.—Slosson.
- valida* LOEW, *Mon. N. A. Dipt.*, I, 110.—No locality; O. S. gives N. Y., Quebec.  
 White Mts., N. H.—Slosson; Montreal—Chagnon.

## SEPEDON.

LATREILLE, *Hist. Nat. Crust. et Ins.*, XIV, 305, 1804.FALLÉN, *Sciomyzides*, 2, 1820.



- MEIGEN, Syst. Besch., vi, 27, 1830.  
 SCHINER, Fauna Austr., ii, 64, 1864.  
 LOEW, Mon. N. A. Dipt., i, 124, 1862.  
 VAN DER WULP, Biologia, Dipt., ii, 359, table of Mexican species, 1897.  
**armipes** LOEW, Wien. Ent. Monatsch., iii, 298; Mon. N. A. Dipt., i, 126.—Middle States.  
 WEBSTER, Canad. Ent., 1900, 213, oc. in Ohio. N. J.—Smith Cat.  
 Common in the upper Mississippi Valley—J. M. A.  
**fuscipennis** LOEW, Wien. Ent. Monatsch., iii, 299; Mon. N. A. Dipt., i, 124.—Middle States.  
 DAY, Canad. Ent., xiii, 88, notes and oc.—Wash.  
 NEEDHAM, Bull. 47, N. Y. State Mus. Nat. Hist., 577, pl. xiv, f. 1-8, life hist.; larva floats at surface of water in creek, among vegetation. Colored figs. of larva, puparium, and adult.—Adirondacks, N. Y.  
 N. J.—Smith Cat.  
**macropus** WALKER, List, iv, 1078.—Jamaica.  
 LOEW, Mon. N. A. Dipt., i, 125.—Middle States. Porto Rico—Roeder.  
**nigriventris** VAN DER WULP, Biologia, Dipt., ii, 359.—Vera Cruz, Mex.  
**nubilipennis** VAN DER WULP, Biologia, Dipt., ii, 360, pl. ix, f. 14.—Mazatlan and Vera Cruz, Mex.  
**præmiosus** GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158; Ditt. del Mess., iv, 38.—Morelia, Mex.  
**pusillus** LOEW, Wien. Ent. Monatsch., iii, 299; Mon. N. A. Dipt., i, 127.—Middle States.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.  
**relictus** VAN DER WULP, Biologia, Dipt., ii, 359.—Mexico City.

## SAPROMYZIDÆ.

- WILLISTON, Ent. News, v, 196, 1894, table of and notes on species.  
 BECKER, Berl. Ent. Zeitsch., xl, 171-264, 1895, a monograph of the European genera and species.

## LONCHÆA.

- FALLÉN, Orthalides, 25, 1820.  
 SCHINER, Fauna Austr., ii, 88, 1864.  
 BECKER, Berl. Ent. Zeitsch., xl, 1895, 322, full discussion of the genus and the European species.  
 PACKARD, Guide to Study of Insects, 412, figs. and life history of "*? Lonchæa* sp." the larva of which makes blister-like swellings on twigs of willow at Brunswick, Me.; 5th Rept. U. S. Ent. Comm., 598, notice of same.  
**albitarsis** ZETTERSTEDT, Ins. Lapp., 754; Dipt. Scand., vi, 2351.—Europe.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 458, oc. in Sitka, Alaska.  
**brevicornis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 379.—St. Vincent, W. I.  
**cærulea** WALKER, List, iv, 1004.—Ga.  
**chalybea** WIEDEMANN, Auss. Zw., ii, 476.—S. A.  
 SCHINER, Novara, 282, note.  
 VAN DER WULP, Tijdschr. v. Ent., 1883, 55.—Brazil.  
 GIGLIO-TOS, Ditt. del Mess., iv, 52, oc. in Tuxpango, Mex.  
**deutsch** ZETTERSTEDT, Ins. Lapp., 753; Dipt. Scand., vi, 2348.—Europe.  
 COQUILLET, Proc. Wash. Acad. Sci., ii, 458, oc. in Sitka, Alaska.  
**discrepans** WALKER, Trans. Ent. Soc., ii, ser., v, 322.—Mex.

- glaberrima* WIEDEMANN, Auss. Zw., II, 475.—W. I.  
Lake Worth, Fla.—Johnson.
- hyalipennis* ZETTERSTEDT, Dipt. Scand., VI, 2350.—Europe.  
COQUILLET, Proc. Wash. Acad. Sci., II, 459, oc. in Yakutat and Virgin Bay, Alaska (*hyalinipennis*).
- longicornis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 378.—St. Vincent, W. I.  
COQUILLET, Proc. U. S. N. M., XXII, 258, oc. in Porto Rico.
- nigra* WIEDEMANN, Auss. Zw., II, 476.—Brazil.  
BIGOT, Sagra's Cuba, 827, oc. in Cuba.  
White Mts., N. H.—Slosson.
- orchidearum* TOWNSEND, Trans. Amer. Ent. Soc., XXII, 80.—Jamaica; bred from flower-stem of an orchid, *Oncidium luridum*.
- polita* SAY, Jour. Acad. Sci. Phil., VI, 188; Compl. Works, II, 371.—Ind.  
HOWARD, Proc. Wash. Acad. Sci., II, 586, reared from human excrement. Mass.—Harris Cat., quoted by O. S.
- rufitarsis* MAQUART, Dipt. Exot., Suppl. IV, 300, pl. XXVIII, f. 2.—N. A.  
? WALKER, List, IV, 1004 (*tarsata* FALL.).—Martin Falls, Canada. [O. S., with a doubt.]  
GIGLIO-TOS, Ditt. del Mess., IV, 53, oc., etc.—Mex.  
N. J.—Smith Cat., "Larvæ and pupæ in decayed wood"; White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.

## PALLOPTERA.

- FALLÉN, Orthalides, 1820, 23.  
SCHINER, Fauna Austr., II, 107, 1864.  
BECKER, Berl. Ent. Zeitsch., XL, 1895, 313, discussion of genus, with table of European species.
- arcuata* FALLÉN, Orthalides, 25.—Sweden.  
MEIGEN, Syst. Besch., V, 267 (*Sapromyza inusta*).  
ZETTERSTEDT, Dipt. Scand., VI, 2275.  
SCHINER, Fauna Austr., II, 108.  
White Mts., N. H.—Slosson (det. by Coq.).
- juvunda* LOEW, Cent., III, 55.—Sitka.  
COQUILLET, Proc. Wash. Acad. Sci., II, 459, oc. in Alaska, Idaho and Col.
- superba* LOEW, Cent., I, 75.—Pa. Quebec—O. S.; White Mts., N. H.—Slosson; Province of Quebec—Fyles.
- terminalis* LOEW, Cent., III, 54.—Sitka.

## PACHYCERINA.

- MACQUART, Hist. Nat. Dipt., II, 511, 1835.  
SCHINER, Fauna Austr., II, 93, 1864.  
BECKER, Berl. Ent. Zeitsch., 1895, XL, 250.
- clavipennis* COQUILLET, Canad. Ent., XXX, 280.—St. Augustine, Fla.
- dolorosa* WILLISTON, in Adams's paper, Kans. Univ. Sci. Bull., II, 37.—Col.
- verticalis* LOEW, Cent., I, 82.—Fla.  
TOWNSEND, Canad. Ent., 1893, 303 (*Sapromyza vulgaris* FITCH). [Kahl.]  
N. J.—Smith Cat.; Florida—Johnson; "Over the greater part of the U. S."—Williston; Beulah, N. M.—Skinner.
- Note*.—Mr. Kahl informs me that *verticalis* and the true *vulgaris* FITCH belong to the same genus, which is neither *Pachycerina* nor *Sapromyza*.

## PHYSOGENUA.

MACQUART, Dipt. Exot., Suppl. III, 60, 1847 (*Physogenua*).

SCHINER, Novara, 277, 1868, notes.

BECKER, Berl. Ent. Zeitsch., XL, 1895, 255.

**ferruginea** SCHINER, Novara, 277.—S. A.

GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893 (*urine*); Ditt. del Mess., IV, 50 (*urina*).—Tuxpango, Mex.

WILLISTON, Ent. News, 1894, 197, syn., with a doubt; Kans. Univ. Quart., VI, 8, oc. in Brazil, and syn.

? **nigra** WILLISTON, Trans. Ent. Soc. Lond., 1896, 379, pl. XIII, f. 133; Kans. Univ. Quart., VI, 8, refers to Becker's "genus incertum," Berl. Ent. Zeitsch., XL, pl. I, f. 12.—St. Vincent, W. I.; Brazil.

**obscuripennis** BIGOT, see *vittata*.

**urina** GIGLIO-TOS, see *ferruginea*.

**variegata** LOEW, see *vittata*.

**vittata** MACQUART, Dipt. Exot., Suppl. III, 60, pl. VII, f. 2.—Brazil.

BIGOT, in Sagra's Cuba, 826 (*Sciomyza obscuripennis*).—Cuba. [Roeder.]

LOEW, Cent., I, 83 (*Laurania variegata*).—Cuba.

SCHINER, Novara, 277, oc. in S. A. (*variegata*).

ROEDER, Stett. Ent. Zeit., 1885, 349.—Porto Rico.

BECKER, Berl. Ent. Zeitsch., XL, 255, pl. I, f. 4, 5, full discussion.

Jamaica—Johnson.

## GRIPHONEURA.

SCHINER, Novara, 281, 1868.

BECKER, Berl. Ent. Zeitsch., XL, 256, 1895.

**imbuta** WIEDEMANN, Auss. Zw., II, 474.—Brazil.

SCHINER, Novara, 281, pl. III, f. 5.—S. A.

GIGLIO-TOS, Ditt. del Mess., IV, 52, oc. in Tuxpango, Mex.

## LAUXANIA.

LATREILLE, Hist. Nat. Crust. et Ins., XIV, 390, 1804.

MEIGEN, Syst. Besch., V, 295, 1826.

SCHINER, Fauna Austr., II, 94, 1864.

BECKER, Berl. Ent. Zeitsch., XL, 246, 1895.

COQUILLET, Canad. Ent., XXX, 279, 1898, table of new species.

**albiset** COQUILLET, Canad. Ent., XXX, 280.—Santa Cruz Mts., Cal.

**albovittata** LOEW, Cent., II, 79.—Cuba. Porto Rico—Roeder; Jamaica—Johnson.

**argyrostoma** WIEDEMANN, Auss. Zw., II, 471.—W. I.

SCHINER, Novara, 282, oc. in S. A.

**cineracea** COQUILLET, Jour. N. Y. Ent. Soc., X, 179.—Biscayne Bay, Fla.

**cylindricornis** FABRICIUS, Ent. Syst., IV, 332 (*Musca*); Syst. Antl., 212.—Europe.

FALLÉN, Orthalides, 27.

MEIGEN, Syst. Besch., V, 296.

MACQUART, Hist. Nat. Dipt., II, 508.

ZETTERSTEDT, Dipt. Scand., VI, 2360.

SCHINER, Fauna Austr., II, 95.

LOEW, in Silliman's Mag., oc. in N. A.

\*BECKER, Berl. Ent. Zeitsch., XL, 247, full bibliog., etc.

COQUILLET, Proc. Wash. Acad. Sci., II, 460, oc. in Alaska, and from Nova Scotia to Ga. Axton, N. Y.—M. and H.

? **elisa** MEIGEN, Syst. Besch., V, 297.—Europe.

SCHINER, Fauna Austr., II, 95.

- WALKER, List, IV, 1003, oc. in Nova Scotia; which is very doubtful.
- eucephala** LOEW, Cent., x, 83.—Texas. Miss.—J. M. A.
- facialis** COQUILLET, Canad. Ent., xxx, 279.—Fla., Ga.
- femoralis** LOEW, Cent., I, 89.—Ga. Kans., Tenn.—J. M. A.
- flaviceps** LOEW, Cent., VII, 91.—D. C.
- flavipennis** FABRICIUS, Syst. Antl., 207 (*Scatophaga*).—S. A.
- WIEDEMANN, Auss. Zw., II, 471.—S. A.
- SCHINER, Novara, 281, note.—Brazil, Colombia.
- ? MACQUART, Dipt. Exot., Suppl. IV, 300, pl. XXVIII, f. 3 (*ruficornis*).—Bahia, Brazil. [G.-T., with a doubt.]
- GIGLIO-TOS, Ditt del Mess., IV, 82, oc. in Tuxpango, Mex.
- frontalis** LOEW, see *Sapromyza*.
- gracilipes** LOEW, Cent., I, 85.—Pa. N. J.—Smith Cat.; Kans.—J. M. A.
- latipennis** COQUILLET, Canad. Ent., xxx, 279.—Fla., Ga. N. J.—Smith Cat.
- longicornis** COQUILLET, Jour. N. Y. Ent. Soc., x, 178.—Williams and Oracle, Ariz.; Mesilla Park, N. M.
- lutea** COQUILLET, Jour. N. Y. Ent. Soc., x, 179.—L. Worth and Biscayne Bay, Fla.
- manuleata** LOEW, Cent., I, 88.—Pa.
- muscaria** LOEW, Cent., I, 87.—Cuba.
- SCHINER, Novara, 382, oc. in S. A.
- WILLISTON, Trans. Ent. Soc. Lond., 1896, 383, doubtful oc. in St. Vincent. N. J.—Smith Cat.
- nasalis** THOMSON, Eugen. Resa, 568.—Cal.
- nigrimanus** COQUILLET, Jour. N. Y. Ent. Soc., x, 179.—Williams, Ariz.
- obscura** LOEW, Cent., I, 86.—English R., Canada; Pa.
- N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.
- opaca** LOEW, Cent., I, 84.—Fla. N. J.—Smith Cat.; Fla., several places—Johnson.
- planiscutum** THOMSON, see *Sapromyza*.
- quadrisetosa** THOMSON, see *Sapromyza*.
- trivittata** LOEW, Cent., I, 90.—Ga. Georgetown, Fla.—Johnson.
- variceps** COQUILLET, Jour. N. Y. Ent. Soc., x, 178.—Williams, Ariz.
- variegata** LOEW, see *Physogenua*.

#### SAPROMYZA.

- FALLÉN, Ortalides, 1820, 29.
- MEIGEN, Syst. Besch., v, 258, 1826.
- SCHINER, Fauna Austr., II, 96, 1864.
- BECKER, Berl. Ent. Zeitsch., XL, 179, 1895.
- WILLISTON, Trans. Ent. Soc. Lond., 1896, 379, table of St. Vincent species.
- TOWNSEND, Canad. Ent., XXIV, 301, table of species, 1892.
- F. LYNCH A., Ann. Soc. Cient. Argentina, XXXIV, 253-303, 1893, table and desc. of all American species.
- COQUILLET, Canad. Ent., xxx, 277, partial table of species, 1898.
- amida** WALKER, List, IV, 988.—Ga.
- angustipennis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 381, pl. XIII, f. 134.—St. Vincent, W. I.
- apta** WALKER, see *latelimbata*.
- bipunctata** SAY, Jour. Acad. Sci. Phil., VI, 178; Compl. Works, II, 367.—Mex.
- WILLISTON, Kans. Univ. Quart., VI, 11, doubtful oc. in Rio Janeiro.
- bispina** LOEW, Cent., I, 79.—Nebr. N. J.—Smith Cat.
- brachysoma** COQUILLET, Canad. Ent., xxx, 278; Proc. Wash. Acad. Sci., II, 460, oc.—White Mts., N. H.; Muir Inlet and Sitka, Alaska.

- cincta** LOEW, Cent., 1, 81.—Cuba.  
GIGLIO-TOS, Ditt. del Mess., iv, 48, note.—Tuxpango, Mex.  
Porto Rico—Roeder; White Mts., N. H.—Slosson.  
Probably is same as *vulgaris* FIRCH.—Williston.
- compedita** LOEW, Cent., 1, 76.—Pa. N. J.—Smith Cat.; Montreal—Chagnon;  
White Mts., N. H.—Slosson; Pacific Coast—Will.
- connexa** SAY, Jour. Acad. Sci. Phil., vi, 177; Compl. Works, ii, 367.—Ind.
- contigua** FABRICIUS, Ent. Syst., iv, 347 (*Musca*); Syst. Antl., 206 (*Scatophaga*).  
—Brazil.  
WIEDEMANN, Auss. Zw., ii, 450.—Brazil.  
SCHINER, Novara, 279, oc. in Brazil.  
GIGLIO-TOS, Ditt. del Mess., iv, 49, oc. in Mexico.
- crevecœuri** COQUILLET, Canad. Ent., xxx, 278.—Onaga, Kans.
- decora** LOEW, Cent., v, 96.—Lake George, N. Y. Canada—O. S.  
N. J.—Smith Cat.; Montreal—Chagnon; collected in Wis. by Wheeler—  
J. M. A.
- exul** WILLISTON, Trans. Ent. Soc. Lond., 1896, 382.—St. Vincent, W. I.  
Rio Janeiro—Will.
- flaveola** COQUILLET, Canad. Ent., xxx, 279.—Seattle, Wash.; Ore.; Los Angeles  
Co., Cal.
- fraterna** LOEW, Cent., 1, 77.—Pa. N. J.—Smith Cat.
- frontalis** LOEW, Wien. Ent. Monatsch., ii, 14 (*Lauxania*).—Europe.  
SCHINER, Fauna Austr., ii, 96 (id.).  
LOEW, Silliman's Jour., oc. in N. A.  
BECKER, Berl. Ent. Zeitsch., xl, 240, gen. ref. and desc.
- geminata** FABRICIUS, Syst. Antl., 331 (*Dictya*).—S. A.  
WIEDEMANN, Auss. Zw., ii, 450.—S. A.  
GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158 (*plagosa*); Ditt. del Mess.,  
iv, 47.—Tuxpango, Mex.  
WILLISTON, Ent. News, 1894, 197, syn.; Kans. Univ. Quart., vi, 9, notes.
- glauca** COQUILLET, Jour. N. Y. Ent. Soc., x, 177.—Marlboro, Md.
- houghii** COQUILLET, Canad. Ent., xxx, 277.—Mass.
- hubbardii** COQUILLET, Canad. Ent., xxx, 277.—Chiric Mts., Ariz.
- ingrata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 385.—St. Vincent, W. I.
- innuba** GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158; Ditt. del Mess., iv, 49.  
—Mex.  
N. J.—Smith Cat.
- latelimbata** MACQUART, Dipt. Exot., Suppl. v, 120, pl. vi, f. 18.—Brazil.  
WALKER, Trans. Ent. Soc., n. ser., v, 54 (*apta*).—Mex. [G.-T.]  
SCHINER, Novara, 279, as syn. of *rubescens* MACQ.  
GIGLIO-TOS, Ditt. del Mess., iv, 49, notes on the syn., etc.—Tuxpango, Mex.
- lineata** WILLISTON, Trans. Ent. Soc., 1896, 385.—St. Vincent, W. I.
- livingstoni** COQUILLET, Canad. Ent., xxx, 278.—Vancouver Id.
- longipennis** FABRICIUS, Ent. Syst., iv, 323 (*Musca*); Syst. Antl., 299 (id.).—Eu-  
rope.  
MEIGEN, Syst. Besch., v, 300 (*Lauxania*).  
DESVOIDY, Myodaires, 646 (*Minettia luctuosa*).  
SCHINER, Fauna Austr., ii, 97.  
VAN DER WULP, Tijdschr. v. Ent., 1867, oc. in N. A. N. J.—Smith Cat.
- lupulina** FABRICIUS, Mant. Insect., ii, 344 (*Musca*); Ent. Syst., iv, 323 (id.);  
Syst. Antl., 298 (id.).—Europe.  
MEIGEN, Syst. Besch., v, 301 (*Lauxania*).  
DESVOIDY, Myodaires, 647 (*Minettia testacea*).

- SCHINER, Fauna Austr., II, 97.  
 LOEW, in Silliman's Jour., oc. in N. A.  
 BECKER, Berl. Ent. Zeitsch., XL, 213.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 460, oc. in Alaska, Kans., Col., N. C.  
 N. J.—Smith Cat.; Pacific Coast—Will.; White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.
- macula** LOEW, Cent., x, 82.—Texas.  
 WILLISTON, Ent. News, 1894, 197, may be syn. of *octopunctata*; Trans. Ent. Soc. Lond., 1896, 380, oc. in St. Vincent, W. I., and Brazil.  
 N. J.—Smith Cat.
- magna** COQUILLET, Canad. Ent., xxx, 279.—D. C.
- notata** FALLÉN, Orthalides, 30.—Europe.  
 MEIGEN, Syst. Besch., v, 271.  
 MACQUART, Hist. Nat. Dipt., II, 402 (*duodecimpunctata*).  
 LOEW, Dipt. Beitr., III, 40.  
 SCHINER, Fauna Austr., II, 99.  
 VAN DER WULP, Tijdschr. v. Ent., 1867, oc. in N. A.  
 BECKER, Berl. Ent. Zeitsch., XL, 203.  
 White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.
- ocellaris** TOWNSEND, see *vulgaris*.
- octopunctata** WIEDEMANN, Auss. Zw., II, 454.—W. I.  
 ROEDER, Stett. Ent. Zeit., 1885, 349, pt. desc.—Porto Rico.  
 See *macula*.
- octovittata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 382.—St. Vincent, W. I.
- philadelphica** MACQUART, Dipt. Exot., II, 3, 191.—N. A.  
 Atlantic States—O. S.; Quebec—Wulp; White Mts., N. H.—Slosson; N. J.—Smith Cat.
- planiscutum** THOMSON, Eugen. Resa, 586 (*Laurania*).—Cal.  
 Identified from Ore. by Coquillett, in the Oregon Agricultural College collection.
- puella** WILLISTON, Trans. Ent. Soc. Lond., 1896, 381.—St. Vincent, W. I.
- puncticeps** COQUILLET, Jour. N. Y. Ent. Soc., x, 178.—Mt. Washington, N. H.
- quadrilineata** LOEW, Cent., I, 78.—Pa.  
 N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.
- quadrisetosa** THOMSON, Eugen. Resa, 569 (*Laurania*).—Cal.
- resinosa** WIEDEMANN, Auss. Zw., II, 456.—Ga. Fla.—Johnson; Axton, N. Y.—M. and H.
- rotundicornis** LOEW, Cent., III, 56.—Sitka. White Mts., N. H.—Slosson.
- sheldoni** COQUILLET, Canad. Ent., xxx, 277.—N. Y.
- slossonæ** COQUILLET, Canad. Ent., xxx, 277.—Biscayne Bay, Fla.
- sonax** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 48.—Tuxpango, Mex.
- sordida** WIEDEMANN, Auss. Zw., II, 456.—W. I.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 383, doubtfully recognized from St. Vincent, W. I.  
 COQUILLET, Proc. U. S. N. M., XXII, 258, oc. in Porto Rico, Fla. and Ga.
- sororia** WILLISTON, Trans. Ent. Soc. Lond., 1896, 385.—St. Vincent, W. I.
- stata** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 47.—Orizaba, Mex.
- stictica** LOEW, Cent., III, 58.—D. C. Texas—O. S.
- tenuispina** LOEW, Cent., I, 80.—Nebr.
- umbrosa** LOEW, Cent., III, 57.—D. C.  
 N. J.—Smith Cat.; Ormond, Fla.—Johnson.



- venusta* WILLISTON, Trans. Ent. Soc. Lond., 1896, 384.—St. Vincent, W. I.  
*vinnula* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess.,  
 IV, 48.—Tuxpango, Mex.  
*vittigera* COQUILLET, Jour. N. Y. Ent. Soc., x, 178.—Ga.  
*vulgaris* FITCH, 1st N. Y. Rept., 300, pl. 1 (*Chlorops*).—N. Y.  
 VAN DER WULP, Tijdschr. v. Ent., x, 159 (*plumata*).—Wis. [O. S.]  
 TOWNSEND, Canad. Ent., 1893, 303 (*ocellaris*).—N. M. [Kahl.]  
 F. LYNCH A., Ann. Soc. cient. Argentina, XXXIV, 283.—Argentina  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 384, notes.—St. Vincent, W. I.  
 COCKERELL, Jour. N. Y. Ent. Soc., VI, 206, oc at Agency, N. M.  
 OSTEN SACKEN, Cat., 261, note 311.  
 Pacific Coast—Will.; N. J.—Smith Cat.  
 See note to *Pachycerina verticalis*.

## CHÆTOCÆLIA.

- GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV,  
 50, 1895.  
*palens* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158; Ditt. del Mess., IV, 51,  
 f. 14.—Orizaba, Mex.  
*vergens* GIGLIO-TOS, Ditt. del Mess., IV, 51, f. 15.—Tuxpango, Mex.

## TRIGONOMETOPUS.

- MACQUART, Hist. Nat. Dipt., II, 419, 1835.  
 LOEW, Centuries, App., p. 290, note.  
 WILLISTON, Manual, 127, footnote, 1896.  
 CZERNY, Wien. Ent. Zeit., XXII, 62, discusses relations, 1903.  
*punctipennis* COQUILLET, Canad. Ent., XXX, 280.—Col.  
*rotundicornis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 388, pl. XIII, f. 137.—St.  
 Vincent, W. I.  
*vittatus* LOEW, Cent., VIII, 98; App., p. 290, note.—Ga.

## ORTALIDÆ.

- VAN DER WULP, Biologia, Dipt., II, 377, 1897, def. and table of genera of the  
 Mexican region, including *Rhopalomera* and *Toxotrypana*.

## PYRGOTA.

- WIEDEMANN, Auss. Zw., II, 580, 1830.  
 MACQUART, Dipt. Exot., II, 3, 197, 1843 (*Oxycephala*).  
 SCHINER, Fauna Austr., II, 66, 1804.  
 LOEW, Mon. N. A. Dipt., III, 72, 1872.  
*chagnoni* JOHNSON, Canad. Ent., 1900, 246.—Montreal Id., Canada.  
*fenestrata* MACQUART, Dipt. Exot., Suppl. IV, 281, pl. XXVI, f. 1 (*Oxycephala*).—  
 No locality; Osten Sacken gives N. A. in Cat., 181.  
*filiola* LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 332.—Tex.  
 OSTEN SACKEN, West. Dipt., 343 (*debilis*).—Ky. [O. S.]  
 Ormond, Fla.—Johnson.  
*lugens* VAN DER WULP, Biologia, Dipt., II, 378, pl. x, f. 1.—Guatemala.  
*pterochorina* GERSTÄCKER, Stett. Ent. Zeit., XXI, 190, pl. II, f. 6.—Carolina.  
 LOEW, Mon. N. A. Dipt., III, 81, transl. of desc., with notes.  
*undata* WIEDEMANN, Auss. Zw., II, 581, pl. x, f. 6.—N. A.

- MACQUART, Hist. Nat. Dipt., II, 423, pl. XVIII, f. 23; Dipt. Exot., II, 3, 198, pl. XXVI, f. 6 (*Oxyccra fuscipennis*).—N. A.; no locality for the second, but America is given in Suppl. IV, 281.
- GRAY, in Griffith's Animal Kingdom, pl. CXXV, f. 5 (*Myopa nigripennis*), 1832. [Gerstæcker.]
- HARRIS, Ins. Inj. to Vegetation, 3d ed., 610, f. 268 (*Sphcomyia*).—Mass.
- GERSTÆCKER, Stett. Ent. Zeit., XXI, 188, pl. II, f. 7.
- LOEW, Mon. N. A. Dipt., III, 77, syn., etc.—U. S.
- Mass. to Kans.—O. S. Montreal—Chagnon; N. J.—Smith Cat.; Province of Quebec—Fyles.
- I collected it at light in Lawrence, Kans.—J. M. A.
- valida** HARRIS, Ins. Inj. to Veg., 3d ed., 611 (*Sphcomyia*).—Mass.
- ? MACQUART, Dipt. Exot., Suppl., I, 210, pl. XVIII, f. 12 (*Oxycephala maculipennis*).—Galveston, Tex. [O. S., with a query.]
- LOEW, Neue Beitr., II, 22 (*millepuncta*); Mon. N. A. Dipt., III, 74 (id.).—D. C., N. Y., III.
- N. and Mid. States—O. S.; N. J.—Smith Cat.
- vespertilio** GERSTÆCKER, Stett. Ent. Zeit., XXI, 189, pl. II, f. 8.—Carolina.
- LOEW, Mon. N. A. Dipt., III, 79, transl. and notes.

## OSTRACOCÆLIA.

- GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 44, 1895.
- mirabilis** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158; Ditt. del Mess., IV, 44, f. 13.—Mex.
- VAN DER WULP, Biologia, Dipt., II, 392, pl. IX, f. 27.—Guerrero, Vera Cruz, and Tampico, Mex.

## AMPHICNEPHES.

- LOEW, Mon. N. A. Dipt., III, 83, 1873.
- fasciola** COQUILLET, Jour. N. Y. Ent. Soc., VIII, 21.—Onaga, Kans.
- pertusus** LOEW, Mon. N. A. Dipt., III, 84, pl. VIII, f. 1.—Carolina, D. C., Conn.
- WIEDEMANN, Auss. Zw., II, 506 (*Trypeta pulla*).—No locality.
- OSTEN SACKEN, Berl. Ent. Zeitsch., 1883, 298, syn., and remarks on the right of priority of species published without locality.
- N. J.—Smith Cat.; Georgetown and Ormond, Fla.—Johnson.
- stellatus** VAN DER WULP, Biologia, Dipt., II, 390, pl. X, f. 23.—Guerrero and Yucatan, Mex.

## AUTOMOLA.

- LOEW, Mon. N. A. Dipt., III, 118, 1873.
- VAN DER WULP, Biologia, Dipt., II, 390, 1899.
- atomaria** WIEDEMANN, Auss. Zw., II, 461 (*Ortalis*).—Brazil.
- VAN DER WULP, Biologia, Dipt., II, 390, pl. X, f. 22.—Vera Cruz, Mex.

## PLATYSTOMA.

- MEIGEN, Illig. Mag., II, 277, 1803; Syst. Besch., V, 390, 1826.
- SCHINER, Fauna Austr., II, 82, 1864.
- ? **mexicanum** GIGLIO-TOS, Boll. R. Univ. Torino, No. 158, 1893; Ditt. del Mess., IV, 46.—Tuxpango, Mex.; the question is raised in the second reference.

## RIVELLIA.

- DESVOIDY, Myodaires, 729, 1830.
- SCHINER, Fauna Austr., II, 80, 1864.

- LOEW, Mon. N. A. Dipt., III, 44 and 87, 1873.
- VAN DER WULP, Biologia, Dipt., II, 381, 1899, table of Mexican species.
- basilaris** COQUILLET, Jour. N. Y. Ent. Soc., VII, 21.—Col., Kans.
- boscii** DESVOIDY, Myodaires, 730.—Carolina.  
? MACQUART, Hist. Nat. Dipt., II, 459 (*Urophora interrupta*).—N. A.  
[Coquillett; query by J. M. A.]
- LOEW, Mon. N. A. Dipt., III, 93, obs.; not recognized.
- brevifasciata** JOHNSON, Ent. News, XI, 326.—Atco, N. J.; Tifton, Ga.
- conjuncta** LOEW, Mon. N. A. Dipt., III, 88, pl. VIII, f. 3.—Md.  
VAN DER WULP, Biologia, Dipt., II, 383, pl. x, f. 11.—Morelos and Guerrero, Mex.; Costa Rica. N. J.—Smith Cat.
- connecta** VAN DER WULP, Biologia, Dipt., II, 383, pl. x, f. 12.—Guerrero, Mex.
- flavimanus** LOEW, Mon. N. A. Dipt., III, 92, pl. VIII, f. 7.—Nebr.  
? VAN DER WULP, Tijdschr. v. Ent., X, 154, pl. v, f. 10 (*Herina metallica*).  
—Wis. [O. S., with a query.]
- OSTEN SACKEN, Cat., 182, note.  
N. J.—Smith Cat.; Montreal—Chagnon.
- flexuosa** VAN DER WULP, Biologia, Dipt., II, 383, pl. x, f. 13.—Guerrero, Mex.
- floridana** JOHNSON, Canad. Ent., 1900, 247.—L. George, Fla.
- ligata** SAY, Jour. Acad. Sci. Phil., VI, 83; Compl. Works, II, 368 (*Ortalis*).—Mex.  
LOEW, Mon. N. A. Dipt., III, 197, quotes desc.; gen. ref.
- longicornis** VAN DER WULP, Biologia, Dipt., II, 384, pl. x, f. 15.—Guerrero, Mex.
- micans** LOEW, Mon. N. A. Dipt., III, 94.—Texas.  
VAN DER WULP, Biologia, Dipt., II, 382, pl. x, f. 9, oc. and note.—N. Sonora, Mex.  
Ga.—Williston MS.
- occulta** VAN DER WULP, Biologia, Dipt., II, 382, pl. x, f. 8.—Guerrero, Mex.
- pallida** LOEW, Mon. N. A. Dipt., III, 95, pl. VIII, f. 8.—D. C.  
HOWARD, Proc. Wash. Acad. Sci., II, 585, note.—D. C.  
N. J.—Smith Cat.; St. Augustine and Georgiana, Fla.—Johnson.
- pilosula** VAN DER WULP, Biologia, Dipt., II, 384, pl. x, f. 14.—Tabasco, Mex.
- quadrifasciata** MACQUART, Hist. Nat. Dipt., II, 433 (*Herina*).—N. A.  
LOEW, Mon. N. A. Dipt., III, 90, pl. VIII, f. 5.—Nebr.  
N. J.—Smith Cat.; Fla., several places—Johnson; Mont.—Williston MS.
- submetallica** VAN DER WULP, Biologia, Dipt., II, 382, pl. x, f. 10.—Guerrero, Mex.
- variabilis** LOEW, Mon. N. A. Dipt., III, 91, pl. VIII, f. 6.—D. C.; locality questioned  
by O. S. N. J.—Smith Cat.; Fla., several places—Johnson; Ga.—Williston MS.
- viridulans** DESVOIDY, Myodaires, 729.—N. A.  
MACQUART, Dipt. Exot., Suppl. v, 123, pl. VII, f. 5 (*Herina rufitarsis*).—  
Baltimore, Md. [Lw.]
- FITCH, 1st N. Y. Report, 65 (*Tephritis melliginis*).—N. Y.; attending the  
apple aphid.
- WALKER, List, IV, 992, 993 (*Ortalis quadrifasciata* FITCH and *Ortalis  
otrada*).—Both N. A.
- COQUILLET, Jour. N. Y. Ent. Soc., VIII, 22, would also place *Ortalis bipars*  
WALKER here as a synonym; but the description shows several dis-  
crepancies.
- LOEW, Mon. N. A. Dipt., III, 88, pl. VIII, f. 4, desc., syn., etc.—N. Y., Ga.,  
D. C.  
Quebec—V. d. Wulp; N. J.—Smith Cat.

**MYRMECOMYIA.**

DESVOIDY, Myodaires, 721, 1830.

MACQUART, Hist. Nat. Dipt., II, 483, 1835 (*Michogaster*; amended into *Mischogaster* by V. d. Wulp).

LOEW, Mon. N. A. Dipt., III, 99, 1873.

*myrmecoides* LOEW, Wien. Ent. Monatsch., IV, 83 (*Cephalia*): Mon. N. A. Dipt., III, 100, pl. VIII, f. 9.—D. C.

*nitidipennis* VAN DER WULP, Biologia, Dipt., II, 385, pl. x, f. 16 16a (*Mischogaster*).—Panama.

**HIMAROËSSA.**

LOEW, Mon. N. A. Dipt., III, 85, 1873.

*pretiosa* LOEW, loc. cit., pl. VIII, f. 2.—Cuba.

**STENOPTERINA.**

MACQUART, Hist. Nat. Dipt., II, 453 (*Stenopterina*), 1835.

LOEW, Mon. N. A. Dipt., III, 96 and 22, 1873.

VAN DER WULP, Biologia, Dipt., II, 380, 1898, table of Mexican species.

*alligata* VAN DER WULP, Biologia, Dipt., II, 381, pl. x, f. 7.—Paso del Macho, Mex.

*bicolor* JOHNSON, see *varia*.

*mexicana* MACQUART, Dipt. Exot., II, 3, 208, pl. XXIX, f. 2 (*Herina*); Suppl., I, 209, pl. XVIII, f. 8 (*Herina splendens*).—Mex.; Colombia.

LOEW, Mon. N. A. Dipt., III, 97 (*carulescens*).—Texas.

VAN DER WULP, Biologia, Dipt., II, 380, pl. x, f. 6, oc., syn., and notes.—Guerrero, Jalisco, and N. Yucatan, Mex.

*varia* COQUILLET, Jour. N. Y. Ent. Soc., VIII, 25.—Fla.

JOHNSON, Canad. Ent., 1900, 246 (*bicolor*).—St. Augustine, Fla. [Johnson, in litt.]

**BRICINIA.**

WALKER, Trans. Ent. Soc., n. ser., v, 57, 1857 (original p. 324).

LOEW, Mon. N. A. Dipt., III, 202, 1873, quotes desc., and states that it did not appear until 1861.

SNOW, in Williston's Manual, 118, 1896, cannot separate from *Stenopterina*.

*flexivitta* WALKER, loc. cit.—Mex.

LOEW, Mon. N. A. Dipt., III, 203, quotes desc.

GIGLIO-TOS, Ditt. del Mess., IV, 45, recognized from Mex.

**BRICINIELLA.**

GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 45, 1895.

*cyanea* GIGLIO-TOS, locis citatis.—Cuernavaca, Mex.

**CEPHALIA.**

MEIGEN, Syst. Besch., v, 293, 1826.

SCHINER, Fauna Austr., II, 176, 1864.

*fenestrata* COQUILLET, Jour. N. Y. Ent. Soc., VIII, 24.—Onaga, Kans.

? *fulvicornis* BIGOT, Annales, 1886, 386.—Cal. Query by Bigot.

? *maculipennis* BIGOT, Annales, 1886, 385.—Rocky Mts. Query by Bigot.

**TRITOXIA.**

LOEW, Mon. N. A. Dipt., III, 102, 1873.

*cuneata* LOEW, Mon. N. A. Dipt., III, 107, pl. VIII, f. 11.—Nebr.

? *rufipes* MEIGEN, Syst. Besch., v, 294.—Europe.

SCHINER, Fauna Austr., II, 177.

WILLISTON, Trans. Amer. Ent. Soc., XIII, 307, doubtful oc. in Va. Mont.—Williston MS.; Beulah, N. M.—Skimmer.

**flexa** WIEDEMANN, Auss. Zw., II, 483 (*Trypeta*).—"Aus Neugeorgien."

WALKER, Dipt. Saund., 383, pl. VIII, f. 10 (*Trypeta arcuata*).—U. S. [Lw.]

SHIMER, Practical Entomologist, I, 4, figs.; biology,—the larvæ live in the bulbs of onions, hence the species is called the "Onion Fly."

SHIMER, American Entomologist, II, 110, further notes on same.

LOEW, Mon. N. A. Dipt., III, 102, pl. VIII, f. 10.—N. Wisconsin R.; Ill.

N. J.—Smith Cat.

**incurva** LOEW, Mon. N. A. Dipt., III, 104, pl. VIII, f. 12.—Ill.; this has the same habits as the preceding, and was included as a variety in the articles on habits just mentioned.

Kans., D. C., Texas—O. S.; N. J.—Smith Cat.

#### CAMPTONEURA.

MACQUART, Dipt. Exot., II, 3, 200, 1843.

LOEW, Mon. N. A. Dipt., III, 108, 1873.

**picta** FABRICIUS, Ent. Syst., IV, 355 (*Musca*); Syst. Antl., 318 and 330 (*Tephritis conica* and *Dictya picta*).—Both N. A. [Wd.]

WIEDEMANN, Auss. Zw., II, 489 (*Trypeta*).—N. A.

DESVOIDY, Myodaires, 720 (*Delphinia thoracica*). [Lw.]

MACQUART, Dipt. Exot., II, 3, 201, pl. XXVII, f. 4; Suppl. v, 124 (*Urophora nigricentris*).—N. A.; Baltimore.

LOEW, Mon. N. A. Dipt., III, 109, pl. VIII, f. 13.—U. S., common.

OSTEN SACKEN, Cat., 259, note 298, syn. of Macquart.

N. J.—Smith Cat.; Fla., several places—Johnson.

#### IDANA.

LOEW, Mon. N. A. Dipt., III, 115, 1873.

**marginata** SAY, Jour. Acad. Sci. Phil., VI, 183; Compl. Works, II, 368 (*Ortalis*).—Ind.

LOEW, Mon. N. A. Dipt., III, 115, pl. VIII, f. 16.—Va., Pa.

N. J.—Smith Cat.

#### DIACRITA.

GERSTÄCKER, Stett. Ent. Zeit., XXI, 195, 1860.

LOEW, Mon. N. A. Dipt., III, 111, 1873.

BIGOT, Bull. Soc. Ent. France, 1877, 38 (*Carlottamyia*).

**æmula** LOEW, Mon. N. A. Dipt., III, 114, pl. VIII, f. 15.—Cal.

**costalis** GERSTÄCKER, Stett. Ent. Zeit., XXI, 197, pl. II, f. 10.—Oaxaca, Mex.

LOEW, Mon. N. A. Dipt., III, 111, pl. VIII, f. 14.—Mex.

BIGOT, Bull. Soc. Ent. France, 1877, 38 (*Carlottamyia marcens*); syn. by himself, loc. cit., 1877, cxxxii.—Mex. Huastec, Mex.—Giglio-Tos.

#### TETROPISMENUS.

LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 333.

**hirtus** LOEW, loc. cit.—San Francisco, Cal.

#### TEPHRONOTA.

LOEW, Zeitsch. f. Ges. Naturwiss., 1868, 6; Mon. N. A. Dipt., III, 119, 1873.

**canadensis** JOHNSON, Ent. News, XIII, 144, figs.—Rigaud, Quebec, Canada.

**ruficeps** VAN DER WULP, Tijdschr. v. Ent., X, 156, pl. v, f. 11 (*Herina*).—Wis.

? WALKER, List, IV, 1020 (*Trypeta narytia*).—Fla. [Syn. with a query by Osten Sacken, Cat., p. 260; see also Coquillett, Jour. N. Y. Ent. Soc., VIII, 22.]

LOEW, Mon. N. A. Dipt., III, 123, pl. VIII, f. 24 (name changed to *humilis*, on account of alleged preoccupation).—N. Y., Va., Tex.

JOHNSON, Ent. News, XIII, 143, oc. in Fla., Ga., Va., and N. J. Montreal—Chagnon.

#### MELIERIA.

DESVOIDY, Myodaires, 715, 1830.

MACQUART, Hist. Nat. Dipt., II, 437, 1835 (*Ceroxys*).

SCHINER, Fauna Austr., II, 73, 1864 (id.).

LOEW, Mon. N. A. Dipt., III, 125, 1873 (id.).

COQUILLET, Jour. N. Y. Ent. Soc., VIII, 22, 1900, syn.

*cana* LOEW, Berl. Ent. Zeitsch., II, 374, 1858 (*Ortalid*); Mon. N. A. Dipt., III, 129, pl. VIII, f. 22 (*Ceroxys*).—Yukon R., Alaska and Nebr.

OSTEN SACKEN, Cat., 184, note (*Ceroxys*).

COQUILLET, Proc. Wash. Acad. Sci., II, 459, oc. in Alaska and Col.

*obscuricornis* LOEW, Mon. N. A. Dipt., III, 126, pl. VIII, f. 20 (*Ceroxys*).—Nebr.

*ochricornis* LOEW, Mon. N. A. Dipt., III, 126, pl. VIII, f. 21 (*Ceroxys*).—N. Wisconsin R. Montreal—Chagnon.

? *philadelphica* DESVOIDY, Myodaires, 715 (*Meckelia*).—Phil. Query by J. M. A. A very doubtful species.

*similis* LOEW, Mon. N. A. Dipt., III, 127, pl. VIII, f. 23.—Conn., Quebec.

OSTEN SACKEN, Cat., 184, note.

Saranac Inn, N. Y.—Needham.

#### ANACAMPTA.

LOEW, Zeitsch. f. Ges. Naturwiss., 1868, 7; Mon. N. A. Dipt., III, 129, 1873.

*latiuscula* LOEW, Mon. N. A. Dipt., III, 130, pl. VIII, f. 19.—Cal.

VAN DER WULP, Biologia, Dipt., II, 393, pl. x, f. 26.—Mexico City.

North and South Idaho—J. M. A.

*pyrrhocephala* LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 335.—Cal.

#### TETANOPS.

FALLÉN, Ortalides, 1820, p. 2.

MEIGEN, Syst. Besch., v, 353, 1826.

SCHINER, Fauna Austr., II, 72, 1864.

LOEW, Mon. N. A. Dipt., III, 119, 1873.

*integra* LOEW, Mon. N. A. Dipt., III, 121, pl. VIII, f. 18.—Ill.

*luridipennis* LOEW, Mon. N. A. Dipt., III, 119, pl. VIII, f. 17.—Nebr. N. J.—Smith Cat.

*polita* COQUILLET, Jour. N. Y. Ent. Soc., VIII, 22.—Col.

*rufifrons* VAN DER WULP, Biologia, Dipt., II, 391, pl. x, f. 25.—Mazatlan and Guerrero, Mex.

*vittifrons* VAN DER WULP, Biologia, Dipt., II, 391, pl. x, f. 24.—Guerrero and Morelos, Mex.

#### ORTALIS.

FALLÉN, Ortalides, 18, 1820.

SCHINER, Fauna Austr., II, 69, 1864.

*Note*.—Only a few problematical species are attributed to this genus, which in the strict sense probably does not occur in North America.

*bipars* WALKER, Trans. Ent. Soc., n. ser., v, 326.—U. S.

OSTEN SACKEN, Cat., 188, not found in the British Museum.



See note under *Rivellia viridulans*.

*costalis* WALKER, List, IV, 995.—Martin Falls, Canada.

? *diopsides* WALKER, List, IV, 995.—Martin Falls, Canada. Query by Walker.

Belongs perhaps to the *Ulidinæ*—LOEW, in O. S. Cat.

See note under *Scoptera vibrans*.

*platycnema* THOMSON, see *Euxesta*.

#### PTEROCALLA.

RONDANI, Ins. ditt. Brasil., Torino, 1848, 23.

LOEW, Mon. N. A. Dipt., III, 132, 1873.

VAN DER WULP, Biologia, Dipt., II, 393, 1899, table of Mexican species.

*bella* GIGLIO-TOS, Ditt. del Mess., IV, 39, f. 11.—Orizaba, Mex.

*costalis* VAN DER WULP, Biologia, Dipt., II, 396, pl. XI, f. 5, 6.—Guerrero, Mex.

*fenestrata* VAN DER WULP, Biologia, Dipt., II, 394, pl. X, f. 30.—Vera Cruz and Tabasco, Mex.

*obscura* WIEDEMANN, Auss. Zw., II, 499 (*Trypeta*).—Brazil.

MACQUART, Dipt. Exot., II, 3, 202, pl. XXVIII, f. 5 (*Camptoncura*).—Guiana.

SCHINER, Novara, 286 and 287, notes.—S. A.

LOEW, Mon. N. A. Dipt., III, 13.—S. A.

GIGLIO-TOS, Ditt. del Mess., IV, 41, oc. in Tuxpango, Mex.

*ocellata* FABRICIUS, Syst. Antl., 330 (*Dictya*).—S. A.

WIEDEMANN, Auss. Zw., II, 495 (*Trypeta*).—S. A.

MACQUART, Dipt. Exot., Suppl. I, 206, pl. XVIII, f. 4 (*Platystoma*).—Columbia, S. A.

RONDANI, Ins. Ditt. Brasil., 1848, 24, 40.—Brazil.

SCHINER, Novara, 286.—S. A.

LOEW, Mon. N. A. Dipt., III, 13 and 60.—S. A.

GIGLIO-TOS, Ditt. del Mess., IV, 40, oc. in Orizaba, Mex.

VAN DER WULP, Biologia, Dipt., II, 395, pl. XI, f. 2.—Vera Cruz, Mex.

*quadrata* VAN DER WULP, Biologia, Dipt., II, 394, pl. XI, f. 1.—Tabasco, Mex.

*strigula* LOEW, Mon. N. A. Dipt., III, 133, pl. VIII, f. 30.—Ga.

*tarsata* SCHINER, Novara, 287.—S. A.

GIGLIO-TOS, Ditt. del Mess., IV, 40, oc. and note.—Orizaba, Mex.

VAN DER WULP, Biologia, Dipt., II, 395, pl. XI, f. 3, 4.—Tabasco, Mex.

#### CALLOPISTRIA.

LOEW, Mon. N. A. Dipt., III, 140, 1873.

*annulipes* MACQUART, Dipt. Exot., Suppl. V, 121 (*Platystoma*).—Baltimore, Md.

LOEW, Mon. N. A. Dipt., III, 141, pl. VIII, f. 27.—United States; very common.

N. J.—Smith Cat.

#### MYENNIS.

DESVOIDY, Myodaires, 717, 1830.

LOEW, Mon. N. A. Dipt., III, 142, 173.

*scutellaris* WIEDEMANN, Auss. Zw., II, 484 (*Trypeta*).—Mex.

LOEW, Mon. N. A. Dipt., I, 60, 92 (*Trypeta*); III, 143.—Mex.

GIGLIO-TOS, Ditt. del Mess., IV, 39, oc. in Tuxpango, Mex.

#### XANTHACRONA.

VAN DER WULP, Biologia, Dipt., II, 392, 1899.

*bipustulata* VAN DER WULP, loc. cit., pl. X, f. 29.—Mazatlan, Mex.

**PARAGORGOPIIS.**

- GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 41, 1895.  
*maculata* GIGLIO-TOS, locis citatis, f. 12.—Tuxpango, Mex.

**PSEUDOTEPHRITIS.**

- JOHNSON, Ent. News, XIII, 144, 1902, change of name.  
 LOEW, Mon. N. A. Dipt., III, 134, 1873 (*Stictocephala*, preoc.).  
*corticalis* LOEW, Mon. N. A. Dipt., III, 136, pl. VIII, f. 28 (*Stictocephala*).—N. Y.  
*cribellum* LOEW, Mon. N. A. Dipt., III, 134, pl. VIII, f. 26 (*Stictocephala*).—Nebr.  
 Province of Quebec—Fyles; Minn.—J. M. A.  
*cribrum* LOEW, Mon. N. A. Dipt., III, 135, pl. VIII, f. 25 (*Stictocephala*).—Middle  
 States.  
*vau* SAY, Jour. Acad. Sci. Phil., VI, 184; Compl. Works, II, 369 (*Ortalis*).—Ohio.  
 LOEW, Mon. N. A. Dipt., III, 138, pl. VIII, f. 29 (*Stictocephala*).—United  
 States.  
 JOHNSON, Ent. News, 1899, 220 (id.), larva common under bark, Over-  
 brook, N. J.  
 Montreal—Chagnon.

**PSAIROPTERA.**

- WAHLBERG, K. Vetensk. Akad. Abhandl., 1838, 2.  
 SCHINER, Fauna Austr., II, 80, 1864.  
*sp. undet.* is reported from White Mts., N. H., by Mrs. Slosson; Mr. Kahl  
 showed me specimens in the Univ. of Kans. coll., which he collected in  
 Kans.; Snow, in Williston's Manual, 116, mentions N. M. as a locality.

**EDOPA.**

- LOEW, Berl. Ent. Zeitsch., 1867, 287; Mon. N. A. Dipt., III, 146, 1873.  
*capito* LOEW, Berl. Ent. Zeitsch., 1867, 287; Mon. N. A. Dipt., III, 146, pl. IX,  
 f. 1-3.—Nebr. Ariz.—Williston MS.  
*elegans* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess.,  
 IV, 42.—Oaxaca, Mex.

**PARÆDOPA.**

- COQUILLET, Jour. N. Y. Ent. Soc., VIII, 22, 1900.  
*punctigera* COQUILLET, loc. cit.—Catalina Spr. and Gailuro Mts., Ariz.; Santa  
 Fe, N. M.

**EURYCEPHALA.**

- ROEDER, Berl. Ent. Zeitsch., XXV, Heft 2, 1881.  
*myopæiformis* ROEDER, loc. cit.—Sacramento, Cal.

**STICTOMYIA.**

- BIGOT, Bull. Soc. Ent. France, 1885, clxvi.  
*longicornis* BIGOT, Bull. Soc. Ent. France, 1885, clxvi.—Mex.  
 VAN DER WULP, Biologia, Dipt., II, 380, pl. X, f. 5, notes.—Mex.  
*punctata* COQUILLET, Jour. N. Y. Ent. Soc., VIII, 23.—Mesilla Valley, N. M.

**NOTOGRAMMA.**

- LOEW, Berl. Ent. Zeitsch., 1867, 289; Mon. N. A. Dipt., III, 148, 1873.  
*stigma* FABRICIUS, Ent. Syst., Suppl., 563 (*Musca*); Syst. Antl., 278 and 303  
 (*Dacus obtusus* and *Musca stigma*).—W. I.

WIEDEMANN, AUSS. ZW., II, 565, syn. and desc. (*Ulidia*).—S. A.

LOEW, BERL. ENT. ZEITSCH., XI, 289, pl. II, f. 5 (*cimiciformis*); MON. N. A. DIPT., III, 148, pl. IX, f. 5.—Cuba.

### CHRYSOMYZA.

FALLÉN, SCENOPIINII, 1817, 3.

SCHINER, WIEN. ENT. MONATSCH., VI, 151, 1862 (*Chloria*); FAUNA AUSTR., II, 85, 1864 (id.).

**demandata** FABRICIUS, ENT. SYST. SUPPL., 564 (*Musca*); SYST. ANTL., 324 (*Tephritis*).—Sweden.

FALLÉN, SCENOPIINII, 4 (*Chrysomyza splendida*).

MEIGEN, SYST. BESCHR., V, 386 (*Ulidia*).

MACQUART, HIST. NAT. DIPT., II, 504 (*Ulidia bicolor*).

ZETTERSTEDT, DIPT. SCAND., VI, 2369 (*Ulidia*).

LOEW, DIPT. BEITR., 1845, 28 (*Ulidia*).

SCHINER, FAUNA AUSTR., II, 85 (*Chloria*).

JOHNSON, ENT. NEWS, XI, 609, oc. in N. A., about Philadelphia; adults on decayed berries and grapes.

“Bouché found the larvæ in horse-dung, where they live in numbers through the fall and winter”—Schiner, loc. cit.

MIK, WIEN. ENT. ZEIT., XV, 241, note on habits.

### ULIDIA.

MEIGEN, SYST. BESCHR., V, 385, 1826.

SCHINER, FAUNA AUSTR., II, 86, 1864.

LOEW, MON. N. A. DIPT., III, 63, 1873.

**fulvifrons** BIGOT, in Sagra's Cuba, 826.—Cuba.

**rubida** LOEW, ZEITSCH. F. GES. NATURWISS., 1876, 377.—Cal.

### ACROSTICTA.

LOEW, BERL. ENT. ZEITSCH., 1867, 293; MON. N. A. DIPT., III, 151, 1873.

**dichroa** LOEW, BERL. ENT. ZEITSCH., 1874, 384.—San Francisco.

**fulvipes** COQUILLET, JOH. N. Y. ENT. SOC., VIII, 24.—Los Angeles Co., Cal.

**scrobiculata** BERL. ENT. ZEITSCH., 1867, 293, pl. II, f. 5; MON. N. A. DIPT., III, 151, ref.—Brazil.

GIGLIO-TOS, DITT. DEL MESS., IV, 42, oc. in Tuxpango, Mex.

### EUXESTA.

LOEW, BERL. ENT. ZEITSCH., XI, 1867, 297; MON. N. A. DIPT., III, 153, 1873.

VAN DER WULP, BIOLOGIA, DIPT., II, 396, 1899, table of Mexican species.

**abdominalis** LOEW, BERL. ENT. ZEITSCH., XI, 307, pl. II, f. 15; MON. N. A. DIPT., III, 164, pl. IX, f. 15.—Cuba.

**alternans** LOEW, BERL. ENT. ZEITSCH., XI, 308, pl. II, f. 16; MON. N. A. DIPT., III, 165, pl. IX, f. 16.—Probably Brazil or Cuba.

GIGLIO-TOS, DITT. DEL MESS., IV, 46, oc. in Tuxpango, Mex.

VAN DER WULP, BIOLOGIA, DIPT., II, 399, pl. XI, f. 12.—Mexico, several places.

**annonæ** FABRICIUS, ENT. SYST., IV, 358 (*Musca*); SYST. ANTL., 320 (*Tephritis*).—W. I.

WIEDEMANN, AUSS. ZW., II, 463 (*Ortalis*).—W. I.

MACQUART, HIST. NAT. DIPT., II, 456 (*Urophora quadrivittata*).—Cuba. [Lw.]

- SCHINER, Novara, 283 (*Amethysa*).—S. A.  
 LOEW, Berl. Ent. Zeitsch., XI, 305; Mon., III, 162, pl. IX, f. 13.—Cuba.  
 St. Vincent, W. I.—Williston; Porto Rico—Roeder; Fla. and Jamaica,  
 Johnson.
- apicalis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 375, pl. XII, f. 128.—St. Vincent, W. I.  
 COQUILLET, Proc. U. S. N. M., XXII, 258, oc. in Porto Rico.
- basalis* WALKER, Dipt. Saund., 373 (*Ortalis*).—U. S.  
 COQUILLET, Jour. N. Y. Ent. Soc., VIII, 24, gen. ref. and oc. in Fla.
- binotata* LOEW, Berl. Ent. Zeitsch., XI, 304; Mon. N. A. Dipt., III, 160, pl. IX, f. 12.—Cuba.
- conserta* VAN DER WULP, Biologia, Dipt., II, 399, pl. XI, f. 14.—Vera Cruz, Mex.  
*costalis* FABRICIUS, Ent. Syst., IV, 360 (*Musca*); Syst. Antl., 275 and 278 (*Dacus aculeatus* and *costalis*).—W. I. [Wd.]  
 WIEDEMANN, AUSS. ZW., II, 464 (*Ortalis*).—W. I.  
 LOEW, Berl. Ent. Zeitsch., XI, 301; Mon. N. A. Dipt., III, 158, pl. IX, f. 10.—W. I.  
 Porto Rico—Roeder; Jamaica—Johnson.
- eluta* LOEW, Berl. Ent. Zeitsch., XI, 312; Mon. N. A. Dipt., III, 168, pl. IX, f. 18.—Cuba.
- fascipennis* VAN DER WULP, Biologia, Dipt., II, 398, pl. XI, f. 10.—Guerrero, Vera Cruz, and Tabasco, Mex.
- laticeps* VAN DER WULP, Biologia, Dipt., II, 397, pl. XI, f. 7.—Tabasco, Mex.  
*latifasciata* VAN DER WULP, Biologia, Dipt., II, 397, pl. XI, f. 9.—Morelos, Mex.  
*major* VAN DER WULP, Biologia, Dipt., II, 398, pl. XI, f. 11.—Orizaba, Mex.  
*nigricans* VAN DER WULP, Biologia, Dipt., II, 397, pl. XI, f. 8.—Guerrero, Mex.  
*nitidiventris* LOEW, Mon. N. A. Dipt., III, 157.—Texas.  
 BRUES, Psyche, 1902, 353, found a hundred or more larvæ under bark of dead pecan tree in Texas; larva desc. and figured.  
 Charlotte Harbor, Fla.—Johnson.
- notata* WIEDEMANN, AUSS. ZW., II, 462 (*Ortalis*).—Savannah and New York.  
 LOEW, Berl. Ent. Zeitsch., XI, 300; Mon. N. A. Dipt., III, 156, pl. IX, f. 9.—D. C., N. Y., Ill., Conn.; bred from pulp of an "Osage orange."  
 RILEY and HOWARD, Insect Life, VI, 270, note the following rearings:  
 From onions (J. B. Smith in N. J.).  
 pulp of Osage orange (O. S.).  
 cotton bolls in Alabama.  
 sumac fruits in Virginia.  
 bolls of *Solanum carolinense* D. C.  
 apple previously infested with Codling Moth in California.  
 HOWARD, Proc. Wash. Acad. Sci., II, 585, reared from human excrement.  
 Inverness, Fla.—Johnson; N. J.—Smith Cat.
- platystoma* THOMSON, Eugen. Resa, 572 (*Ortalis*).—Panama.  
 VAN DER WULP, Biologia, Dipt., II, 397, notes.
- pusio* LOEW, Berl. Ent. Zeitsch., XI, 299; Mon. N. A. Dipt., III, 155, pl. IX, f. 8.—Cuba.
- quaternaria* LOEW, Berl. Ent. Zeitsch., XI, 302; Mon. N. A. Dipt., III, 159, pl. IX, f. 11.—Cuba. Lake Worth, Fla.—Johnson.
- scoriacea* LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 336.—Texas.  
 N. J.—Smith Cat.; Charlotte Harbor, Fla.—Johnson.
- spoliata* LOEW, Berl. Ent. Zeitsch., XI, 298, pl. II, f. 7; Mon. N. A. Dipt., III, 154, pl. IX, f. 7.—Cuba.  
 COQUILLET, Proc. U. S. N. M., XXII, 258, oc. in Porto Rico.

VAN DER WULP, *Biologia*, Dipt., II, 397, note under *laticeps*.  
Porto Rico—Roeder.

*spoliata* WILLISTON. see *willistonii*.

*stigmatias* LOEW, Berl. Ent. Zeitsch., XI, 310, pl. II, f. 18; Mon. N. A. Dipt., III, 166, pl. IX, f. 17.—Cuba, Brazil.

VAN DER WULP, *Biologia*, Dipt., II, 399 pl. XI, f. 13.—Orizaba, Guerrero, Vera Cruz, and Tabasco, Mex.

Porto Rico—Roeder and Coquillett; St. Vincent, W. I.—Williston.

*thomæ* LOEW, Berl. Ent. Zeitsch., XI, 306, pl. II, f. 14; Mon. N. A. Dipt., III, 163, pl. VIII, f. 14.—St. Thomas, W. I.

COQUILLET, Proc. U. S. N. M., XXII, 257, oc. in Porto Rico.

*willistonii* COQUILLET, Jour. N. Y. Ent. Soc., VIII, 24, change of name.

WILLISTON, Dipt. of Death Valley Exped., 257 (*spoliata*, preoc.).—Death Valley and Panamint Mts., Cal.

### ZACOMPSIA.

COQUILLET, Ent. News, XII, 15, 1901.

*fulva* COQUILLET, loc. cit.—Texas, and Opelousas, La.

### CHÆTOPSIS.

LOEW, Berl. Ent. Zeitsch., XI, 305, 1867; Mon. N. A. Dipt., III, 169, 1873.

*ænea* WIEDEMANN, Auss. Zw., II, 462, 1830 (*Ortalis*).—New Orleans.

SAY, Jour. Acad. Sci. Phil., VI, 184, 1830; Compl. Works, II, 368 (*Ortalis trifasciata*).—U. S.

MACQUART, Dipt. Exot., Suppl. v, 125, pl. VII, f. 8 (*Urophora fulvifrons*).—Baltimore, Md.

WALKER, List, IV, 992 (*Ortalis massyla*).—N. A.

LOEW, Berl. Ent. Zeitsch., XI, 315; Mon. N. A. Dipt., III, 170, pl. IX, f. 19.—U. S., rather common; Cuba, Canada and the Bermudas—O. S.

RILEY and HOWARD, Insect Life, II, 281, record the rearing by Gillette from larvæ boring in the pith of cornstalk.

HOWARD, Insect Life, VII, 352, mentions damage by larvæ to sugar-cane, corn, and oats; La, Ohio, Fla., Md.

White Mts., N. H.—Slosson; Province of Quebec—Fyles.

*apicalis* JOHNSON, Ent. News, XI, 326, fig.—N. J., Fla.

*debilis* LOEW, Berl. Ent. Zeitsch., XI, 318; Mon. N. A. Dipt., III, 172, pl. IX, f. 20.—Cuba.

*trifasciata* SAY, Desc. of new spp. of N. A. Ins. found in La. by Jos. Barabino, 1831 (*Trypeta*); quoted by Scudder, Psyche, 1899, 306, with notes by Osten Sacken. *Debilis* may be the same—O. S.

*Notc.*—This description was omitted from the Complete Works of Say.

As will be seen above, Say had already described a *trifasciata* of the same genus a year earlier.

### SEOPTERA.

KIRBY, Introd. to Ent., II, 305, 1817. Letter XXIII (*Scioptera*).

DESVOIDY, Myodaires, 727, 1830 (*Myodina*).

SCHINER, Fauna Austr., II, 84, 1864 (*Myodina*).

LOEW, Berl. Ent. Zeitsch., 1867, 295 (amended to *Scioptera* and defined for the first time); Mon. N. A. Dipt., III, 151, 1873.

*colon* LOEW, Berl. Ent. Zeitsch., XI, 296, pl. II, f. 6; Mon. N. A. Dipt., III, 152, pl. IX, f. 6.—Ill. N. J.—Smith Cat.

**vibrans** LINNÉ, Syst. Naturæ, 11th ed., p. 599 (*Musca*); Fauna Suec., 2d ed., p. 459 (id.).—Europe.

FABRICIUS, Species Ins., II, 450 (*Musca*); Syst. Antl., 324 (*Tephritis*).

MEIGEN, Syst. Besch., v, 284 (*Ortalis*).

DESVOIDY, Myodaires, 728 (*Myodina urticae*).

SCHINER, Fauna Austr., II, 85 (*Myodina*).

LOEW, Mon. N. A. Dipt., II, 153, notes; Appendix, note by O. S. on oc. in N. A.; Province of Quebec—Fyles.

N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.

Widespread in U. S.; Idaho—J. M. A.

*Note*.—Coquillett, Jour. N. Y. Ent. Soc., VIII, 24, would make *Ortalis diopsides* Walker a synonym of this; from the description this would seem very doubtful.

#### STENOMYIA.

LOEW, Berl. Ent. Zeitsch., XI, 320, 1867; Mon. N. A. Dipt., III, 173, 1873.

**tenuis** LOEW, locis citatis.—Ga., Texas. N. J.—Smith Cat.

#### EUMETOPIA.

MACQUART, Dipt. Exot., Suppl. II, 87, 1847.

LOEW, Berl. Ent. Zeitsch., XI, 322, 1867; Mon. N. A. Dipt., III, 175, 1873.

**rufipes** MACQUART, loc. cit., pl. VI, f. 2.—Philadelphia.

LOEW, Berl. Ent. Zeitsch., XI, 322; Mon. N. A. Dipt., III, 175, pl. IX, f. 22.

—U. S., not rare. D. C., Texas—O. S. N. J.—Smith Cat.

**varipes** LOEW, Cent., VI, 87; Berl. Ent. Zeitsch., XI, 323; Mon. N. A. Dipt., III, 176, pl. IX, f. 23.—Cuba.

#### CONICEPS.

LOEW, Mon. N. A. Dipt., III, 177, 1873; see also Besch. Europ. Dipt., III, 292.

**niger** LOEW, Mon. N. A. Dipt., III, 178.—Texas.

#### STENERETMA.

LOEW, Mon. N. A. Dipt., III, 186, 1873.

**latiuscula** LOEW, loc. cit.—Texas.

#### EIPLATEA.

LOEW, Berl. Ent. Zeitsch., XI, 324, 1867; Mon. N. A. Dipt., III, 194, 1873.

**amabilis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 376.—St. Vincent, W. I.

**erosa** LOEW, Berl. Ent. Zeitsch., XI, 325; Mon. N. A. Dipt., III, 194, pl. IX, f. 24.

—Cuba.

**gracilis** COQUILLET, Jour. N. Y. Ent. Soc., VIII, 25.—Allende, Mex.

**scutellaris** COQUILLET, Jour. N. Y. Ent. Soc., VIII, 25.—Dunsmuir, Cal.

#### CÆLOMETOPIA.

MACQUART, Dipt. Exot., Suppl. II, 91, 1847 (*Coilometopia*).

LOEW, Mon. N. A. Dipt., III, 188, 1873, amended, with desc.

**bimaculata** LOEW, Mon. N. A. Dipt., III, 189.—Cuba.

#### NEIDIOTYPA.

OSTEN SACKEN, Cat., 187, 1878, change of name.

LOEW, Mon. N. A. Dipt., III, 183, 1873 (*Idiotypa*, preoc.).

**appendiculata** LOEW, loc. cit. (*Idiotypa*).—Cuba.



## RICHARDIA.

- DESVOIDY, Myodaires, 728, 1830.  
 LOEW, Mon. N. A. Dipt., III, 178, 1873.  
 VAN DER WULP, Biologia, Dipt., II, 385, 1899, table of Mexican species.  
**concinna** VAN DER WULP, Biologia, Dipt., II, 387, pl. x, f. 18.—Santiago Iscuintla and Guerrero, Mex.  
**elegans** VAN DER WULP, Biologia, Dipt., II, 386, pl. x, f. 17.—Tabasco, Mex.  
**podagrica** FABRICIUS, Syst. Antl., 272 (*Dacus*).—S. A.  
 WIEDEMANN, Auss. Zw., II, 445, pl. 10a, f. 5 (*Cordylura*).—Brazil. The ref. to fig. 9 in the text is a mistake—Wulp.  
 DESVOIDY, Myodaires, 728 (*saltatoria*).—Cayenne.  
 MACQUART, Dipt. Exot., II, 3, 205, pl. XXVII, f. 8.—Guiana.  
 RONDANI, Studi Ent., I, 82.—Brazil.  
 GERSTÆCKER, Stett. Ent. Zeit., XXI, 163.  
 SCHINER, Novara, 259.—S. A.  
 VAN DER WULP, Biologia, Dipt., II, 385, oc. in N. A.—Guerrero and Vera Cruz, Mex.  
**viridiventris** VAN DER WULP, Biologia, Dipt., II, 386.—Tabasco, Mex.

## STENOMACRA.

- LOEW, Mon. N. A. Dipt., III, 180, 1873.  
**guerini** BIGOT, in Sagra's Cuba, 822, pl. xx, f. 9 (*Sepsis*).—Cuba.  
 LOEW, Mon. N. A. Dipt., III, 180, pl. IX, f. 25.—Cuba.  
 VAN DER WULP, Biologia, Dipt., II, 389, pl. x, f. 21.—Vera Cruz and Tabasco, Mex. Porto Rico—Roeder.

## PANERYMA.

- VAN DER WULP, Biologia, Dipt., II, 387, 1899.  
**elongata** VAN DER WULP, loc. cit., pl. x, f. 19.—Tabasco, Mex.

## CYRTOMETOPA.

- LOEW, Mon. N. A. Dipt., III, 179, 1873.  
 MACQUART, Dipt. Exot., II, 3, 372, 215, 1843 (*Odontomera*, preoc.).  
 VAN DER WULP, Biologia, Dipt., II, 388, notes.  
**cinctella** VAN DER WULP, Biologia, Dipt., II, 389, pl. x, f. 20.—Cordova and Tabasco, Mex.  
**ferruginea** MACQUART, Dipt. Exot., II, 3, 215, pl. XXIX, f. 6 (*Odontomera*).—No locality.  
 LOEW, Mon. N. A. Dipt., III, 179, recognized from America.  
 GIGLIO-TOS, Ditt. del Mess., IV, 61, oc. in Orizaba, Mex., and partial desc.  
 VAN DER WULP, Biologia, Dipt., II, 389.—Morelos and Vera Cruz, Mex.  
 ? **setosa** BIGOT, Annales, 1886, 386 (*Odontomera*).—Wash. Query by Bigot.

## RHOPALOMERIDÆ.

## RHINOTORA.

- SCHINER, Novara, 233, 1868.  
**diversa** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158; Ditt. del Mess., IV, 43, f. 25, 26.—Tuxpango, Mex.

## RHOPALOMERA.

WIEDEMANN, Auss. Zw., II, 570, 1830.

LOEW, Mon. N. A. Dipt., III, 14, 15, 1873, would place in Sapromyzidæ.

VAN DER WULF, Biologia, Dipt., II, 379, 1899, puts in Ortalidæ.

WILLISTON, Psyche, 1895, 183, puts in a separate family with *Rhinotora*.

BECKER, Berl. Ent. Zeitsch., XL, 1895, 260, notes.

*pleuropunctata* WIEDEMANN, Auss. Zw., II, 572.—S. A.

GIGLIO-TOS, Ditt. del Mess., IV, 43, oc. in Mex.—at Playa Vicente.

*xanthops* WILLISTON, Psyche, 1895, 213.—Yucatan.

## WILLISTONIELLA.

MIK, Wien. Ent. Zeit., XIV, 136, change of name.

WILLISTON, Psyche, 1895, 184 (*Rhopalomyia*, preoc.).

The genus is reported from North America by Williston, Ent. News, VII, 185. The described species are South American.

## TRYPETIDÆ.

LOEW, Mon. N. A. Dipt., III, 327, 1873, table of genera.

COQUILLET, Jour. N. Y. Ent. Soc., VII, 267, 1899, table of genera.

*Note*.—The order followed is essentially that of the table in Williston's Manual, although Coquillett has pointed out some seeming defects in the relation of genera therein. The genera of this family are closely interwoven, and mostly based on plastic characters; hence a slight difference in the emphasis placed on one set of characters has the effect of throwing a large number of species into other genera than they previously occupied. This change of emphasis Mr. Coquillett seems to have adopted, as compared with Loew, who established most of the genera; but as he has not published anything to justify his new generic references in most cases, I have been slow to accept them. The synonymy of species by Mr. Coquillett in Jour. N. Y. Ent. Soc., VII, 259–268, seems to me to do a great injustice to Mr. Doane, whose species were very carefully and accurately worked out. From an examination of Doane's material, I am satisfied that Coquillett was wrong in all, or nearly all, of the assertions he made regarding the synonymy of Doane's species; this was shown in a rejoinder published by Doane, op. cit., VIII, 47.

## TOXOTRYPANA.

GERSTÆCKER, Stett. Ent. Zeit., XXI, 191, 1860.

BIGOT, Bull. Soc. Ent. France, 1884, XXIX (*Mikimyia*).

ROEDER, Wien. Ent. Zeit., X, 31, 1891, refers to Ortalidæ.

SNOW, Kans. Univ. Quart., IV, 117–119, figs., 1895, full discussion.

*curvicauda* GERSTÆCKER, Stett. Ent. Zeit., XXI, 194, pl. II, f. 9.—St. John, Antigua, in the West Indies.

BIGOT, Bull. Soc. Ent. France, 1884, XXIX (*Mikimyia furcifera*).—Brazil.  
[V. d. W.]

ROEDER, Wien. Ent. Zeit., X, 31.—Peru.

SNOW, Kans. Univ. Quart., IV, 117, fig., etc.—Yucatan.

VAN DER WULF, Biologia, Dipt., II, 379, oc. in N. Yucatan, Mex.

## CERATITIS.

MACLEAY, Zool. Jour., XVII, 1829.

SCHINER, Fauna Austr., II, 173, 1864.

ROEDER, Berl. Ent. Zeitsch., xxix, 132, 1885.

[*capitata* WIEDEMANN, *Analecta Ent.*, 54 (*Trypeta*); *Auss. Zw.*, II, 496 (id.).—East Indies.

MACLEAY, *Zool. Jour.*, IV, 1829, 475 (*Ceratitis citriperda*).—Madeira; destructive to oranges.

WESTWOOD, *Gardener's Chronicle*, 1848, 604, fig.—Azores.

PENZIG, *Annali di Agricoltura*, 1887, important article; abstract in *Ins. Life*, III, 80.

HENSLOW, *Gardiner's Chronicle*, 1890, May 24, 655, biology, with figs.—Malta, seriously injuring oranges.

RILEY and HOWARD, *Insect Life*, III, 5, life history, figures, etc.—Bermuda, where the larvæ injure peaches by mining in them.]

*Note*.—Although this insect is at present not known within the faunal limits of this catalogue, its economic importance and proximity justify its insertion.

#### HEXACHÆTA.

LOEW, *Mon. N. A. Dipt.*, III, 219, 1873.

VAN DER WULP, *Biologia, Dipt.*, II, 402, 1899, table of Mexican species.

*amabilis* LOEW, *Mon. N. A. Dipt.*, III, 219.—Mexico, in v. Roeder's collection.

ROEDER, *Wien. Ent. Zeit.*, XIII, 97, fig.—Peru; says the type locality was Peru, not Mex.

TOWNSEND, *Zoe*, IV, 15, notes and desc. of female.—Mex.

GIGLIO-TOS, *Ditt. del Mess.*, IV, 59, oc. in Orizaba, Mex.

VAN DER WULP, *Biologia, Dipt.*, II, 403, pl. XI, f. 16.—Yucatan, Mex.

?*dinia* WALKER, *List*, IV, 1040 (*Trypeta*).—Jamaica. Gen. ref. with a doubt by Loew—may be same as *eximia*.

*eximia* WIEDEMANN, *Auss. Zw.*, II, 477.—Surinam.

MACQUART, *Dipt. Exot.*, *Suppl.* IV, 291, pl. XXVII, f. 3 (*Tephritis fasciventris*).—Brazil. [Lw.]

LOEW, *Mon. N. A. Dipt.*, III, 216.—Mex.

VAN DER WULP, *Biologia, Dipt.*, II, 402, pl. XI, f. 15, oc. in Vera Cruz.

*pulchella* VAN DER WULP, *Biologia, Dipt.*, II, 403, pl. XI, f. 18.—Tabasco, Mex.

*rupta* VAN DER WULP, *Biologia, Dipt.*, II, 404, pl. XI, f. 19.—Tabasco, Mex.

*socialis* WIEDEMANN, *Auss. Zw.*, II, 491 (*Trypeta*).—Brazil.

MACQUART, *Dipt. Exot.*, *Suppl.* II, 93, pl. VI, f. 6 (*Tephritis major*).—Brazil. [Lw.]

LOEW, *Mon. N. A. Dipt.*, III, 219, obs. 2, note.

GIGLIO-TOS, *Ditt. del Mess.*, IV, 59, oc. in Tuxpango, Mex.

VAN DER WULP, *Biologia, Dipt.*, II, 403, pl. XI, f. 17.—Vera Cruz, Mex.

*splendida* GIGLIO-TOS, *Boll. R. Univ. Torino*, VIII, No. 158; *Ditt del Mess.*, IV, 58, f. 20 (both *Blepharoneura*).—Mex.

VAN DER WULP, *Biologia, Dipt.*, II, 404, pl. XI, f. 20.—Costa Rica.

#### ANASTREPHA.

SCHINER, *Novara*, 263, 1868.

LOEW, *Mon. N. A. Dipt.*, III, 227, 1873 (*Acrotoxa*).

OSTEN SACKEN, *Cat.*, 260, 1878, makes the *Leptoxyda* of Macquart, *Dipt. Exot.*, II, 452, 1835, the same as this; it was amended by Macquart, *Dipt. Exot.*, *Suppl.*, II, 2, 216, 1841, to *Leptoxys*, which is apparently preoccupied. This raises a peculiar question of nomenclature. Coquillett, *Jour. N. Y. Ent. Soc.*, VII, 259, 1899, asserts that *Leptoxys* is not the same genus. I deem it safest to make no change under these con-

- ditions. The same question, with the synonymy of *Acrotora*, is discussed by Van der Wulp, *Biologia*, Dipt., II, 404, 1899.
- acidusa** WALKER, List, IV, 1014 (*Trypeta*).—Jamaica.  
 LOEW, Mon. N. A. Dipt., III, 335, note—not seen.  
 Fla.—Johnson.
- fraterculus** WIEDEMANN, AUSS. ZW., II, 524 (*Dacus*).—Brazil.  
 LOEW, Mon. N. A. Dipt., I, 70, pl. II, f. 6 (*Trypeta unicolor*); III, 222, pl. X, f. 6, syn. (*Acrotora*).—Brazil, Peru, Colombia, Cuba.  
 VAN DER WULP, *Biologia*, Dipt., II, 404, pl. XI, f. 21.—Yucatan, Mex. Porto Rico—Roeder (*Acrotora*).
- ludens** LOEW, Mon. N. A. Dipt., III, 223, pl. XI, f. 19 (*Acrotora*).—Mex.  
 RILEY and HOWARD, Ins. Life, I, 45, life-history with figures; the larvæ live in oranges in Mexico, and injure the crop considerably.  
 HERRERA, Bol. Comis. Parisit. Agric. Mex., I, No. I, 1900, biology, figs., etc.; larvæ in oranges, same as preceding.  
 JOHNSON, Proc. Ent. Soc. Wash., IV, 56, both sexes; bred at Champaign, Ill., from Mexican oranges, coming from near City of Mexico.
- mucida** GIGLIO-TOS, see *Polionota*.
- obliqua** MACQUART, Hist. Nat. Dipt., II, 464 (*Tephritis*); Dipt. Exot., II, 3, 225, pl. XXX, f. II (id.).—Cuba.  
 LOEW, Mon. N. A. Dipt., III, 337, note; not seen.  
 OSTEN SACKEN, Cat., 195, note on type.
- ocresia** WALKER, List, IV, 1016 (*Trypeta*).—Jamaica.  
 LOEW, Mon. N. A. Dipt., III, 337, note; not seen.  
 OSTEN SACKEN, Cat., 195, note on type.
- suspensa** LOEW, Mon. N. A. Dipt., I, 69, pl. II, f. 5 (*Trypeta*); III, 219, pl. X, f. 5 (*Acrotora*).—Cuba.  
 SCHINER, Novara, 263, oc. in S. A.  
 GIGLIO-TOS, Ditt. del Mess., IV, 59, oc. in Tuxpango, Mex. (*Acrotora*).
- tricincta** LOEW, Mon. N. A. Dipt., III, 225 (*Acrotora*).—Hayti.
- tripuncta** VAN DER WULP, *Biologia*, Dipt., II, 405, pl. XI, f. 22.—Guerrero, Mex.

#### POLIONOTA.

- VAN DER WULP, *Biologia*, Dipt., II, 409, 1899.
- mucida** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 58, f. 21 (both *Acrotora*).—Mex.  
 VAN DER WULP, *Biologia*, Dipt., II, 410, pl. XII, f. 1, type of this genus.—Guerrero, Mex.
- radians** VAN DER WULP, *Biologia*, Dipt., II, 410, pl. XII, f. 2.—Sierra de las Aguas Escondidas, Mex., 9,500 ft.

#### STRAUSSIA.

- DESVOIDY, Myodaires, 718, 1830 (*Strausia*).  
 LOEW, Mon. N. A. Dipt., III, 243, 1873, def. and change of name.
- longipennis** WIEDEMANN, AUSS. ZW., II, 483 (*Trypeta*), 1830.—N. A.  
 DESVOIDY, Myodaires, 718 and 719 (*incermis* and *armata*).—Philadelphia.  
 MACQUART, Dipt. Exot., II, 3, 226, pl. XXXI, f. 3 (*Tephritis trimaculata*).—N. A.  
 WALKER, List, IV, 1010, 1011 (*Trypeta cornigera* and *cornifera*).—N. A.?  
 no locality.  
 LOEW, Mon. N. A. Dipt., I, 65, pl. II, f. 2, 3; III, 238, pl. X, f. 2, 3; several varieties named and distinguished.—Conn. to Nebr.

OSTEN SACKEN, West. Dipt., 345, oc. in Col.

LINTNER, 3d N. Y. Rept., 137, notes on oviposition, etc.

SNOW, Kans. Univ. Quart., II, 159.—Kansas, Conn., Cal.; extended notes on varieties.

DOANE, Jour. N. Y. Ent. Soc., VII, 178, notes.—S. D., Col., Ohio.

N. J.—Smith Cat.; Montreal—Chagnon; Beulah, N. M.—Skinner.

#### MOLYNOCÆLIA.

GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 59, 1895.

*lutea* GIGLIO-TOS, locis citatis, f. 23.—Tuxpango, Mex.

#### STENOPA.

LOEW, Mon. N. A. Dipt., III, 234, 1873.

*vulnerata* LOEW, Mon. N. A. Dipt., III, 232.—Mass.

#### ACIDIA.

DESVOIDY, Myodaires, 720, 1830.

SCHINER, Fauna Austr., II, 114, 1864.

LOEW, Europ. Bohrfliiegen, 34, 1862; Mon. N. A. Dipt., III, 235, note, 1873.

*fratria* LOEW, Mon. N. A. Dipt., I, 67, pl. II, f. 4 (*Trypeta*); III, 245, pl. X, f. 4.—U. S. (O. S. gives Atlantic States).

THOMSON, Eugenes Resa, 578 (*Trypeta liogaster*).—Cal.

COQUILLETT, Ins. Life, VII, 383, life history, fig., etc.; larvæ mine in leaves of parsnip in Mo.

DOANE, Jour. N. Y. Ent. Soc., VII, 178, notes and syn.; larva mine leaves of *Heracleum*; may be the same as the European *heraclei* L.—Wash.

N. J.—Smith Cat.

*fausta* OSTEN SACKEN, West. Dipt., 346.—Alpine region of Mt. Washington, N. H.

COQUILLETT, Jour. N. Y. Ent. Soc., VII, 260, note.

Montreal—Chagnon.

*suavis* LOEW, Mon. N. A. Dipt., I, 75, pl. II, f. 10 (*Trypeta*); III, 235, pl. X, f. 10.—Middle States.

COQUILLETT, Jour. N. Y. Ent. Soc., VII, 260, note.

BABB, Ent. News, XIII, 242, 1 pl., life hist.; larvæ live in outer covering of fruit of black walnut.—Amherst, Mass. (*Rhagoletis*).

*tortilis* COQUILLETT, Canad. Ent., XXVI, 71.—Wash.

*uncinata* COQUILLETT, Jour. N. Y. Ent. Soc., VII, 260.—Ft. Wrangle, Alaska.

#### EPOCHRA.

LOEW, Mon. N. A. Dipt., III, 238, 1873.

*canadensis* LOEW, Mon. N. A. Dipt., III, 235.—Canada and Maine.

GILLETTE, Bull. 19, Colo. Expt. Sta., 1892, larva infests gooseberries in Col.

HARVEY, Rept. Maine Expt. Sta., 1895, 111–124, plates and figs.; biology; Bull. Maine Expt. Sta., No. 35, 1897, habits, etc.—Maine, infesting gooseberries and currants.

BAKER, Ent. News, VI, 174, 1895, infesting gooseberries at Ft. Collins, Col.

FLETCHER, Trans. R. Soc. Canada, 2d ser., v, 223, reports serious damage to currants in Vancouver Id.

- DOANE, Jour. N. Y. Ent. Soc., VII, 178, attacks both currants and gooseberries in Washington.  
 PIPER and DOANE, Bull. 36, Wash. Ex. Sta., biology, with figs.; same habits.—Wash.  
*rubida* COQUILLET, Jour. N. Y. Ent. Soc., VII, 260.—Colo.

## SPILOGRAPHA.

- LOEW, Europ. Bohrfiegen, 39, 1862 (*Spilographa* and *Zonosema*; united in Mon., III, 245); Mon. N. A. Dipt., III, 247 (*Edicarena*).  
 SCHINER, Fauna Austr., II, 118, 1864, inclusive of *Rhagoletis*.  
 VAN DER WULP, Biologia, Dipt., II, 406, syn. of *Edicarena*; table of Mexican species, 1899.  
*basolum* OSTEN SACKEN, West. Dipt., 348 (*Zonosema*).—Mass.  
*concolor* VAN DER WULP, Biologia, Dipt., II, 408, pl. XI, f. 28.—Mexico City.  
*diffusa* SNOW, Kans. Univ. Quart., II, 161, pl. VII, f. 9 (*Edicarena*).—Kans., Wash.  
 DOANE, Jour. N. Y. Ent. Soc., VII, 179, note.—Wash., S. D., Col.  
 ? *dubia* JOHNSON, Trans. Amer. Ent. Soc., XXIX, 102, fig.—Beulah, N. M. (? *Zonosema*).  
*electa* SAY, Jour. Acad. Sci. Phil., VI, 185; Compl. Works, II, 369 (*Trypeta*).—Ind.  
 LOEW, Mon. N. A. Dipt., I, 71, pl. II, f. 7 (*Trypeta*); III, 244, pl. X, f. 7.—Fla.  
 WILLISTON, Kans. Univ. Quart., XIII, 307, bred in Mo. from berries of *Solanum carolinense*.  
 SNOW, Kans. Univ. Quart., II, 161, notes.—Kans., Conn., Ga.  
*flavotata* MACQUART, Dipt. Exot., Suppl. V, 125, pl. VII, f. 9 (*Tephritis*).—Baltimore.  
 LOEW, Mon. N. A. Dipt., III, 245.—Yukon R., Alaska.  
 COQUILLET, Jour. N. Y. Ent. Soc., VII, 261, note.  
 N. J.—Smith Cat; Beulah, N. M.—Skinner.  
*fractura* COQUILLET, Proc. U. S. N. M., XXV, 125.—White Mts. of New Mexico; Col.  
*latifrons* VAN DER WULP, Biologia, Dipt., II, 407, pl. XI, f. 26.—Durango, Mex.  
*maculosa* COQUILLET, Jour. N. Y. Ent. Soc., VII, 261.—Colo.  
*obfuscata* VAN DER WULP, Biologia, Dipt., II, 406, pl. XI, f. 25.—Guerrero, Mex.  
*persuasa* OSTEN SACKEN, West. Dipt., 344 (*Edicarena*).—Col.  
*rufata* VAN DER WULP, Biologia, Dipt., II, 407, pl. XI, f. 27.—Guerrero, Mex.  
*setosa* DOANE, Jour. N. Y. Ent. Soc., VII, 178, pl. III, f. 1.—Wash., Ida., Mich., S. D., Minn.  
*striata* VAN DER WULP, Biologia, II, 406, pl. XI, f. 24.—Guerrero, Mex.  
*tetanops* LOEW, Mon. N. A. Dipt., III, 245, pl. XI, f. 15 (*Edicarena*).—Mex.  
*vittigera* COQUILLET, Jour. N. Y. Ent. Soc., VII, 261 (*Zonosema*).—Eagle Pass, Tex.; Las Cruces and Mesilla, N. M.

## TRYPETA.

- MEIGEN, Illig. Mag., II, 277, 1803; Syst. Besch., V, 210, 1826.  
 LOEW, Eur. Bohrfiegen, 51, 1862, restricted; Mon. N. A. Dipt., III, 253, 1873, notes.  
 SCHINER, Fauna Austr., II, 125, 1864.  
*baccharis* COQUILLET, Canad. Ent., XXVI, 73.—Cal.; larvæ in galls on *Baccharis*.  
*cerasi* Fauna Suec., 2d ed., p. 461, 1761 (*Musca*).—Europe.



*Notc.*—Hagen, *Canad. Ent.*, xv, 159, records finding in cherries at Cambridge Mass., the larvæ of this European species, which is referred by Schiner to *Rhagoletis* (*Fauna Austr.*, ii, 121). As nothing further has been brought to light, it is very likely that the species found by Hagen was the native *Rhagoletis cingulata*, q. v.

*flaveola* COQUILLET, *Dipt. of Commander Ids.*, 345.—Bering Id.

*florescentiæ* LINNÉ, see *ruficauda*.

*fratria* LOEW, see *Acidia*.

*ludens* LOEW, see *Anastrepha*.

*narytia* WALKER, see *Tephronota ruficeps*.

*notata* COQUILLET, *Jour. N. Y. Ent. Soc.*, vii, 262.—Albuquerque, N. M.

COCKERELL, *Jour. N. Y. Ent. Soc.*, viii, 198, bred from spherical galls on "*Bigelovia graveolens* (sens. lat.)" at Santa Fe, N. M.

*occidentalis* SNOW, *Kans. Univ. Quart.*, ii, 163, pl. vii, f. 11.—Cal., Col.

DOANE, *Jour. N. Y. Ent. Soc.*, vii, 179, pt. desc.—Wash., Idaho, Col., S. D. Beulah, N. M.—Skinner.

*palposa* LOEW, *Mon. N. A. Dipt.*, i, 74; iii, 253, pl. x, f. 9.—N. Wisconsin R.

OSTEN SACKEN, *West. Dipt.*, 345, note.

SNOW, *Kans. Univ. Quart.*, ii, 162, oc. in *Kans.* and note on wing.

N. J.—Smith Cat.; Minn., Ia.—Doane.

*ruficauda* FABRICIUS, *Ent. Syst.*, iv, 353 (*Musca*); *Syst. Antl.*, 276 (*Dacus*).—Europe.

FALLÉN, *K. Vetensk. Akad. Handl.*, 1814, 167 (*Tephritis ? punctata*); *Ortalides*, 7 (*Tephritis florescentiæ* LINNÉ).

MEIGEN, *Syst. Besch.*, v, 321 (*florescentiæ*).

LOEW, *Europ. Bohrfiegen*, 59 (id.); *Mon. N. A. Dipt.*, iii, 254 (id.), oc. in N. A.—Canada.

SCHINER, *Fauna Austr.*, ii, 132; shows in a footnote that this cannot be the *florescentiæ* of Linné.

*Notc.*—The larvæ have been bred from thistle heads in Europe.

? *scutellata* WIEDEMANN, *Auss. Zw.*, ii, 494.—Mex.

"A Trypetid of doubtful position"—Loew, in *O. S. Cat.*

*stelligera* COQUILLET, *Canad. Ent.*, xxvi, 74.—Cal.

*straminea* DOANE, *Jour. N. Y. Ent. Soc.*, vii, 179, pl. iii, f. 2.—Wash.

*undosa* COQUILLET, *Jour. N. Y. Ent. Soc.*, vii, 262.—Col.

*varipennis* COQUILLET, *Jour. N. Y. Ent. Soc.*, x, 180.—Coconino Co., Ariz.

#### PERONYMA.

LOEW, *Mon. N. A. Dipt.*, iii, 250, 1873.

*sarcinata* LOEW, *Cent.*, ii, 73; *Mon. N. A. Dipt.*, iii, 247, pl. xi, f. 16.—S. Car.

? MACQUART, *Dipt. Exot.*, ii, 3, 226, pl. xxx, f. 8 (*Tephritis quadrifasciata*).—Ga. [Loew, with a doubt.]

#### PLAGIOTOMA.

LOEW, *Mon. N. A. Dipt.*, iii, 252, 1873.

*discolor* LOEW, *Mon. N. A. Dipt.*, i, 64 (*Trypeta*); iii, 250, pl. x, f. 1.—Cuba.

*incompleta* WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 378.—St. Vincent, W. I.

*obliqua* SAY, *Jour. Acad. Sci. Phil.*, vi, 186; *Compl. Works*, ii, 370 (*Trypeta*).—Ind.

LOEW, *Mon. N. A. Dipt.*, i, 99 (id.); iii, 251, pl. xi, f. 14.—Pa., Tex.; on *Vernonia* in August.

SCHINER, *Novara*, 267, oc. in Brazil; but this is doubtless the related

form described later by Loew as *biscriata*.

VAN DER WULP, *Biologia, Dipt.*, II, 405, pl. XI, f. 23.—Orizaba and Vera Cruz, Mexico. Ariz.—Williston MS. N. J.—Smith Cat.

#### POLYMORPHOMYIA.

SNOW, *Kans. Univ. Quart.*, II, 165, 1894.

*basilica* SNOW, *Kans. Univ. Quart.*, II, 165, pl. VII, f. 1.—San Domingo.

*pilosula* VAN DER WULP, *Biologia, Dipt.*, II, 411, pl. XII, f. 4.—Vera Cruz and Tabasco, Mex.

#### EDASPIS.

LOEW, *Europ. Bohrfliegen*, 46, 1862; *Mon. N. A. Dipt.*, III, 260, 1873.

SCHINER, *Fauna Austr.*, II, 122, 124 (*Edaspis* and *Orellia*), 1864.

*anthracina* DOANE, *Jour. N. Y. Ent. Soc.*, VII, 180, pl. III, f. 3.—Ida., Mich.

*atra* LOEW, *Cent.*, II, 74; *Mon. N. A. Dipt.*, III, 256, pl. XI, f. 17.—Mex.; N. Y.

PATTON, *Canad. Ent.*, XXIX, 247, larvæ in *solidago* heads, forming galls the same as those of *polita*.—Conn.

VAN DER WULP, *Biologia, Dipt.*, II, 408, pl. XI, f. 29, oc. in N. Sonora, Mex.

N. J.—Smith Cat.

*gibba* LOEW, *Mon. N. A. Dipt.*, III, 260.—Texas.

*minuta* SNOW, *Kans. Univ. Quart.*, II, 164, pl. VI, f. 2.—Mont.

*montana* SNOW, *Kans. Univ. Quart.*, II, 163, pl. VI, f. 5.—Mont.

*penelope* OSTEN SACKEN, *West. Dipt.*, 346.—Western N. Y.

*polita* LOEW, *Mon. N. A. Dipt.*, I, 77; III, 257, pl. X, f. 12.—D. C., Conn., N. Y., Miss.

OSTEN SACKEN, *Trans. Amer. Ent. Soc.*, II, 301, describes gall made by the larva on *Solidago*. N. J.—Smith Cat.

*setigera* COQUILLET, *Jour. N. Y. Ent. Soc.*, VII, 262.—R. I., Va., Ga., Mo., Kans.

#### RHAGOLETIS.

LOEW, *Europ. Bohrfliegen*, 44, 1862; *Mon. N. A. Dipt.*, III, 267, 1873.

DOANE, *Ent. News*, IX, 69, 1898, table of species.

*caurina* DOANE, *Jour. N. Y. Ent. Soc.*, VII, 182, pl. III, f. 5.—Oregon.

*cingulata* LOEW, *Mon. N. A. Dipt.*, I, 76 (*Trypeta*); III, 263, pl. X, f. 11.—Long Branch, N. J.

SLINGERLAND, *Bull. 172, Cornell Expt. Sta.*, Sept., 1899; larva mines in fruit of cherry. Life history, figs., etc. The identity of the species is confirmed from reared specimens, in *Canad. Ent.*, XXXIV, 28.

See note under *Trypeta cerasi*.

*formosa* COQUILLET, *Canad. Ent.*, XXVI, 71.—Cal.

*pomonella* WALSH, *First Ill. Rept.*, 29-33, fig. (*Trypeta*).—Ill.; larva mines in fruits of *Cratægus*, and in apples. The Apple Maggot.

LOEW, *Mon. N. A. Dipt.*, III, 265.—Ill.

GLOVER, *Rept. Ent.*, 1867, 72, note on habits.

COMSTOCK, *Rept. Dept. Agric.*, 1881-2, 195-198, pl. XIV, life history.

LINTNER, *Bull. LXXV, N. Y. Agr. Expt. Sta.*, Dec. 29, 1883, brief acct.; 2d N. Y. *Rept.*, 117-125, figs., biology; 8th N. Y. *Rept.*, 245-249, popular acct.—N. Y.

HARVEY, *Annual Rept. Me. State College and Expt. Sta.*, 1889, 190-241, 4 pl.; full account of life history, all stages.—Me.

RILEY and HOWARD, *Insect Life*, III, 253, abstract of preceding.

WEED, *N. H. Expt. Sta., Bull. 35*, 1896, 31-35, figs., biol., etc.

- FLETCHER, Trans. R. Soc. Canada, 2d ser., v, 223, notes on damage to apples; oc. in Canada.  
 N. J.—Smith Cat.; Col.—J. M. A.; N. C.—Howard, Ins. Life, vii, 279.
- ribicola** DOANE, Ent. News, ix, 69-72, 1 pl.—Washington: larvæ mine in currants and gooseberries. See also note by Doane, Jour. N. Y. Ent. Soc., vii, 181, with f. 4, pl. iii.
- PIPER and DOANE, Bull. 36, Wash. Ex. Sta., biology with figs. and desc.—Wash.; same habits.
- striatella** VAN DER WULP, Biologia, Dipt., ii, 408, pl. xi, f. 30.—Guerrero, Mex.
- tabellaria** FITCH, 1st N. Y. Rept., 66 (*Trypeta*).—N. Y.  
 LOEW, Mon. N. A. Dipt., iii, 263.—Canada. N. J.—Smith Cat.
- zephyria** SNOW, Kans. Univ. Quart., ii, 164, pl. vi, f. 1.—Cal.

## ACIURA.

- DESVOIDY, Myodaires, 773, 1830.  
 LOEW, Europ. Bohrfliegen, 29, 1862.  
 SCHINER, Fauna Austr., ii, 112, 1864.
- aplopappi** COQUILLET, Canad. Ent., xxvi, 72.—Cal.; larvæ in galls on *Aplopappus*.
- ferruginea** DOANE, Jour. N. Y. Ent. Soc., vii, 182, pl. iii, f. 6.—Wash.
- insecta** LOEW, Mon. N. A. Dipt., i, 72, pl. ii, f. 8 (*Trypeta*); iii, 268, pl. x, f. 7.—Cuba.  
 SCHINER, Novara, 265, oc. in S. A.  
 VAN DER WULP, Biologia, Dipt., ii, 410, pl. xii, f. 3, oc. in Mexico, several places.  
 Hayti—O. S.; Porto Rico—Roeder; Jamaica and Fla.—Johnson.
- limata** COQUILLET, Jour. N. Y. Ent. Soc., vii, 263.—New Bedford, Mass.
- lutea** COQUILLET, Jour. N. Y. Ent. Soc., vii, 264.—Pareah, Utah.
- nigricornis** DOANE, Jour. N. Y. Ent. Soc., vii, 183, pl. iii, f. 7.—Penn.  
 Axton, N. Y.—M. and H.
- opaca** COQUILLET, Jour. N. Y. Ent. Soc., vii, 263.—Elko, Nev.
- phœnicura** LOEW, Mon. N. A. Dipt., iii, 269, pl. xi, f. 12.—Brazil.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 376, oc. in St. Vincent, W. I.

## BLEPHARONEURA.

- LOEW, Mon. N. A. Dipt., iii, 271, obs., 1873.  
 VAN DER WULP, Biologia, Dipt., ii, 411, 1899, table of Mexican species.
- biseriata** VAN DER WULP, Biologia, Dipt., ii, 413, pl. xii, f. 8.—Guerrero, Mex.
- diva** GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158, 1893; Ditt. del Mess., iv, 57, f. 17.—Tuxpango, Mex.
- femoralis** VAN DER WULP, Biologia, Dipt., ii, 412, pl. xii, f. 6.—Guerrero, Mex.
- fulvicollis** VAN DER WULP, Biologia, Dipt., ii, 411, pl. xii, f. 5.—Guerrero, Vera Cruz, and Tabasco, Mex.
- io** GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158; Ditt. del Mess., iv, 57, f. 18.—Tuxpango, Mex.
- pœcilogaster** LOEW, Mon. N. A. Dipt., iii, 270.—Cuba.
- quadristriata** VAN DER WULP, Biologia, Dipt., ii, 413, pl. xii, f. 7.—Tabasco, Mex.
- regina** GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158, 1893; Ditt. del Mess., iv, 56, f. 16.—Mex.
- saga** GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158, 1893; Ditt. del Mess., iv, 56, f. 19.—Cordova, Mex.
- splendida** GIGLIO-TOS, see *Hecrachata*.

## ACROTÆNIA.

- LOEW, Mon. N. A. Dipt., III, 274, 1873.  
 VAN DER WULP, Biologia, Dipt., II, 414, 1899, table of Mexican species.  
*apiata* VAN DER WULP, Biologia, Dipt., II, 415, pl. XII, f. 15.—Guerrero, Mex.  
*incisa* VAN DER WULP, Biologia, Dipt., II, 415, pl. XII, f. 13.—Guerrero, Mex.  
*otopappi* DOANE, Jour. N. Y. Ent. Soc., VII, 183, pl. III, f. 8.—Mex.; breeds in heads of *Otopappus acuminatus*.  
*tarsata* VAN DER WULP, Biologia, Dipt., II, 414, pl. XII, f. 11.—Guerrero, Mex.  
*testudinea* LOEW, Mon. N. A. Dipt., III, 272, pl. XI, f. 13.—Cuba.

## EUTRETA.

- LOEW, Mon. N. A. Dipt., III, 275, 1873.  
 SCHINER, Novara, 267, 1868 (*Icaria*, preoc.).  
*aurantiaca* DOANE, Jour. N. Y. Ent. Soc., VII, 185, pl. III, f. 10.—Wash.  
 COQUILLET, Jour. N. Y. Ent. Soc., VII, 264, note.  
*diana* OSTEN SACKEN, West. Dipt., 347.—Mo.  
 DOANE, Jour. N. Y. Ent. Soc., VII, 184, note.—Nebr., Wash.; reared from galls of *Artemisia tridentata*. Mont.—Williston MS.  
 SNOW, Kans. Univ. Quart., II, 168, var. *tricolor*.—Nev., Mont.; bred from *Artemisia* sp.  
*longicornis* SNOW, Kans. Univ. Quart., II, 168, pl. VI, f. 12.—Mont.  
*patagiata* VAN DER WULP, Biologia, Dipt., II, 414, pl. XII, f. 10.—Guerrero, Mex.  
*rotundipennis* LOEW, Mon. N. A. Dipt., I, 79 (*Trypeta*); III, 276, pl. X, f. 14.—Middle States.  
*sparsa* WIEDEMANN, Auss. Zw., II, 492.—No locality.  
 SAY, Jour. Acad. Sci. Phil., VI, 187; Compl. Works, II, 370 (*Trypeta caliptera*).—Ind.  
 MACQUART, Dipt. Exot., II, 3, 200, pl. XXVI, f. 8 (*Platystoma latipennis*).—No locality.  
 FITCH, 1st N. Y. Rept., 67 (*Acinia novaboracensis*).—N. Y.  
 LOEW, Mon. N. A. Dipt., I, 78, pl. II, f. 13, syn. and desc. (*Trypeta*); III, 274, pl. X, f. 13.—Tex., Col., Cal., Canada.  
 SNOW, Kans. Univ. Quart., II, 167, pl. VI, f. 10, II, notes on varieties, etc.—N. H., Me., N. Y., Wash., Col.  
 DOANE, Jour. N. Y. Ent. Soc., VII, 184, notes.—S. D., Cal., Pa., Col.  
 VAN DER WULP, Biologia, Dipt., II, 413, pl. XII, f. 9, oc. in Mexico, several places. Montreal—Chagnon; Quebec—V. d. W. and Fyles.

## CARPHOTRICHA.

- LOEW, Europ. Bohrfliegen, 77, 1862; Mon. N. A. Dipt., III, 279, 1873.  
 SCHINER, Fauna Austr., II, 144, 1864.  
*Note*.—Coquillett, Jour. N. Y. Ent. Soc., VII, 264, 1892, establishes a genus *Paracantha* for *culta*; as this is directly contrary to the opinion of LOEW, Mon., III, 279, I do not accept it.  
*culta* WIEDEMANN, Auss. Zw., II, 486 (*Trypeta*).—Savannah, Ga.  
 MACQUART, Dipt. Exot., II, 3, 228, pl. XXXI, f. 5 (*Acinia fimbriata*).—Carolina.  
 LOEW, Mon. N. A. Dipt., I, 94, pl. II, f. 29 (*Trypeta*); III, 276, pl. XI, f. 3.—Texas.  
 COQUILLET, Canad. Ent., XXVI, 72 (*cultaris*).—S. Cal.  
 DOANE, Jour. N. Y. Ent. Soc., VII, 185, syn. of *cultaris*, etc.—Wash., Ida., Ore., S. D., Fla.

VAN DER WULP, *Biologia*, Dipt., II, 422, pl. XII, f. 30, oc. in Mex., several places. Fla.—Johnson; Beulah, N. M.—Skinner.

*Note*.—I have seen this species depositing eggs in flower-buds of *Helianthus biennis*, the cultivated form—J. M. A.

? *marginipunctata* MACQUART, *Hist. Nat. Dipt.*, II, 464 (*Tephritis*).—Philadelphia.

Perhaps the same as *culta*—Loew, in *O. S. Cat.*, and *Mon.*, III, 337.

#### ACIDOGONA.

LOEW, *Mon. N. A. Dipt.*, III, 285, 1873.

*melanura* LOEW, loc. cit., pl. XI, f. 6.—D. C.

#### EUROSTA.

LOEW, *Mon. N. A. Dipt.*, III, 280, 1873.

*aterrima* DOANE, *Jour. N. Y. Ent. Soc.*, VII, 187, pl. IV, f. 2.—Col.

*bigeloviae* COCKERELL, *Ent. Mo. Mag.*, Dec., 1890, 324; *Canad. Ent.*, XXV, 112, note.—Reared from round woolly gall on *Bigelovia* at West Cliff, Col. TOWNSEND, *Canad. Ent.*, XXV, 49 (as *bigeloviae*, n. sp.).—Col., N. M.; reared from gall on *Bigelovia*.

BAKER, *Ent. News*, VI, 174, note; oc. at Dolores, Col.

CAUDELL, *Bull.* 38, n. ser., *Div. of Ent.*, 37, notes (*Aciura*).—Col. S. Ida.—J. M. A.

*comma* WIEDEMANN, *Auss. Zw.*, II, 478 (*Trypeta*).—Ky.

MACQUART, *Dipt. Exot.*, II, 3, 229 (*Acinia*).—Philadelphia.

LOEW, *Mon. N. A. Dipt.*, I, 93 (*Trypeta*); III, 280, pl. XI, f. 2.—Md., Mass.

SNOW, *Kans. Univ. Quart.*, II, 169, pl. VII, f. 3, note.—Conn., Va.

DOANE, *Jour. N. Y. Ent. Soc.*, VII, 186, note.

N. J.—Smith Cat.

*conspurcata* DOANE, *Jour. N. Y. Ent. Soc.*, VII, 186, pl. IV, f. 1.—Wash., N. H., N. J.

*fenestrata* SNOW, *Kans. Univ. Quart.*, II, 169, pl. VII, f. 7.—Ariz.

*latifrons* LOEW, *Mon. N. A. Dipt.*, I, 89 (*Trypeta*); III, 283, pl. X, f. 22.—Carolina, Conn.

VAN DER WULP, *Tijdschr. v. Ent.*, X, 158, pl. V, f. 15 (*Trypeta cribrata*).—Wis. [Lw.]

Detroit, Mich.; White Mts., N. H.—O. S.

*reticulata* SNOW, *Kans. Univ. Quart.*, II, 170, pl. VII, f. 6.—Conn., Mont.

DOANE, *Jour. N. Y. Ent. Soc.*, VII, 186, oc. in Col., S. D., Minn.

*solidaginis* FITCH, 1st *N. Y. Rept.*, 66 (*Acinia*).—N. Y.; makes round galls in the stalks of several species of *Solidago*.

HARRIS, *Ins. Inj. to Veget.*, 3d edit., 620 (*Trypeta asteris*).—Mass. [Lw.]

LOEW, *Mon. N. A. Dipt.*, I, 82 (*Trypeta*); III, 279, pl. X, f. 16.—N. Y.,

D. C., New England. (Osten Sacken says Atlantic States and Canada.)

BRODIE, *Canad. Ent.*, XXIV, 137-139, biology.

SNOW, *Kans. Univ. Quart.*, II, 169, pl. VII, f. 5.—Me., Conn., Ill.

BAKER, *Ent. News*, VI, 174, notes and oc. at Ft. Collins, Col.; makes galls on *Solidago canadensis*.

FYLES, *Canad. Ent.*, XXVI, 120, desc., parasites, etc.—Quebec.

HARRINGTON, *Canad. Ent.* XXVII, 197, occupants of the galls.

MRS. A. J. SNYDER, *Canad. Ent.* XXX, 99, desc. of emergence.

Charlotte Harbor, Fla.—Johnson; N. J.—Smith Cat.; Montreal—Chagnon.

## XENOCHÆTA.

SNOW, Kans. Univ. Quart., II, 166, 1894.  
*dichromata* SNOW, loc. cit., pl. VII, f. 2.—Mt. Hood, Ore.

## NEASPILOTA.

OSTEN SACKEN, Cat., 192, 1878, change of name.  
 LOEW, Mon. N. A. Dipt., III, 286, 1873 (*Aspilota*, preoc.).  
*achilleæ* JOHNSON, Ent. News, XI, 328, fig.—Pa., Ga. "Common on yarrow or  
 milfoil (*Achillea millefolium*)."  
 N. J.—Smith Cat.  
*alba* LOEW, Cent., I, 72 (*Trypeta*); Mon. N. A. Dipt., I, 100 (id.); III, 285, pl.  
 XI, f. 11.—Pa.; captured on a sp. of *Vernonia*.  
 OSTEN SACKEN, Cat., 260, "bred by Riley from seeds of *Vernonia*."  
 Mo., Col.—O. S.; N. J.—Smith Cat.  
*albidipennis* LOEW, Cent., I, 73 (*Trypeta*); Mon. N. A. Dipt., I, 100 (id.); III,  
 286, pl. XI, f. 10.—Pa.; captured on a sp. of *Vernonia*.  
 N. J.—Smith Cat.  
*brunneistigmata* DOANE, Jour. N. Y. Ent. Soc., VII, 187, pl. IV, f. 3.—No locality.  
*signifera* COQUILLET, Canad. Ent., XXVI, 73.—S. Cal.  
*vernoniæ* LOEW, Cent., I, 74 (*Trypeta*); Mon. N. A. Dipt., I, 74 (id.); III, 286,  
 pl. XI, f. 8.—Pa.; captured on a sp. of *Vernonia*.  
 COQUILLET, Jour. N. Y. Ent. Soc., VII, 262, refers to *Trypeta*.  
 N. J.—Smith Cat.; Inverness, Fla.—Johnson.

## ICTERICA.

LOEW, Mon. N. A. Dipt., III, 287, 1873.  
*circinata* LOEW, Mon. N. A. Dipt., III, 288.—N. Y. N. J.—Smith Cat.  
*lichtensteinii* WIEDEMANN, Auss. Zw., II, 497 (*Trypeta*).—Mex.  
 LOEW, Mon. N. A. Dipt., I, 92 (*Trypeta*); III, 289, pl. XI, f. 9.—Mex.  
*seriata* LOEW, Mon. N. A. Dipt., I, 84 (*Trypeta*); III, 287, pl. X, f. 18.—Ill.  
 SNOW, Kans. Univ. Quart., II, 171, note on female.—Nebr.  
 Detroit, Mich., and Mass.—O. S.; N. J.—Smith Cat.; Montreal—Chagnon.

## BARYPLEGMA.

VAN DER WULP, Biologia, Dipt., II, 416, 1899.  
*gilva* VAN DER WULP, loc. cit., pl. XII, f. 14.—Jalisco, Mex.

## ENSINA.

DESVOIDY, Myodaires, 751, 1830.  
 LOEW, Europ. Bohrfiegen, 64, 1862; Mon. N. A. Dipt., III, 291, 1873.  
 SCHINER, Fauna Austr., II, 143, 1864.  
 VAN DER WULP, Biologia, Dipt., II, 416, table of Mexican species, 1899.  
*aurifera* THOMSON, Eugen. Resa, 585 (*Trypeta*).—Cal.  
 OSTEN SACKEN, Cat., 195, gen. ref. by Loew.  
 COQUILLET, Jour. N. Y. Ent. Soc., VII, 264, refers to *Rhagoletis*, as a  
 synonym of *humilis* LOEW.  
*conspersa* VAN DER WULP, Biologia, Dipt., II, 417, pl. XII, f. 18.—Guerrero, Mex.  
*despecta* VAN DER WULP, Biologia, Dipt., II, 418, pl. XII, f. 19.—Guerrero, Mex.  
*guttularis* VAN DER WULP, Biologia, Dipt., II, 418, pl. XII, f. 21.—Guerrero, Mex.  
*humilis* LOEW, Mon. N. A. Dipt., I, 81 (*Trypeta*); III, 291, pl. X, f. 17, and note  
 on Bigot's types.—Cuba.  
 BIGOT, in Sagra's Cuba, 824, pl. XX, f. 10 (*Acinia picciola*).—Cuba.  
 OSTEN SACKEN, West. Dipt., 345, oc. in Colorado.



- VAN DER WULP, *Biologia*, Dipt., II, 417, pl. XII, f. 15.—Guerrero and Tabasco, Mex.
- COQUILLET, *Jour. N. Y. Ent. Soc.*, VII, 264, gen. ref. (*Tephritis picciola*). Porto Rico—Roeder; Jamaica—Johnson; Key West, Fla.—Osten Sacken.
- Note.*—Loew's note rejecting Bigot's name shows a valid ground, in my opinion, although there has been a tendency the other way in recent years.
- luculenta VAN DER WULP, *Biologia*, Dipt., II, 417, pl. XII, f. 17.—Guerrero, Mex.
- mediana VAN DER WULP, *Biologia*, Dipt., II, 418, pl. XII, f. 20.—Guerrero, Mex.
- peregrina LOEW, *Mon. N. A. Dipt.*, III, 292, pl. X, f. 30.—Brazil.
- WILLISTON, *Trans. Ent. Soc. Lond.*, 1896, 377, pl. XIII, f. 130.—St. Vincent, W. I.
- COQUILLET, *Proc. U. S. N. M.*, XXII, 258, oc. in Porto Rico (*Tephritis*).
- VAN DER WULP, *Biologia*, Dipt., II, 417, pl. XII, f. 16.—Orizaba and Guerrero, Mex.
- picciola BIGOT, see *humilis*.

## TEPHRITIS.

- LATREILLE, *Hist. Nat. Crust. et Ins.*, XIV, 389, 1804.
- LOEW, *Europ. Bohrfliegen*, 96, 1862; *Mon. N. A. Dipt.*, III, 295, 1873.
- SCHINER, *Fauna Austr.*, II, 151, 1864.
- VAN DER WULP, *Biologia*, Dipt., II, 419, 1899, table of Mexican species.
- ? acutangula THOMSON, *Eugen. Resa*, 583 (*Trypeta*).—Cal.
- LOEW, *Mon. N. A. Dipt.*, III, 335, note, not seen.
- COQUILLET, *Jour. N. Y. Ent. Soc.*, VII, 265, makes a syn. of *abstersa*, in *Euaresta*.
- affinis SNOW, *Kans. Univ. Quart.*, II, 172, pl. VII, f. 12.—Wash., Mont., Cal.
- COQUILLET, *Jour. N. Y. Ent. Soc.*, VII, 264, note.
- albiceps LOEW, *Mon. N. A. Dipt.*, III, 302, pl. XI, f. 5.—Canada, Me.
- N. H. and N. J.—Snow; White Mts., N. H.—Slosson; Axton, N. Y.—M. and H.; Province of Quebec—Fyles.
- angustipennis LOEW, *Germ. Zeitsch.*, V, 382, pl. II, f. 4 (*Trypeta*); *Europ. Bohrfliegen*, 113; *Mon. N. A. Dipt.*, III, 293.—Europe; Europe; Yukon R., N. A.
- ZETTERSTEDT, *Dipt. Scand.*, VI, 2229.
- californica DOANE, *Jour. N. Y. Ent. Soc.*, VII, 190, pl. IV, f. 7.—Cal.
- COQUILLET, *Jour. N. Y. Ent. Soc.*, VII, 266, note.
- cancellata VAN DER WULP, *Biologia*, Dipt., II, 420, pl. XII, f. 25.—Guerrero, Mex.
- clathrata LOEW, *Mon. N. A. Dipt.*, I, 80 (*Trypeta*); III, 297, pl. X, f. 5.—Middle States.
- euryptera LOEW, *Mon. N. A. Dipt.*, III, 304.—West Point, N. Y.
- fibulata VAN DER WULP, *Biologia*, Dipt., II, 421, pl. XII, f. 26.—Orizaba, Mex.
- finalis LOEW, *Cent.*, II, 78 (*Trypeta*); *Mon. N. A. Dipt.*, III, 296, pl. XI, f. 4.—Texas, Cal.
- Beulah, N. M.—Skinner.
- DOANE, *Jour. N. Y. Ent. Soc.*, VII, 188, oc. and note; "reared from the heads of various Compositæ."—Ida., S. D., Colo., Cal., N. M.
- VAN DER WULP, *Biologia*, Dipt., II, 419, pl. XII, f. 22.—Mexico, several places.
- Coscom and Orizaba, Mex.—Giglio-Tos.
- fucata FABRICIUS, *Ent. Syst.*, IV, 359 (*Musca*); *Syst. Antl.*, 321.—W. Indies?
- WIEDEMANN, *Auss. Zw.*, II, 505 (*Trypeta*).—S. A.
- LOEW, *Mon. N. A. Dipt.*, III, 300.—Argentina.

- WILLISTON, Trans. Ent. Soc. Lond., 1896, 377, pl. XII, f. 129.—St. Vincent, W. I.
- JOHNSON, Ent. News, XIV, 100, oc. in N. J. Jamaica and St. Augustine, Fla.—Johnson.
- gemella* COQUILLET, Jour. N. Y. Ent. Soc., x, 181.—Las Vegas Hot Spr., N. M.
- geminata* LOEW, Cent., II, 75 (*Trypeta*); Mon. N. A. Dipt., III, 298, pl. XI, f. 1.—Pa.
- N. J.—Smith Cat.
- ? *genalis* THOMSON, Eugen. Resa, 585 (*Trypeta*).—Cal.
- LOEW, Mon. N. A. Dipt., III, 336, note, not seen.
- Hudsonian Zone, N. M.—Cockerell; Beulah, N. M.—Skinner.
- inornata* COQUILLET, Jour. N. Y. Ent. Soc., x, 181.—Las Vegas Hot Spr., N. M.
- intricata* VAN DER WULP, Biologia, Dipt., II, 422, pl. XII, f. 29.—Durango, Mex.
- melliginis* FITCH, see *Rivellia viridulans*.
- murina* DOANE, Jour. N. Y. Ent. Soc., VII, 189, pl. IV, f. 5.—Wash.
- COQUILLET, Proc. Wash. Acad. Sci., II, 459, oc. in Alaska.
- obscuripennis* SNOW, Kans. Univ. Quart., II, 174, pl. VII, f. 8.—No locality.
- COQUILLET, Jour. N. Y. Ent. Soc., VII, 264, note.
- obsoleta* VAN DER WULP, Biologia, Dipt., II, 421, pl. XII, f. 27.—Orizaba, Mex.
- picturata* SNOW, Kans. Univ. Quart., II, 173.—Fla.
- platyptera* LOEW, Mon. N. A. Dipt., III, 306.—Conn.
- Hudsonian Zone, N. M.—Cockerell.
- rufipennis* DOANE, Jour. N. Y. Ent. Soc., VII, 190, pl. IV, f. 8.—Cal.
- semifusca* VAN DER WULP, Biologia, Dipt., II, 422, pl. XII, f. 28.—Durango, Mex.
- staminea* VAN DER WULP, Biologia, Dipt., II, 419, pl. XII, f. 23.—Orizaba, Mex.
- subradiata* VAN DER WULP, Biologia, Dipt., II, 420, pl. XII, f. 24.—Guerrero, Mex.
- tabellaria* FITCH, 1st N. Y. Rept., 770.—N. Y.
- LOEW, Mon. N. A. Dipt., III, 263.—Canada.
- tenebrosa* COQUILLET, Jour. N. Y. Ent. Soc., VII, 264.—Custer Co., Col.
- variabilis* DOANE, Jour. N. Y. Ent. Soc., VII, 188, pl. IV, f. 4.—Wash., Ore.
- webbii* DOANE, Jour. N. Y. Ent. Soc., VII, 189, pl. IV, f. 6.—Ida., Minn.
- COQUILLET, Jour. N. Y. Ent. Soc., VII, 266, note.

## EUARESTA.

- LOEW, Mon. N. A. Dipt., III, 295, 308, 1873.
- VAN DER WULP, Biologia, Dipt., II, 423, 1899, table of Mexican species.
- æqualis* LOEW, Mon. N. A. Dipt., I, 86 (*Trypeta*); III, 308, pl. X, f. 20.—Ill.
- OSTEN SACKEN, West. Dipt., 345 (*Euresta* sp.).
- MARLATT, Ent. News, I, 168, reared from seed-pods of *Xanthium*; Proc. Ent. Soc. Wash., II, No. 1, "The *Xanthium Trypeta*"; same habits; Insect Life, III, 129 and 312, notes on same habits.
- SNOW, Kans. Univ. Quart., II, 171, pl. VII, f. 10, correction of Loew's desc.—Pa., Va., Ill., N. M., Col.
- COQUILLET, Jour. N. Y. Ent. Soc., VII, 264, refers to *Tephritis*.
- Md., Ohio—O. S.; Idaho—J. M. A.
- N. J.—Smith Cat., "On *Ambrosia artemisiaefolia*, ragweed."
- angustipennis* VAN DER WULP, Biologia, Dipt., II, 425, fig.—Mexico City.
- araneosa* COQUILLET, Canad. Ent., XXVI, 74; Jour. N. Y. Ent. Soc., VII, 266, note.—S. Cal.
- audax* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 55, f. 22.—Tuxpango, Mex.
- bella* LOEW, Mon. N. A. Dipt., I, 88 (*Trypeta*); III, 311, pl. X, f. 23.—N. Y., D. C.
- "Rather common everywhere in the U. S."—O. S.

- Montreal—Chagnon; White Mts., N. H.—Slosson; Fla.—Johnson.
- bellula** SNOW, Kans. Univ. Quart., II, 172.—Ariz.
- DOANE, Jour. N. Y. Ent. Soc., VII, 192, oc. in Cal.
- californica** COQUILLET, Canad. Ent., XXVI, 73.—S. Cal.
- crenulata** VAN DER WULP, Biologia, Dipt., II, 423, fig.—Morelos and Guerrero, Mex.
- festiva** LOEW, Mon. N. A. Dipt., I, 86 (*Trypeta*); III, 309, pl. x, f. 21.—Pa., Conn.
- SNOW, Kans. Univ. Quart., II, 171, pl. VI, f. 9.—Kans., Va.
- N. J., Ill., Ohio, Quebec—O. S.
- latipennis** TOWNSEND, Zoc, IV, 13.—Chacaltianguis, Mex.
- melanogaster** LOEW, Mon. N. A. Dipt., I, 90, pl. II, f. 24; III, 315, pl. x, f. 24.—Cuba.
- WILLISTON, Trans. Ent. Soc. Lond., 1896, 377, pl. XIII, f. 131, oc. and notes.—St. Vincent, W. I. Porto Rico—Roeder.
- mexicana** WIEDEMANN, Abss. Zw., II, 551 (*Trypeta*).—Mex.
- LOEW, Mon. N. A. Dipt., III, 317, pl. x, f. 28.—Texas.
- munda** COQUILLET, Jour. N. Y. Ent. Soc., VII, 265.—Elko, Nev.
- mundula** COQUILLET, Jour. N. Y. Ent. Soc., VII, 265.—Pareah, Utah.
- pura** LOEW, Mon. N. A. Dipt., III, 320.—Mass.
- rufula** VAN DER WULP, Biologia, Dipt., II, 424, fig.—Vera Cruz, Mex.
- scitula** VAN DER WULP, Biologia, Dipt., II, 425, fig.—N. Sonora, Mex.
- sobrinata** VAN DER WULP, Biologia, Dipt., II, 425, fig.—Guerrero and Orizaba, Mex.
- stigmatica** COQUILLET, Jour. N. Y. Ent. Soc., X, 180.—Flagstaff and Williams, Ariz.
- tapetis** COQUILLET, Canad. Ent., XXVI, 75.—N. M.
- DOANE, Jour. N. Y. Ent. Soc., VII, 191, oc. in Col.
- timida** LOEW, Cent., II, 76 (*Trypeta*); Mon. N. A. Dipt., III, 312, pl. x, f. 25.—Mex.
- VAN DER WULP, Biologia, Dipt., II, 424, fig.—Several places in Mexico.
- tricolor** DOANE, Jour. N. Y. Ent. Soc., VII, 191, pl. IV, f. 9.—S. D.
- COQUILLET, Jour. N. Y. Ent. Soc., VII, 264, note.

## URELLIA.

- DESVOIDY, Myodaires, 774, 130.
- LOEW, Europ. Bohrfliegen, 117, 1862.
- VAN DER WULP, Biologia, Dipt., II, 426, 1899, table of species in Mexico.
- abstersa** LOEW, Cent., II, 77 (*Trypeta*); Mon. N. A. Dipt., III, 323, pl. XI, f. 7.—N. A.; Cuba.
- VAN DER WULP, Biologia, Dipt., II, 426, fig., oc. in Mexico City.
- COQUILLET, Jour. N. Y. Ent. Soc., VII, 264, note.
- N. J.—Smith Cat.; Key West, Fla.—Johnson; Hudsonian Zone, N. M.—Cockerell; Beulah, N. M.—Skinner (*Euaressta*).
- actinobola** LOEW, Mon. N. A. Dipt., III, 326.—Texas.
- COQUILLET, Jour. N. Y. Ent. Soc., VII, 266, note.
- aldrichii** DOANE, Jour. N. Y. Ent. Soc., VII, 192, pl. IV, f. 11.—S. D.
- COQUILLET, Jour. N. Y. Ent. Soc., VII, 266, note.
- bisetosa** COQUILLET, Jour. N. Y. Ent. Soc., VII, 266.—Las Cruces, N. M., and Marysvale, Utah.
- eugenia** VAN DER WULP, Biologia, Dipt., II, 427, fig.—Guerrero, Mex.
- femoralis** THOMSON, Eugen. Resa, 585 (*Trypeta*).—Cal.
- LOEW, Mon. N. A. Dipt., III, 336, note, not seen.

- imperfecta* COQUILLET, Jour. N. Y. Ent. Soc., x, 181.—Williams, Ariz.  
*mevarna* WALKER, List, iv, 1023 (*Trypeta*).—Fla. (Is perhaps *solaris*—O. S.)  
 Hudsonian Zone, N. M.—Cockerell, det. by Coquillett.  
 Beulah, N. M.—Skinner.  
*nigricornis* COQUILLET, Jour. N. Y. Ent. Soc., vii, 266.—Col.  
*pacifica* DOANE, Jour. N. Y. Ent. Soc., vii, 192, pl. iv, f. 10.—Oregon (the locality was omitted in printing—Doane in litt.).  
 COQUILLET, Jour. N. Y. Ent. Soc., vii, 266, note.  
*polyclona* LOEW, Mon. N. A. Dipt., iii, 324.—Cuba.  
 VAN DER WULP, Biologia, Dipt., ii, 426, fig.—N. Sonora, Mex.  
*radifera* COQUILLET, Jour. N. Y. Ent. Soc., vii, 267.—Tucson, Ariz.  
*solaris* LOEW, Mon. N. A. Dipt., i, 84, pl. ii, f. 19; iii, 325, pl. x, f. 19.—Ga.  
 OSTEN SACKEN, West. Dipt., 345, probably the same in Cal.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 377, pl. xiii, f. 132, oc. and note.  
 —St. Vincent, W. I.  
 VAN DER WULP, Biologia, Dipt., ii, 427, fig., oc. in Guerrero, Mex.  
 COQUILLET, Jour. N. Y. Ent. Soc., vii, 266, note.  
 Puebla, Mex.—Giglio-Tos; N. J.—Smith Cat.; Fla.—Johnson.  
 See also *mevarna*.  
*stigmatica* COQUILLET, Jour. N. Y. Ent. Soc., vii, 266.—Col.  
*vicina* VAN DER WULP, Biologia, Dipt., ii, 427, fig.—Orizaba, Mex.

## UROPHORA.

- DESVOIDY, Myodaires, 769, 1830.  
 SCHINER, Fauna Austr., ii, 134, 1864.  
*antillarum* MACQUART, Dipt. Exot., Suppl. iv, 289, pl. xxvi, f. 17.—Antilles.  
*avala* WALKER, List, iv, 1020.—Jamaica. "A small Ortalid"—O. S., from type.  
*quadrifasciata* MEIGEN, Syst. Besch., v, 331, pl. XLIX, f. 3 (*Trypeta*).—Europe.  
 SCHINER, Fauna Austr., ii, 139.  
 MACQUART, Dipt. Exot., ii, 3, 221, oc. in Cuba (mentioned as *quadrivittata*); see O. S. Cat., 195.  
*Note.*—None of the three preceding, probably, belong to *Urophora* at all.

## PRIONELLA.

- DESVOIDY, Myodaires, 1830.  
*beauvoisii* DESVOIDY, Myodaires, 760.—N. A.?  
*villosa* DESVOIDY, Myodaires, 760.—U. S.  
 LOEW, in O. S. Cat., 195, thinks it altogether uncertain whether these two species belong to Trypetidæ or Ortalidæ. They seem to be quite unrecognizable from the descriptions.

## MICROPEZIDÆ.

VAN DER WULP, Biologia, Dipt., ii, 360-363, 1897.

*Note.*—For Bigot's species of *Taniptera*, see *Tanypeza* and *Calobata*.

I do not find any described species of *Tetanura* (Fallén, Opomyz., 10, 1820; Schiner, Fauna Austr., ii, 190, 1864), although the genus is mentioned in Williston's Manual.

## NERIUS.

FABRICIUS, Syst. Antl., 264, 1805.

MACQUART, Hist. Nat. Dipt., ii, 492, 1835.

- bistriatus** WILLISTON, Trans. Ent. Soc. Lond., 1896, 373, pl. XII, f. 126.—St. Vincent, W. I.
- cinereus** ROEDER, Stett. Ent. Zeit., 1885, 348.—Porto Rico.
- flavifrons** BIGOT, Annales, 1886, 372.—Mex.  
VAN DER WULP, Biologia, Dipt., II, 364.—Tabasco and N. Yucatan, Mex.  
HUBBARD, Psyche, May, 1899, suppl., 14, referred to as bred from giant cactus (*Cereus giganteus*) in Ariz.
- pilifer** FABRICIUS, Syst. Antl., 264.—S. A.  
WIEDEMANN, Auss. Zw., II, 550.—S. A.  
VAN DER WULP, Biologia, Dipt., II, 364, oc. in Tabasco, Mex.
- plurivittatus** BIGOT, Annales, 1886, 372.—Mex.
- xanthopus** SCHINER, Novara, 247.—S. A.  
GIGLIO-TOS, Ditt. del Mess., IV, 64, oc. in Orizaba, Mex.

## CARDIACEPHALA.

- MACQUART, Dipt. Exot., II, 3, 242, 1843.
- VAN DER WULP, Biologia, Dipt., II, 375, 1898, table of Mexican spp.
- myrmex** SCHINER, Novara, 254.—S. A.  
GIGLIO-TOS, Ditt. del Mess., IV, 63, oc. at Mexico City, and in Tuxpango, Mex.  
VAN DER WULP, Biologia, Dipt., II, 376, oc. in Vera Cruz and Tabasco, Mex.
- nigra** SCHINER, Novara, 255.—S. A.  
VAN DER WULP, Biologia, Dipt., II, 376, oc. in Vera Cruz, Mex., and Guatemala.

## MICROPEZA.

- MEIGEN, Illig. Mag., II, 276, 1803; Syst. Besch., V, 382, 1826.
- SCHINER, Fauna Austr., II, 195, 1864.
- LOEW, Berl. Ent. Zeitsch., XII, 1868, 161-167 and 393.
- VAN DER WULP, Biologia, Dipt., II, 364, 1897, table of Mexican species.
- bilineata** VAN DER WULP, Biologia, Dipt., II, 366.—Guerrero, Mex.
- bisetosa** COQUILLET, Jour. N. Y. Ent. Soc., X, 177.—Prescott, Ariz., and Las Vegas Hot Spr., N. M.
- divisa** WIEDEMANN, Auss. Zw., II, 540 (*Calobata*).—Mex.
- incisa** WIEDEMANN, Auss. Zw., II, 547.—Brazil.  
SCHINER, Novara, 250 (*appendiculata*).—S. A.  
GIGLIO-TOS, Ditt. del Mess., IV, 64, oc. in Tuxpango, Mex., and syn.
- limbata** ROEDER, Stett. Ent. Zeit., 1885, 347.—Porto Rico.  
COQUILLET, Proc. U. S. N. M., XXII, 257, oc. in same.
- nigricornis** VAN DER WULP, Biologia, Dipt., II, 366.—Guerrero, Mex.
- obscura** BIGOT, Annales, 1886, 387.—Mex.  
VAN DER WULP, Biologia, Dipt., II, 365, redesc.—Vera Cruz and Tabasco, Mex.
- occipitalis** VAN DER WULP, Biologia, Dipt., II, 365.—Guerrero, Mex.
- pectoralis** WIEDEMANN, Auss. Zw., II, 540 (*Calobata*).—Mex.
- producta** WALKER, List, IV, 1056.—Ga. Cuba—Loew; Jamaica—Johnson.
- ruficeps** VAN DER WULP, Biologia, Dipt., II, 365.—N. Sonora, Mex.
- stigmatica** VAN DER WULP, Biologia, Dipt., II, 366, pl. IX, f. 17.—Mexico, several places.
- turcana** TOWNSEND, Trans. Kans. Acad. Sci., XIII, 136.—Turkey Tanks, Ariz. S. D., Kans., Ida.—J. M. A.

## CALOBATA.

- MEIGEN, Illig. Mag., II, 276, 1803; Syst. Besch., v, 376, 1826.  
 SCHINER, Fauna Austr., II, 191, 1864.  
 VAN DER WULP, Biologia, Dipt., II, 367, 1897, table of Mexican species.
- albiceps** VAN DER WULP, Tijdschr. v. Ent., XXVI, sep. 50.—Quebec.
- alesia** WALKER, List, IV, 1048.—Martin Falls, Canada.  
 New England—O. S.; N. J.—Smith Cat.
- alva** WALKER, List, IV, 1053.—Jamaica.
- angulata** LOEW, Cent., VII, 87.—Colombia, S. A.  
 SCHINER, Novara, 253.—Brazil.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 372, oc. in St. Vincent, W. I.,  
 and remarks on the synonymy.
- annulata** FABRICIUS, Ent. Syst., IV, 338 (*Musca*); Syst. Antl., 262.—Cayenne,  
 S. A.  
 WIEDEMANN, Auss. Zw., II, 534, same locality.  
 VAN DER WULP, Tijdschr. v. Ent., XXVI, 49; Biologia, Dipt., II, 373.—  
 Tabasco, Mex., and Panama.
- antennipes** SAY, Jour. Acad. Sci. Phil., III, 97; Compl. Works, II, 83 (*antennipes*).—Pa.  
 WIEDEMANN, Auss. Zw., II, 546.  
 OSTEN SACKEN, Cat., 179, oc. in Md. and Ky.; name changed to *antennipennis*, which destroys the original significance, of the insect waving its fore feet like antennæ.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- bracteata** VAN DER WULP, Biologia, Dipt., II, 371, pl. IX, f. 23.—Vera Cruz, Mex.
- callichroma** BIGOT, Annales, 1886, 373.—Mex.  
 GIGLIO-TOS, Ditt. del Mess., IV, 63, note.  
 VAN DER WULP, Biologia, Dipt., II, 375, pl. IX, f. 30.—Vera Cruz and  
 Yucatan, Mex.; Costa Rica.
- calocephala** BIGOT, Annales, 1886, 575.—Mex.
- calosoma** BIGOT, Annales, 1886, 379 (*Taniaptera*).—Mex.  
 Orizaba, Mex.—Giglio-Tos.
- conveniens** VAN DER WULP, Biologia, Dipt., II, 373.—Panama.
- diversa** SCHINER, Novara, 250.—S. A.  
 VAN DER WULP, Tijdschr. v. Ent., XXVI, sep. 49, oc. in Mex.
- erythrocephala** FABRICIUS, Syst. Antl., 260.—S. A.  
 WIEDEMANN, Auss. Zw., II, 532.—Brazil.  
 WALKER, List, IV, 1055, oc. in Brazil and Mexico.  
 SCHINER, Novara, 250, notes.—S. A.  
 VAN DER WULP, Tijdschr. v. Ent., XX, 49; Biologia, Dipt., II, 369.—Guadeloupe;  
 Orizaba and Vera Cruz, Mex., Guatemala, Costa Rica.  
 Guadeloupe—O. S.
- fasciata** FABRICIUS, Syst. Ent., 781 (*Musca*); Ent. Syst., IV, 336 (id.); Syst.  
 Antl., 262.—W. I.  
 WIEDEMANN, Auss. Zw., II, 536.—W. I.  
 COQUILLET, Proc. U. S. N. M., XXII, 257, oc. in Porto Rico (on human  
 excrement—Howard).  
 Porto Rico—Roeder; Jamaica—Johnson; Fla.—Johnson.
- geometra** DESVOIDY, Myodaires, 736 (*Neria*).—Carolina. Texas, Ky.—O. S.  
 ? DESVOIDY, Myodaires, 736-738 (*Neria atripes*, *carolinensis*, and *longipes*  
 FAB.).—Car. [O. S. Cat., 180, with a doubt.]
- grata** VAN DER WULP, Biologia, Dipt., II, 371, pl. IX, f. 24.—Guerrero and N.  
 Yucatan, Mex.



- ichneumonea** BRAUER, Sitzungsbericht d. K. Akad., xci, 388, pl. iv, 1885.—Mex.  
BIGOT, Annales, 1886, 381 (*Grallomyia caloptera*).—Mex.  
GIGLIO-TOS, Ditt. del Mess., iv, 63 (*Calobata caloptera* BIG.).—Mex.  
VAN DER WULP, Biologia, Dipt., II, 373, syn. and desc.—Guerrero, Mex., and Guatemala.
- lasciva** FABRICIUS, Ent. Syst., Suppl., 574 (*Musca*); Syst. Antl., 262.—Cayenne, S. A.  
WIEDEMANN, Auss. Zw., II, 535.—Cayenne.
- MACQUART**, Hist. Nat. Dipt., II, 491, pl. xx, f. 9 (*Tanioptera tricittata*); Dipt. Exot., II, 3, 245, pl. xxxiii, f. 3 (*Calobata albimana*).—N. A.; the latter reference mentions Philadelphia, Cuba, Java and Australia, of which the two last certainly require confirmation.  
GUÉRIN, Iconographie, III, 553, pl. ciii, f. 7 (*Calobata ruficeps*).—Cuba.  
? WALKER, Dipt. Saund., 390 (*valida*).—U. S. [O. S., with a doubt.]  
JENNICKE, Neue Exot. Dipt., 4, oc. in Cuba.  
SCHINER, Novara, 253, desc. and syn. of *albimana*.—S. A.  
OSTEN SACKEN, Cat., 259, note and syn.  
COQUILLET, Proc. U. S. N. M., xxii, 257, oc. in Porto Rico.  
N. J.—Smith Cat.; Jamaica and Fla.—Johnson; Porto Rico—Roeder.
- latifascia** VAN DER WULP, Biologia, Dipt., II, 372, pl. ix, f. 25.—Costa Rica and Panama.
- lunulata** VAN DER WULP, Biologia, Dipt., II, 372, pl. ix, f. 26.—Presidio, Vera Cruz, Tabasco, and N. Yucatan, all in Mex.
- maculosa** LOEW, Cent., VII, 88.—Cuba.
- manifesta** VAN DER WULP, Biologia, Dipt., II, 370, pl. ix, f. 20.—Costa Rica.
- mellea** WILLISTON, Trans. Ent. Soc. Lond., 1896, 373, pl. xii, f. 126.—St. Vincent, W. I.
- munda** VAN DER WULP, Biologia, Dipt., II, 374, pl. ix, f. 29.—Guerrero, Mex.
- nebulosa** LOEW, Cent., VII, 89.—Fla. Fla., several places—Johnson.
- pallipes** SAY, Jour. Acad. Sci. Phil., III, 97; Compl. Works, II, 84.—Mo.  
WIEDEMANN, Auss. Zw., II, 548 (*Micropeza*).  
Hudson B. Terr.—O. S.; White Mts., N. H.—Slosson.
- placida** LOEW, Cent., VII, 90.—Cuba.
- plectilis** GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 62.—Mex.  
VAN DER WULP, Biologia, Dipt., II, 370, pl. ix, f. 21.—Guerrero, Mex.
- pleuritica** JOHNSON, Proc. Acad. Nat. Sci. Phil., 1894, 279.—Jamaica.
- rubella** VAN DER WULP, Biologia, Dipt., II, 368, pl. ix, f. 18.—Guerrero, Mex.
- russula** VAN DER WULP, Biologia, Dipt., II, 370, pl. ix, f. 22.—Guerrero, Mex.
- stellata** VAN DER WULP, Biologia, Dipt., II, 375.—Tabasco, Mex.
- univitta** WALKER, List, IV, 1049.—N. Y. and Martin Falls, Canada.  
N. J.—Smith Cat.; Montreal—Chagnon.
- varipes** JOHNSON, Proc. Acad. Nat. Sci. Phil., 1895, 306.—Jacksonville, Fla.
- vittipennis** COQUILLET, Proc. U. S. N. M., xxv, 125.—Frontera in Tabasco, Mex.

## TANYPEZA.

- FALLÉN, Opomyzides, 4, 1820.  
MEIGEN, Syst. Besch., VI, 100, 1830.  
SCHINER, Fauna Ausr., II, 283, 1864.  
VAN DER WULP, Biologia, Dipt., II, 362, 1897, table of species in Mexico.  
HENDEL, Wien. Ent. Zeit., xxii, 201, 1903, places in Ortalidæ.  
**claripennis** SCHINER, Novara, 247.—Brazil.

- WILLISTON, Trans. Ent. Soc. Lond., 1896, 371, pl. XII, f. 124.—St. Vincent, W. I.
- claripennis* SCHINER, Novara, 247.—Brazil.
- VAN DER WULP, Biologia, Dipt., II, 362.—Guerrero, Morelos, and Tabasco, Mex.; Costa Rico.
- mexicana* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 61.—Mex.
- VAN DER WULP, Biologia, Dipt., II, 363, note; may be same as *ornatipes* BIG.
- ornatipes* BIGOT, Annales, 1886, 380 (*Tæniaptera*).—Mex.
- VAN DER WULP, Biologia, Dipt., II, 363, gen. ref.
- pallidipennis* BIGOT, Annales, 1886, 380 (*Tæniaptera*).—Mex.
- VAN DER WULP, Biologia, Dipt., II, 363, footnote, gen. ref.; may be same as *claripennis*.
- rutila* VAN DER WULP, Biologia, Dipt., II, pl. IX, f. 15.—Guerrero, Mex.

#### TETRADISCUS.

- BIGOT, Annales, 1886, 374.
- VAN DER WULP, Biologia, Dipt., II, 363, note on position of genus.
- notatus* BIGOT, Annales, 1886, 374.—Mex.
- pictus* BIGOT, Annales, 1886, 370.—Rocky Mts.

#### SEPSIDÆ.

*Note.*—For *Madiza annulicornis*, see *Siphonella*.

#### PROCHYLIZA.

- WALKER, List, IV, 1045, 1849.
- xanthostoma* WALKER, loc. cit.—Martin Falls, Canada.
- OSTEN SACKEN, Cat., 199, note on family.
- COQUILLET, Proc. Wash. Acad. Sci., II, 461, oc. in Alaska, Ga., Texas, Kansas.
- N. J.—Smith Cat.; White Mts.—Slosson.

#### TYLEMYIA.

- GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893, 14, change of name.
- MACQUART, Dipt. Exot., II, 3, 231, 1843 (*Omaloccephala*, preoc.).
- fusca* MACQUART, Dipt. Exot., II, 3, 232, pl. XXXI, f. 12 (*Omaloccephala*).—Guiana.
- GIGLIO-TOS, Ditt. del Mess., IV, 61, oc. in Tuxpango, Mex.

#### THEMIRA.

- DESVOIDY, Myodaires, 746, 1830.
- MACQUART, Hist. Nat. Dipt., II, 479, 1835 (*Cheligaster*).
- SCHINER, Fauna Austr., II, 181, 1864.
- putris* LINNÉ, Fauna Suecica, 2d edit., 456, No. 1850, var. *fimcti* (*Musca*).—Europe; "habitat in fimetis copiosissime et instar grandinum."
- FABRICIUS, Spec. Ins., II, 445 (*Musca*); Ent. Syst., IV, 334 (id.); Syst. Antl., 323 (*Tephritis*).
- FALLÉN, Ortalides, 21 (*Scpsis*).
- MEIGEN, Syst. Besch., V, 292 (*Scpsis*).

ST. EGER, Mon. Sepsis, Kroyer's Tidskr., 1845, 29 (*Scpsis*).

MACQUART, Hist. Nat. Dipt., II, 479 (*Cheligaster*).

ZETTERSTEDT, Dipt. Scand., VI, 2290.

SCHINER, Fauna Austr., II, 182.

White Mts., N. H.—Slosson; Montreal—Chagnon; S. D.—J. M. A.

*Note*.—I found the adults in abundance attending plant-lice on cotton-wood.

### SEPSIS.

FALLÉN, Ortalides, 20, 1820.

MEIGEN, Syst. Besch., v, 285, 1826.

SCHINER, Fauna Austr., II, 177, 1864.

*discolor* BIGOT, in Sagra's Cuba, 823.—Cuba. Porto Rico—Roeder.

*ecalcarata* THOMSON, Eugenes Resa, 588.—Cal.

*flavimanus* MEIGEN, Syst. Besch., v, 288.—Europe.

SCHINER, Fauna Austr., II, 180.

COQUILLET, Proc. Wash. Acad. Sci., II, 461, oc. in N. A.—Saldovia and Juneau, Alaska.

*insularis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 431, pl. xiv, f. 159.—St. Vincent, W. I.

COQUILLET, Proc. U. S. N. M., XXII, 259, oc. in Porto Rico.

*referens* WALKER, List, IV, 999.—N. A.

COQUILLET, Proc. Wash. Acad. Sci., II, 461, oc. at Lowe Inlet, Brit. Col.

*scabra* LOEW, Wien. Ent. Monatsch., v, 42.—Cuba.

*similis* MACQUART, Dipt. Exot., Suppl. IV, 296, pl. XXVII, f. II.—N. A.

*vicaria* WALKER, List, IV, 998.—Fla.

St. Augustine and Inverness, Fla.—Johnson.

*violacea* MEIGEN, Syst. Besch., v, 289.—Europe.

ZETTERSTEDT, Dipt. Scand., VI, 2289.

SCHINER, Fauna Austr., II, 179.

GIGLIO-TOS, Ditt. del Mess., IV, 60, oc. in Coscom, Mex.

HOWARD, Proc. Wash. Acad. Sci., II, 586, figs. and habits; reared abundantly from human excrement; Canad. Ent., XXXIII, 44, bred from cow-dung.—N. H., N. J., D. C., Md., Va.; Va.

Montreal—Chagnon; Hudsonian Zone, N. M.—Cockerell; Beulah, N. M. Skinner.

### NEMOPODA.

DESVOIDY, Myodaires, 743, 1830.

SCHINER, Fauna Austr., II, 180, 1864.

*aterrima* BIGOT, Annales, 1886, 390.—Cal.

*cubensis* BIGOT, Annales, 390.—Cuba.

*cylindrica* FABRICIUS, Ent. Syst., IV, 336 (*Musca*); Syst. Antl., 263 (*Calobata*).—Europe.

FALLÉN, Ortalides, 21 (*Scpsis nitidula*).

MEIGEN, Syst. Besch., v, 290 (*Scpsis*).

DESVOIDY, Myodaires, 744 (*putris*).

MACQUART, Hist. Nat. Dipt., II, 480.

ZETTERSTEDT, Dipt. Scand., VI, 2301 (*Scpsis*).

VAN DER WULP, Tijdschr. v. Ent., XXVI, 51, oc. in N. A.—Quebec.

N. J.—Smith Cat.; Montreal—Chagnon.

*fulvicoxalis* BIGOT, Annales, 1886, 390.—Cal.; Cuba?

*minuta* WIEDEMANN, Auss. Zw., II, 468 (*Scpsis*).—N. Y.

- HOWARD, Proc. Wash. Acad. Sci., 11, 588, fig. and habits; reared from human excrement.—Va., D. C. N. J.—Smith Cat.  
*cæruleiformis* MACQUART, Dipt. Exot., Suppl. 11, 2, 94.—Philadelphia.  
*obscuripennis* BIGOT, Annales, 1886, 392.—Cal.

## MYCETAULUS.

- LOEW, Dipt. Beitr., 1, 37, 1845.  
 SCHINER, Fauna Austr., 11, 187, 1864.  
*longipennis* LOEW, Cent., IX, 100.—Huds. Bay Terr.

## PIOPHILA.

- FALLÉN, Heteromyzides, 8, 1820.  
 MEIGEN, Syst. Besch., v, 394, 1826.  
 SCHINER, Fauna Austr., 11, 184, 1864.  
*affinis* MEIGEN, Syst. Besch., VI, 383.—Europe.  
 ZETTERSTEDT, Dipt. Scand., VI, 2511.  
 SCHINER, Fauna Austr., 11, 186.  
 STÆGER, Grœnl. Antl., 368 (*casei* LINN.), oc. in Greenland.  
 SCHIÖDTE, Tillag til Rink: Greenland, etc., 69 (id.), same.  
 HOLMGREN, Ins. Nordgrœnl., 104 (*pilosa* STÆG.).—Greenland.  
 LUNDBECK, Dipt. Grœnl., 11, 299, fig.—Greenland.  
*casei* LINNÉ, Fauna Suecica, 456, No. 1850 (*Musca putris*, var. *casei*).—Europe;  
 "habitat in caseo, cujus larva caseum consumit."  
 FABRICIUS, Spec. Ins., 11, 333 (*Musca atrata*).  
 MEIGEN, Syst. Besch., v, 395, pl. LIV, f. 4.  
 ZETTERSTEDT, Dipt. Scand., VI, 2510.  
 DUFOUR, Ann. de Science Nat., 1844, 369, pl. XVI, f. 7 (*pectasionis*).  
 [Schiner.]  
 SCHINER, Fauna Austr., 11, 186.  
 LOEW, in Silliman's Jour., oc. in N. A. (*casei* and *pectasionis*).  
 KELLOGG, Kans. Acad. Sci., XIII, 112, damaging smoked meats at Kansas City; Insect Life, v, 116, same.  
 MURTFELDT, Ins. Life, v, 135, similar habit; VI, 170, article on habits—affecting smoked pork.  
 RILEY and HOWARD, Ins. Life, VI, 208, notes.  
 HOWARD and MARLATT, Bull. 4, n. ser., Div. of Ent., 102, figs., biol., etc.  
 LINTNER, 12th N. Y. Report, 229–234, figs.; life history.  
 MÖTTER, Jour. N. Y. Ent. Soc., VI, 223, oc. in human graves.  
 HOWARD, Proc. Wash. Acad. Sci., 11, 588, pl. XXX, all stages figured.  
 Cosmopolitan: reported from Alaska to New Mexico, etc.  
*concolor* THOMSON, Eugenes Resa, 596.—Cal.  
*nigerrima* LUNDBECK, Dipt. Grœnl., 11, 301, fig.—Greenland.  
*nigriceps* MEIGEN, Syst. Besch., v, 397.—Europe.  
 ZETTERSTEDT, Dipt. Scand., VI, 2516.  
 SCHINER, Fauna Austr., 11, 185.  
 LOEW, in Silliman's Jour., oc. in N. A.  
*nigriceps* MACQUART, Suppl. IV, 303, pl. XXVIII, f. 6.—N. A.  
*nitida* VAN DER WULP, Tijdschr. v. Ent., x, 160, pl. v, f. 16–18.—Wis.  
*pilosa* STÆGER, Grœnl. Antl., 368.—Greenland.  
 ZETTERSTEDT, Dipt. Scand., VI, 2514.—N. Europe.  
 SCHIÖDTE, Tillag til Rink: Greenland, etc., 69, oc. in Greenland.  
 LUNDBECK, Dipt. Grœnl., 11, 301, oc. in Greenland.

## ENICOPUS.

WALKER, Ent. Mag., I, 253, 1833.

? *fuscus* BIGOT, Annales, 1886, 387.—Mex. Query by Bigot.

## PSILIDÆ.

VAN DER WULP, Biologia, Dipt., II, 360, 1897, def. and table of genera.

## LOXOCERA.

MEIGEN, Illig. Mag., II, 275, 1803; Syst. Besch., v, 362, 1826.

ZETTERSTEDT, Dipt. Scand., VI, 2382, 1847.

SCHINER, Fauna Austr., II, 196, 1864.

LOEW, Schles. Ent. Zeit., 1857, European species.

BIGOT, Annales, 1887, 17-19, table of all species.

*collaris* LOEW, Cent., IX, 97.—D. C.

*cylindrica* SAY, Jour. Acad. Sci. Phil., III, 98; Compl. Works, II, 84.—Pa.

WIEDEMANN, Auss. Zw., II, 528.

? LOEW, Cent., VIII, 65 (*pleuritica*).—Conn., N. Y. [J. M. A., in spite of Loew's note to the contrary.]

N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson.

The two last mentioned as *pleuritica*.

*fallax* LOEW, Cent., IX, 98.—Canada.

Axton, N. Y.—M. and H.

*fumipennis* COQUILLET, Proc. U. S. N. M., XXIII, 617.—Baldwin, Kans.; Texas.

*pectoralis* LOEW, Cent., VIII, 64.—D. C.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

*quadrilinea* WALKER, Trans. Ent. Soc., n. ser., v, 329.—U. S.

## CHYLIZA.

FALLÉN, Opomyzides, 6, 1820.

MEIGEN, Syst. Besch., v, 367, 1826.

SCHINER, Fauna Austr., II, 199, 1864.

*apicalis* LOEW, Wien. Ent. Monatsch., IV, 82; Cent., VIII, 72.—D. C.

GIGLIO-TOS, Ditt. del Mess., IV, 64, oc. in Tuxpango, Mex.

N. J.—Smith Cat.

*euthea* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1893; Ditt. del Mess., IV, 64.—Tuxpango, Mex.

*metallica* WALKER, List, IV, 1045.—Martin Falls, Canada.

*nigroviridis* WALKER, Trans. Ent. Soc., n. ser., v, 330.—U. S.

*notata* LOEW, Cent., IX, 99.—D. C.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

*varipes* VAN DER WULP, Biologia, Dipt., II, 361.—Guerrero and Tabasco, Mex.

## PSILA.

MEIGEN, Illig. Mag., II, 278, 1803; Syst. Besch., v, 355, 1826.

SCHINER, Fauna Austr., II, 202, 1864.

*bicolor* MEIGEN, Syst. Besch., v, 358.—Europe.

ZETTERSTEDT, Dipt. Scand., VI, 2394.

SCHINER, Fauna Austr., II, 204.

LOEW, Silliman's Journal, oc. in N. A.—Sitka and L. Winnipeg.

White Mts., N. H.—Slosson.

- bivittata* LOEW, Cent., VIII, 67.—Conn. Quebec—O. S.; N. J.—Smith Cat.  
*collaris* LOEW, Cent., VIII, 68.—Conn.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.  
*dimidiata* LOEW, Cent., VIII, 69.—Red R. of the North.  
*exigua* VAN DER WULP, Biologia, Dipt., II, 361.—Guerrero, Mex.  
*frontalis* COQUILLET, Proc. U. S. N. M., XXIII, 617.—Franconia, N. H.  
*lateralis* LOEW, Wien. Ent. Monatsch., IV, 81; Cent., VIII, 66.—D. C.  
 N. J.—Smith Cat.  
*levis* LOEW, Cent., VIII, 71.—White Mts., N. H.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 459, oc. in Alaska, several places.  
*rosæ* FABRICIUS, Ent. Syst., IV, 356 (*Musca*); Syst. Antl., 319 (*Tephritis*).—  
 Europe.  
 MEIGEN, Syst. Besch., V, 358.  
 ZETTERSTEDT, Dipt. Scand., VI, 2402 (*Scatophaga*).  
 MACQUART, Hist. Nat. Dipt., II, 421 (*Psilomyia*).  
 SCHINER, Fauna Austr., II, 206.  
 FLETCHER, Rept. Ent. and Bot., Canada Dept. Agric., 1897, 196–198, oc.  
 in Canada; biology; larva burrows in carrots; op. cit., 1898, 193, habits,  
 distribution, etc.; op. cit., 1899, 161, notes on damage; Trans. Roy. Soc.  
 Can., 2d ser., V, 213, figs. and notes.—Quebec and New Brunswick.  
 Called the Carrot Rust Fly.  
 CHITTENDEN, Bull. 33, n. ser., Div. of Ent., 26, fig., habits, oc.—N. Y.  
 FELT, 18th N. Y. Rept., 1902, 99, biol., bibliog., figs.—N. Y.  
*sternalis* LOEW, Cent., VIII, 70.—Middle States.

#### MEGAMERINA.

- RONDANI, Dipt. Ital. Prod., IV, 10, 1861, change of name.  
 MEIGEN, Syst. Besch., V, 370, 1826 (*Lissa*, preoc.).  
 SCHINER, Fauna Austr., II, 189, 1864 (*Lissa*).  
*carbonaria* WALKER, List, IV, 1047 (*Lissa*).—Martin Falls, Canada.  
*carbonaria* WALKER, see *Cordylura*.  
*fulvida* BIGOT, Annales, 1886, 384.—Mex.

#### DIOPSIDÆ.

- BIGOT, Annales, 1874, 107, gives a list of the published species, showing that  
 only one belongs to the western continent, while some fifty belong to the  
 tropical parts of the old world. He also gives a table of genera of the world,  
 Annales, 1880, 90–94.

#### SPHYRACEPHALA.

- SAY, American Entomology, pl. LII, 1828; Compl. Works, I, 116, pl. LII.  
*brevicornis* SAY, Jour. Acad. Sci. Phil., I, 23; Compl. Works, I, 116, pl. LII.—  
 Pa., Mo.  
 WIEDEMANN, Auss. Zw., II, 563 (*Diopsis*); Aclias, etc., pl. II, f. 3 (id.).  
 GRAY, in Griffith's Animal Kingdom, Ins., 774, pl. LXI, f. 2.  
 MACQUART, Hist. Nat. Dipt., II, 486 (*Diopsis*).  
 WESTWOOD, Trans. Linn. Soc., XVII, 311, pl. IX, f. 20.  
 FITCH, 1st N. Y. Rept., 773 (*brevicornis* and *subbifasciata*), notes; col-  
 lected on skunk cabbage, as Say also did.—N. Y.  
 LOEW, Zeitsch. f. Ges. Naturwissenschaft, XLII, 101.  
 KEEN, Canad. Ent., XV, 200, oc. in Philadelphia.



C. O. HOUGHTON, Ent. News, XIII, 160, note on habits of adult; oc. at Ithaca, N. Y. N. J.—Smith Cat.; Montreal—Chagnon.

*Note.*—In midsummer of 1901 I found this species by hundreds on foliage in one of the shady glens adjoining the campus of Cornell University, Ithaca, N. Y. There is nothing to show that the larva has anything to do with the skunk cabbage.

## EPHYDRIDÆ.

BECKER, Berl. Ent. Zeitsch., XLI, 91-276, 1896, has given an excellent monograph of the European species.

## DICHÆTA.

MEIGEN, Syst. Besch., VI, 61, 1830.

LOEW, Mon. N. A. Dipt., I, 132, 1862.

SCHINER, Fauna Austr., II, 235, 1864.

BECKER, Berl. Ent. Zeitsch., XLI, 102, 1896.

*brevicauda* LOEW, Neue Beitr., VII, 5; Mon. N. A. Dipt., I, 133.—Middle States.

SCHINER, Fauna Austr., II, 236.—Europe.

BECKER, Berl. Ent. Zeitsch., XLI, 103.—Europe.

N. J.—Smith Cat.; St. Augustine, Fla.—Johnson.

*caudata* FALLÉN, Hydromyzides, 8 (*Notiphila*).—Europe.

MEIGEN, Syst. Besch., VI, 62.

SCHINER, Fauna Austr., II, 236.

LOEW, Mon. N. A. Dipt., I, 133.—Mass., N. H.

BECKER, Berl. Ent. Zeitsch., XLI, 103.

White Mts., N. H.—Slosson.

*furcata* COQUILLET, Jour. N. Y. Ent. Soc., X, 182.—Biscayne Bay and L. Worth, Fla.

## NOTIPHILA.

FALLÉN, Hydromyzides, 7, 1823.

SCHINER, Fauna Austr., II, 236, 1864.

BECKER, Berl. Ent. Zeitsch., XLI, 105, 1896.

*avia* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 193.—Hudson Bay Terr.

*bella* LOEW, Mon. N. A. Dipt., I, 135.—Middle States.

*bellula* WILLISTON, Trans. Ent. Soc. Lond., 1896, 390.—St. Vincent, W. I.; reported by Williston from Brazil later.

*carinata* LOEW, Mon. N. A. Dipt., I, 137.—Middle States. N. J.—Smith Cat.

*decorata* WILLISTON, Trans. Ent. Soc. Lond., 1896, 389.—St. Vincent, W. I.

*decoris* WILLISTON, Dipt. of Death Valley Exped., 258.—Panamint Valley, Cal.

*erythroceræ* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 194.—Cuba.

Porto Rico—Roeder.

*macrochæta* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 192.—Texas.

*producta* WALKER, List, IV, 1099.—Martin Falls, Canada.

*pulchrifrons* LOEW, Cent., X, 84.—Texas.

*quadrisetosa* THOMSON, Eugen. Resa, 594.—Cal.

*repleta* WALKER, see *Scatella*.

*scalaris* LOEW, Mon. N. A. Dipt., I, 134.—Middle States. N. J.—Smith Cat.

*solita* WALKER, Dipt. Saund., 406.—U. S.

*transversa* WALKER, Dipt. Saund., 407.—U. S.

*unicolor* LOEW, Mon. N. A. Dipt., I, 137.—Middle States.

*virgata* COQUILLET, Proc. U. S. N. M., XXII, 259.—Porto Rico.

*vittata* LOEW, Mon. N. A. Dipt., I, 134.—Middle States. N. J.—Smith Cat.

## PARALIMNA.

- LOEW, Mon. N. A. Dipt., 1, 138, 1862.  
 OSTEN SACKEN, Cat., 201, note.  
 BECKER, Berl. Ent. Zeitsch., xli, 114, 1896.  
*appendiculata* LOEW, Mon. N. A. Dipt., 1, 138.—Middle States.  
 N. J.—Smith Cat.; St. Augustine, Fla.—Johnson.  
*decipiens* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 196.—Texas.  
 COQUILLET, Proc. U. S. N. M., xxii, 259, oc. in Porto Rico, Ga., and Fla.  
*multipunctata* WILLISTON, Trans. Ent. Soc. Lond., 1896, 290; Kans. Univ. Quart.,  
 vi, 5, oc. in Brazil.—St. Vincent, W. I.; Williston suggests that this,  
 with *secunda* SCHINER from S. A., and *appendiculata*, may all be one  
 species.  
*nuda* COQUILLET, Jour. N. Y. Ent. Soc., x, 182.—Frontera in Tabasco, Mex.  
*obscura* WILLISTON, Trans. Ent. Soc. Lond., 1896, 391.—St. Vincent, W. I.  
 Porto Rico—Coquillett.

## PTILOMYIA.

- COQUILLET, Proc. U. S. N. M., xxii, 261, 1900.  
*enigma* COQUILLET, loc. cit.—Porto Rico.

## ALLOTRICHOMA.

- BECKER, Berl. Ent. Zeitsch., xli, 1896, 121.  
 WILLISTON, Kans. Univ. Quart., vi, 4, 1897, note.  
*abdominalis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 398 (*Hccamcdc*); Kans.  
 Univ. Quart., vi, 4, gen. ref.—St. Vincent, W. I.; Brazil.  
 COQUILLET, Proc. U. S. N. M., xxii, 260, oc. in Porto Rico.

## GASTROPS.

- WILLISTON, Kans. Univ. Quart., vi, 3, 1897.  
*nebulosus* COQUILLET, Canad. Ent., xxxii, 34.—N. C., Ga.  
*niger* WILLISTON, Kans. Univ. Quart., vi, 3.—Grenada, W. I., and Rio Janeiro.

## DISCOMYZA.

- MEIGEN, Syst. Besch., vi, 76, 1830.  
 SCHINER, Fauna Austr., ii, 240, 1864.  
 BECKER, Berl. Ent. Zeitsch., xli, 128, 1896.  
*balioptera* LOEW, Mon. N. A. Dipt., 1, 140.—Cuba.  
*dubia* WILLISTON, Trans. Ent. Soc. Lond., 1896, 392, pl. xiii, f. 138.—St. Vin-  
 cent, W. I.

## PSILOPA.

- FALLÉN, Hydromyzides, 6, 1820.  
 SCHINER, Fauna Austr., ii, 241, 1864 (*Ephygrobia*).  
 BECKER, Berl. Ent. Zeitsch., xli, 135, 1896, adopts and defends *Ephy-*  
*grobia*.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 392, table of St. Vincent species.  
*aciculata* LOEW, Mon. N. A. Dipt., 1, 142.—Cuba.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 394, pl. xiii, f. 140; Kans. Univ.  
 Quart., vi, 4, oc.—St. Vincent, W. I.; Rio Janeiro.  
 COQUILLET, Proc. U. S. N. M., xxii, 260, reports from Porto Rico, Ga.,  
 and La.  
*æneonigra* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 196.—Texas.  
*atra* LOEW, Mon. N. A. Dipt., 1, 142.—Middle States.

- atrimanus** LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 197.—D. C., Texas.  
N. J.—Smith Cat.
- cæruleiventris** LOEW, Mon. N. A. Dipt., 1, 144.—Cuba.
- desmata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 395.—St. Vincent, W. I.
- flavida** COQUILLET, Canad. Ent., xxxii, 33.—New Bedford, Mass.
- mellipes** COQUILLET, Proc. U. S. N. M., xxii, 260.—Porto Rico.
- nigra** WILLISTON, Trans. Ent. Soc. Lond., 1896, 393, pl. xiii, f. 139.—St. Vincent, W. I.
- nigrimanus** WILLISTON, Trans. Ent. Soc. Lond., 1896, 393; Kans. Univ. Quart., vi, 4, oc.—St. Vincent, W. I.; Rio Janeiro.
- nigropunctum** WILLISTON, Trans. Ent. Soc. Lond., 1896, 393.—St. Vincent, W. I.
- nitidula** FALLÉN, K. Vetenskap. Akad. Handl., 1813, 252; Hydromyzides, 7, 1823.—Europe.  
BECKER, Berl. Ent. Zeitsch., xli, 143 (*Ephygrobia*).  
WALKER, List, iv, 1098 (*Notiphila*), oc. in N. A.—Martin Falls, Canada.
- nobilis** LOEW, Cent., ii, 92.—D. C.
- petrolei** COQUILLET, Canad. Ent., xxxi, 1899, 8.—S. Cal.; larvæ live in crude petroleum!  
HOWARD, Scientific American, Feb. 4, 1899, vol. lxxx, p. 75; life hist. and figs. of different stages—same habits.  
HOWARD and COQUILLET, Entomologist, 1899, 235, same.
- pulchripes** LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 197.—Texas.
- scoriacea** LOEW, Mon. N. A. Dipt., 1, 142.—N. Y. N. J.—Smith Cat.
- similis** COQUILLET, Canad. Ent., xxxii, 33.—Fla., La.
- umbrosa** LOEW, Mon. N. A. Dipt., 1, 143.—Cuba.
- varipes** COQUILLET, Canad. Ent., xxxii, 33.—Vancouver Id., Br. Col.

#### ILYTHERA.

- HALIDAY, Ann. Nat. Hist., iii, 408, 1839.
- SCHINER, Fauna Austr., ii, 262, 1864.
- BECKER, Berl. Ent. Zeitsch., xli, 132, 1896.
- flavipes** WILLISTON, Trans. Ent. Soc. Lond., 1896, 403.—St. Vincent, W. I.; gen. ref. with a doubt. Also Kans. Univ. Quart., vi, 4, oc. in Rio Janeiro; confirms gen. ref.  
Porto Rico—Coquillett.
- ? **oscitans** WALKER, Trans. Ent. Soc., n. ser., iv, 233 (*Ephydra*).—U. S.  
OSTEN SACKEN, Cat., 262, note 319, says there is an earlier *Eph. oscitans* by Walker himself; refers with a doubt to *Ilythea spilota* CURT.  
COQUILLET, Proc. U. S. N. M., xxii, 260, recognizes as a distinct and valid species.—Porto Rico. See *Ephydra* and *Scatella*.
- spilota** CURTIS, Brit. Ent., 413.—Europe.  
WALKER, Ins. Brit., ii, 264.  
STENHAMMAR, Mon. Ephyd., 186 (*notata*).  
LOEW, Neue Beitr., vii, 37; Silliman's Jour., oc. in N. A.  
SCHINER, Fauna Austr., ii, 263.  
BECKER, Berl. Ent. Zeitsch., xli, 133, 1896.

#### ATHYROGLOSSA.

- LOEW, Neue Beitr., vii, 12, 1860; Mon. N. A. Dipt., 1, 132, 1862.
- SCHINER, Fauna Austr., ii, 244, 1864.
- BECKER, Berl. Ent. Zeitsch., xli, 133, 1896.
- glabrata** MEIGEN, Syst. Besch., vi, 69 (*Notiphila*).—Europe.

LOEW, Neue Beitr., VII, 12.

SCHINER, Fauna Austr., II, 245.

WALKER, Ins. Brit., II, 254.

BECKER, Berl. Ent. Zeitsch., XLI, 134, 1896.

HOUGH, in litt., reports it from Wash.

*glaphyropus* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 198.—Texas.

*nitida* WILLISTON, Trans. Ent. Soc. Lond., 1896, 397, pl. XIII, f. 142.—St. Vincent, W. I.

Porto Rico—Coquillett.

#### DISCOCERINA.

MACQUART, Hist. Nat. Dipt., II, 527, 1835.

STENHAMMAR, Mon. Ephyd., 251, 1844 (*Clasiopa*).

LOEW, Mon. N. A. Dipt., I, 145, 1862.

SCHINER, Fauna Austr., II, 243 (*Clasiopa*).

BECKER, Berl. Ent. Zeitsch., XLI, 144, 1896 (*Clasiopa*).

WILLISTON, Trans. Ent. Soc. Lond., 1896, 395, table of St. Vincent species.

*facialis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 396, pl. XIII, f. 141.—St. Vincent, W. I.

*incisa* COQUILLET, Jour. N. Y. Ent. Soc., X, 182.—Porto Rico.

*lacteipennis* LOEW, Mon. N. A. Dipt., I, 145.—D. C. N. J.—Smith Cat.

*leucoprocta* LOEW, Berl. Ent. Zeitsch., 1861, 255; Mon. N. A. Dipt., I, 148.—Md.

? WILLISTON, Trans. Ent. Soc. Lond., 1896, 395, doubtfully recognized from St. Vincent, W. I. Porto Rico—Coquillett.

*nana* WILLISTON, Trans. Ent. Soc. Lond., 1896, 396.—St. Vincent, W. I.

*obscura* WILLISTON, Trans. Ent. Soc. Lond., 1896, 397.—St. Vincent, W. I.

*orbitalis* LOEW, Cent., I, 91; Mon. N. A. Dipt., I, 147.—D. C.

BECKER, Mittheilungen Zool. Mus. Berl., II, 160, 1903, oc. in Egypt (*Clasiopa*).

*parva* LOEW, Mon. N. A. Dipt., I, 146.—D. C.

COQUILLET, Proc. U. S. N. M., XXII, 261, oc. in Porto Rico.

HOWARD, Proc. Wash. Acad. Sci., II, 592, note.

*simplex* LOEW, Cent., I, 92; Mon. N. A. Dipt., I, 147.—Md.

#### PAREPHYDRA.

COQUILLET, Jour. N. Y. Ent. Soc., X, 183, 1902.

*humilis* COQUILLET, loc. cit.—Hot Spr., Yavapai Co., Ariz.

#### PARATISSA.

COQUILLET, Canad. Ent., XXXII, 36, 1900.

*pollinosa* WILLISTON, Trans. Ent. Soc. Lond., 1896, 414 (*Drosophila*).—St. Vincent, W. I.

COQUILLET, Canad. Ent., XXXII, 36, gen. ref.—Biscayne Bay, Fla.

#### HYDRELLIA.

DESVOIDY, Myodaires, 790, 1830.

LOEW, Mon. N. A. Dipt., I, 150, 1862.

SCHINER, Fauna Austr., II, 246, 1864.

BECKER, Berl. Ent. Zeitsch., XLI, 167, 1896.

*conformis* LOEW, Cent., VIII, 73.—Newport, R. I.

*formosa* LOEW, Cent., I, 94; Mon. N. A. Dipt., I, 154.—Pa.

- HOWARD, Proc. Wash. Acad. Sci., II, 593, oc. and note.—D. C.  
*gilvipes* COQUILLET, Proc. U. S. N. M., XXII, 261.—Porto Rico.  
*hypoleuca* LOEW, Mon. N. A. Dipt., I, 151.—Middle States.  
*ischiaca* LOEW, Mon. N. A. Dipt., I, 150.—Middle States.  
*obscuripes* LOEW, Mon. N. A. Dipt., I, 152.—Middle States.  
 White Mts., N. H.—Slosson.  
*parva* WILLISTON, Trans. Ent. Soc. Lond., 1896, 399, pl. XIII, f. 143.—St. Vincent, W. I.  
*pulchra* WILLISTON, Trans. Ent. Soc. Lond., 1896, 400, pl. XIII, f. 144.—St. Vincent, W. I.  
*scapularis* LOEW, Mon. N. A. Dipt., I, 153.—Middle States.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 461, oc. in Br. Col., Alaska, Cal., and Ill. N. J.—Smith Cat.  
*valida* LOEW, Mon. N. A. Dipt., I, 153.—Middle States.

## NOSTIMA.

- COQUILLET, Canad. Ent., XXXII, 35, 1900.  
*slossonæ* COQUILLET, loc. cit.—Biscayne Bay, Fla.

## PHILYGRIA.

- STENHAMMAR, Mon. Ephyd., 238, 1844.  
 LOEW, Mon. N. A. Dipt., I, 155, 1862.  
 SCHINER, Fauna Austr., II, 251, 1864.  
 BECKER, Berl. Ent. Zeitsch., XLI, 186, 1896.  
 ? DESVOIDY, Myodaires, 1830—*Hydrina*.  
*debilis* LOEW, Cent., I, 96; Mon. N. A. Dipt., I, 157.—Pa.  
 White Mts., N. H.—Slosson (*Hydrina*).  
*fuscicornis* LOEW, Mon. N. A. Dipt., I, 155.—Middle States.  
 White Mts., N. H.—Slosson (*Hydrina*).  
*nitida* WILLISTON, Trans. Ent. Soc. Lond., 1896, 400, pl. XIII, f. 145 (*Hydrina*).—St. Vincent, W. I.  
*nitifrons* WILLISTON, Trans. Ent. Soc. Lond., 1896, 401 (*Hydrina*).—St. Vincent, W. I.  
*opposita* LOEW, Cent., I, 95; Mon. N. A. Dipt., I, 156.—Pa.; D. C.  
 Quebec—O. S.; White Mts., N. H.—Slosson (*Hydrina*).  
*vittipennis* ZETTERSTEDT, Ins. Lapp., 716 (*Notiphila*); Dipt. Scand., v, 1924 (id.).—Europe.  
 STENHAMMAR, Mon. Ephyd., 250.  
 STEGER, Grenl. Antl., 369 (*Notiphila*), oc. in Greenland.  
 BECKER, Berl. Ent. Zeitsch., XLI, 193, 1896.  
 ? LUNDBECK, Dipt. Grenl., II, 302, doubtfully recognized from Greenland.

## HYADINA.

- HALIDAY, Annals of Nat. Hist., III, 406, 1839.  
 SCHINER, Fauna Austr., II, 254, 1864.  
 BECKER, Berl. Ent. Zeitsch., XLI, 193, 1896.  
*albovenosa* COQUILLET, Canad. Ent., XXXII, 34.—Ga., La.  
*gravida* LOEW, Cent., IV, 98.—Sitka.

## OCHTHERA.

- LATREILLE, Hist. Nat. Crust. et Ins., II, 462, 1802: XIV, 391, 1804.  
 LOEW, Mon. N. A. Dipt., I, 159, 1862.

- SCHINER, Fauna Austr., II, 256, 1864.  
 BECKER, Berl. Ent. Zeitsch., XLI, 204, 1896.  
 WHEELER, Ent. News, VII, 123, 1896, table of species and notes.  
**cuprilineata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 402, pl. XIII, f. 148.—St. Vincent, W. I.  
 WHEELER, Ent. News, VII, 123, pt. desc.  
**exsculpta** LOEW, Mon. N. A. Dipt., I, 160.—Cuba.  
 WILLISTON, Trans. Amer. Ent. Soc., XIII, 307, oc. in So. States. Jamaica and Fla.—Johnson.  
**lauta** WHEELER, Ent. News, VII, 121.—Wis.  
**mantis** DEGEER, Mém. Hist. Ins., VI, 143, pl. VIII, f. 15 (*Musca*).—Europe.  
 FABRICIUS, Ent. Syst., IV, 334 (*Musca manicata*); Syst. Antl., 323 (*Tephritis* id.).  
 FALLÉN, Hydromyzides, 2 (*manicata*).  
 LATREILLE, Gen. Ins., IV, 348, pl. XV, f. 10; Consid. Générales, 444.  
 MEIGEN, Syst. Besch., VI, 78.  
 SCHINER, Fauna Austr., II, 256.  
 BECKER, Berl. Ent. Zeitsch., XLI, 205, pl. V, f. 3; pl. VI, f. 20.  
 LOEW, Mon. N. A. Dipt., I, 161.—Middle States.  
 WHEELER, Ent. News, VII, 123, oc.—Conn. to Cal., common.  
 GIGLIO-TOS, Ditt. del Mess., IV, 66, bibliog. and oc.—Tuxpango, Mex. White Mts., N. H.—Slosson.  
**rapax** LOEW, Mon. N. A. Dipt., I, 162.—Carolina.  
**tuberculata** LOEW, Mon. N. A. Dipt., I, 161.—Ill.  
 WHEELER, Ent. News, VII, 123, oc. and pt. desc.—Wis. St. Augustine, Fla.—Johnson.

#### OCHTHEROIDEA.

- WILLISTON, Trans. Ent. Soc. Lond., 1896, 401.  
**atra** WILLISTON, loc. cit., pl. XIII, f. 146.—St. Vincent, W. I.

#### PELINA.

- HALIDAY, Annals of Nat. Hist., III, 407, 1839.  
 SCHINER, Fauna Austr., II, 255, 1864.  
 BECKER, Berl. Ent. Zeitsch., XLI, 196, 1896.  
**truncatula** LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 198.—Texas.

#### PELOMYIA.

- WILLISTON, Dipt. of Death Val. Exped., 259, 1893.  
 BECKER, Berl. Ent. Zeitsch., XLI, 274, 1896, quotes orig. desc.  
**occidentalis** WILLISTON, loc. cit.—Monterey, Cal.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 461, oc. at Saldovia, Alaska.

#### BRACHYDEUTERA.

- LOEW, Mon. N. A. Dipt., I, 162, 1862.  
 BECKER, Berl. Ent. Zeitsch., XLI, 201, 1896.  
**argentata** WALKER, Dipt. Saund., 407 (*Notiphila*).—U. S.  
 LOEW, Mon. N. A. Dipt., I, 163 (*dimidiata*).—D. C., Cuba. [Lw.]  
 WILLISTON, Kans. Univ. Quart., VI, 4, oc. in Brazil, Bolivia, and Paraguay.



HOWARD, Proc. Wash. Acad. Sci., II, 592, bred from a pond "strongly impregnated with horse manure."—D. C.  
Charlotte Harbor, Fla.—Johnson (*dimidiata*).

## PARYDRA.

STENHAMMAR, Mon. Ephyd., 144, 1844.

LOEW, Mon. N. A. Dipt., 1, 164, 1862.

SCHINER, Fauna Austr., II, 257, 1864.

BECKER, Berl. Ent. Zeitsch., XLI, 208, 1896.

*abbreviata* LOEW, Cent., 1, 97; Mon. N. A. Dipt., 1, 168.—Pa.

*appendiculata* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 202.—Texas.

*bituberculata* LOEW, Mon. N. A. Dipt., 1, 165.—Middle States.

N. J.—Smith Cat.; S. D., Kans., Ida., common—J. M. A.

*breviceps* LOEW, Mon. N. A. Dipt., 1, 167.—Middle States.

*imitans* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 201.—Mass.

*limpidipennis* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 201.—D. C.

*paullula* LOEW, Mon. N. A. Dipt., 1, 167.—Locality omitted; U. S.—O. S.

COQUILLET, Proc. Wash. Acad. Sci., II, 462, oc. on Popof Id., Alaska.

*pinguis* WALKER, Dipt. Saund., 409 (*Ephydra*).—U. S.

LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 199.—D. C., Texas.

N. J.—Smith Cat.

*quadrituberculata* LOEW, Mon. N. A. Dipt., 1, 165.—Middle States.

Ormond, Fla.—Johnson.

*untuberculata* LOEW, Zeitsch. f. Ges. Naturwiss., 1878, 200.—D. C.

*varia* LOEW, Cent., IV, 100.—Sitka, Alaska.

## EPHYDRA.

FALLÉN, Hydromyzides, 3, 1820.

LOEW, Mon. N. A. Dipt., 1, 169, 1862.

SCHINER, Fauna Austr., II, 260, 1864.

PACKARD, Proc. Essex Inst., VI, 1869, and Amer. Jour. of Arts and Sciences, 1st ser., 1, 1872, discusses in both the species of *Ephydra* which in the larval stage inhabit salt or alkaline waters.

WILLISTON, Trans. Conn. Acad., VI, July, 1883, on "Dipterous Larvæ in Western Alkaline Lakes, and their Use as Human Food."

SCHWARZ, Canad. Ent., XXIII, 236, on larvæ in Great Salt Lake.

BECKER, Berl. Ent. Zeitsch., XLI, 216, 1896.

*atrovirens* LOEW, Mon. N. A. Dipt., 1, 169.—Middle States.

*austrina* COQUILLET, Canad. Ent., XXXII, 36.—Georgiana, Fla.

*brevis* WALKER, Trans. Ent. Soc., n. ser., IV, 233.—U. S.

*crassimanus* LOEW, Cent., VI, 88.—Mex.

*halophila* PACKARD, Proc. Essex Inst., VI, 46, fig.—Ill. The name is preoccupied.

*californica* PACKARD, Amer. Jour. Arts and Sci., 3d ser., 1, 103 (larva and pupa only).—Cal.: larva in alkaline lake.

? WILLISTON, Trans. Conn. Acad., VI, July, 1883, adult desc.; larvæ in Soda Lake, Nev., also in Mono Lake. Identity not quite certain.

*gracilis* PACKARD, Amer. Jour. Arts and Sci., 3d ser., 1, 103, larva only.—Cal.

SCHWARZ, Canad. Ent., XXIII, 235, extended notes on the larvæ—abundant in Great Salt Lake.

- hians SAY, Jour. Acad. Sci. Phil., vi, 188; Compl. Works, ii, 371.—Mex.  
 lata WALKER, Trans. Ent. Soc., n. ser., iv, 233.—U. S.  
 lutea WIEDEMANN, Auss. Zw., ii, 593.—W. I.  
 nana WALKER, Trans. Ent. Soc., n. ser., iv, 234.—U. S.  
 N. J.—Smith Cat.; Ormond, Fla.—Johnson.  
*Note.*—The description is embraced in two lines, and suggests a *Psilopa*.  
 obscuripes LOEW, Cent., vii, 92.—Mass.  
 oscitans WALKER, Trans. Ent. Soc., n. ser., iv, 233.—U. S.  
*Note.*—The name is preoccupied, and I should call the species unrecognizable, although Mr. Coquillett believes that he has identified it from Porto Rico and Mr. Johnson reported it from N. J.; see under *Ilythea* and *Scatella*.  
 pilicornis COQUILLET, Jour. N. Y. Ent. Soc., x, 184.—Biscayne Bay, Fla.  
 pygmæa WILLISTON, Trans. Ent. Soc. Lond., 1896, 402, pl. xiii, f. 147.—St. Vincent, W. I.  
 subopaca LOEW, Cent., v, 99.—Conn.  
 N. J.—Smith Cat.; Charlotte Harbor, Fla.—Johnson.  
 tarsata WILLISTON, Dipt. of Death Valley Exped., 257.—Owen's Valley, Cal.  
 thomæ WIEDEMANN, Auss. Zw., ii, 593.—St. Thomas, W. I.

## SCATELLA.

- DESVOIDY, Myodaires, 801, 1830.  
 SCHINER, Fauna Austr., ii, 264, 1864.  
 LOEW, Mon. N. A. Dipt., i, 170, 1862.  
 BECKER, Berl. Ent. Zeitsch., xli, 225, 1896.  
 cribrata STENHAMMAR, Mon. Ephyd., 269 (*Ephydra*).—Sweden.  
 ZETTERSTEDT, Dipt. Scand., v, 1835 (id.).  
 SCHINER, Fauna Austr., ii, 265.  
 LUNDBECK, Dipt. Grænl., ii, 303, oc. in Greenland.  
 favillacea LOEW, Mon. N. A. Dipt., i, 170.—Middle States.  
 N. J.—Smith Cat.  
 lugens LOEW, Mon. N. A. Dipt., i, 171.—Middle States. Ormond, Fla.—Johnson.  
 mesogramma LOEW, Cent., viii, 74.—Newport, R. I.  
 obscura WILLISTON, see *stagnalis*.  
 obsoleta LOEW, Cent., i, 98; Mon. N. A. Dipt., i, 172.—D. C.  
 octonotata WALKER, List, iv, 1106 (*Ephydra*).—Martin Falls, Canada.  
 ? oscitans WALKER, List, iv, 1106 (*Ephydra*).—Martin Falls, Canada.  
 N. J.—Smith Cat. See *Ephydra* and *Ilythea*.  
 pentastigma THOMSON, Eugen. Resa, 591 (*Ephydra*).—Cal.  
 picea WALKER, List, iv, 1105.—Martin Falls, Canada.  
 quadrata FALLÉN, Hydromyzides, 5.—Europe.  
 HALIDAY, Ent. Mag., i, 176 (*Ephydra graminum*).  
 STENHAMMAR, Mon. Ephyd., 182.  
 ZETTERSTEDT, Dipt. Scand., v, 1840.  
 SCHINER, Fauna Austr., ii, 265.  
 LOEW, in Silliman's Jour., oc. in N. A.  
 BECKER, Berl. Ent. Zeitsch., xli, 230.  
 repleta WALKER, List, iv, 1099 (*Notiphila*).—Martin Falls, Canada. Gen. ref. by J. M. A.

- sejuncta** LOEW, Cent., iv, 99.—Sitka.
- setosa** COQUILLET, Proc. Wash. Acad. Sci., II, 462.—Saldovia, Alaska.
- stagnalis** FALLÉN, Acta Holm., 248; Hydromyzides, 5 (*Ephydra*).—Europe.  
 MEIGEN, Syst. Besch., vi, 118 (id.).  
 STENHAMMAR, Mon. Ephyd., 178.  
 LOEW, Neue Beitr., vii, 42.  
 SCHINER, Fauna Austr., II, 266.  
 STÆGER, Grœnl. Antl., oc. in Greenland.  
 HOLMGREN, Ins. Nordgrœnl., same.  
 COQUILLET, Proc. Wash. Acad. Sci., II, 462. oc. in Alaska, N. J., Ga., Ariz.
- WILLISTON**, Trans. Ent. Soc., Lond., 1896, 403 (*obscura*).—St. Vincent, W. I. [Will.]
- BECKER, Berl. Ent. Zeitsch., xli, 235.
- HOWARD, Proc. Wash. Acad. Sci., II, 593. oc. and note.—D. C.
- LUNDBECK, Dipt. Grœnl., II, 303. oc. in Greenland.
- Hudsonian Zone, N. M.—Cockerell; White Mts., N. H.—Mrs. Slosson; Montreal—Chagnon; N. J.—Smith Cat.
- stenhammari** ZETTERSTEDT, Dipt. Scand., v, 1842.—Europe.  
 SCHINER, Fauna Austr., II, 266.  
 LOEW, in Silliman's Jour., oc. in N. A.  
 BECKER, Berl. Ent. Zeitsch., xli, 230.
- striata** WALKER, List, iv, 1107 (*Ephydra*).—Martin Falls, Canada.
- trisetæ** COQUILLET, Jour. N. Y. Ent. Soc., x, 184.—Williams, Ariz.

## CÆNIA.

- DESVOIDY, Myodaires, 800, 1830.
- SCHINER, Fauna Austr., II, 263, 1864.
- BECKER, Berl. Ent. Zeitsch., xli, 207, 1896.
- bisetosa** COQUILLET, Jour. N. Y. Ent. Soc., x, 183.—Salt Lake, Utah.
- spinosa** LOEW, Cent., v, 100.—Mass.  
 N. Y.—O. S.; N. J.—Smith Cat.; St. Augustine, Fla.—Johnson.

## LIPOCHÆTA.

- COQUILLET, Ent. News, vii, 220, 1896.
- BECKER, Berl. Ent. Zeitsch., xli, 274. quotes orig. desc
- WILLISTON, Kans. Univ. Quart., vi, 7, 1897. generic relations.
- TOWNSEND, Ent. News, ix, 168, 1898, notes on generic position.
- slossonæ** COQUILLET, Ent. News, vii, 221, fig.—Fla.  
 TOWNSEND, Ent. News, ix, 168 (*texensis*).—Texas. [Will. in litt.]  
 N. J.—Smith Cat.
- Notc.*—Mr. R. W. Doane found the species by thousands on the sea-beach in southern California.

## OSCINIDÆ.

## ELLIPONEURA.

- LOEW, Cent., vii, 79, 1860.
- debilis** LOEW, Cent., vii, 79.—D. C.

## MEROMYZA.

- MEIGEN, Syst. Besch., v, 163, 1830.  
 SCHINER, Fauna Austr., II, 209, 1864.  
*americana* FITCH, 1st N. Y. Rept., 299; 2d N. Y. Rept., 531.—N. Y.  
 RILEY, 1st Mo. Rept., 159-161, fig. 90; pl. II, f. 28; larvæ in wheat stalks.—Mo.  
 LINTNER, 39th Rept. N. Y. State Ag'l Soc.; reprinted with a few changes in 1st N. Y. Rept., 221-227; bibliog., figs., habits, etc.  
 FORBES, Ill. Rept., 1883, 13-29, pl. I. f. 1-8, full treatment; Rept., 1886, 35-39, additional notes on life history.  
 WEBSTER, Dept. Agric. Rept., 1884, 389 and 1886, 574, notes on life hist.; Ins. Life, II, 87, notes on susceptibility of different varieties of wheat.  
 GARMAN, Ins. Life, III, 332, note on placing of eggs.  
 LUGGER, 2d Minn. Rept., 1896, 10, pl. XIV, notes on oc.—Minn.  
 COQUILLET, Bull. 10, n. ser., Div. of Ent., 70, larvæ in wheat and rye straws.—Ind., Mo., Wis.  
 FLETCHER, Rept. Ent. and Bot., 1898, 175, habits, figs., etc.  
 MARLATT, Farmers' Bull. 132, Dept. of Agric., 29-30, fig., remedies, etc.  
 LOCHHEAD, Bull. 116, Ontario Ag. Coll. and Ex. Sta., 7, 8, fig.  
 PETTIT, Bull. 186, Mich. Ex. Sta., oc. at Chatham, Northern Mich., and notes.  
 WEBSTER, Bull. 42, Div. of Ent., 1903, 43-51, figs.; life history, etc. Called the Greater Wheat Stem-Maggot.  
 STEDMAN, 34th Rept. Bd. of Agric. Mo., 86-94, figs., life hist., etc.  
 St. Augustine, Fla.—Johnson; N. J.—Smith Cat.; Hudsonian Zone, N. M.—Cockerell; Beulah, N. M.—Skinner; Axton, N. Y.—M. and H.  
*Note*.—The preceding has also been called the Wheat Bulb-worm.

## CHLOROPS.

- MEIGEN, Illig. Mag., II, 278, 1803; Syst. Besch., VI, 138, 1830.  
 SCHINER, Fauna Austr., II, 210, 1864.  
 LOEW, Zeitsch. f. Ent. zu Breslau, XX, 3-94, 1866, divided into subgenera and monographically considered. I have separated the subgenera below as far as practicable; but under the subgenus *Chlorops* are doubtless some that only belong to the genus.  
 RILEY and HOWARD, Ins. Life, I, 86, early accounts of injury to wheat.  
 WEBSTER, Ins. Life, I, 373, notes on, affecting stems of grasses.

## Subgenus Centor.

- procera* LOEW, Cent., x, 92.—Conn.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.

## Subgenus Anthracophaga.

- eucera* LOEW, Cent., III, 85.—D. C. N. J.—Smith Cat.  
*maculosa* LOEW, Cent., x, 99.—Texas.  
*sanguinolenta* LOEW, Cent., III, 84.—Carolina.

## Subgenus Haplegis.

- fossulata* LOEW, Cent., III, 82.—Cuba.

Subgenus *Diptotoxa*.

See LOEW, Cent., x, 98, 1872.

- alternata* LOEW, Cent., x, 97.—Texas.  
*confluens* LOEW, Cent., x, 94.—Texas.  
*microcera* LOEW, Cent., x, 95.—Texas.  
*nigricans* LOEW, Cent., x, 98.—Texas.  
*pulchripes* LOEW, Cent., x, 96.—Texas.  
*versicolor* LOEW, Cent., III, 97.—D. C. U. S. and Canada—O. S.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.  
*gundlachi* LOEW, Cent., x, 93.—Cuba.

Subgenus *Chlorops*.

Inclusive of *Chloropisca* and a few species that have not been assigned to any subgenus; notes on some of these are given by Loew in O. S. Cat., p. 209.

- abdominalis* COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 318.—Charlotte Harbor, Fla.  
*albifacies* ADAMS, Kans. Univ. Sci. Bull., II, 43 (*albifascies*).—Atherton, Mo.  
*antennalis* FITCH, 2d N. Y. Rept., 532.—N. Y.  
*annulata* WALKER, List, IV, 1119.—Martin Falls, Canada.  
*appropinqua* ADAMS, Kans. Univ. Sci. Bull., II, 39.—Kans., Wyo. and Col.  
*aristalis* COQUILLET, Jour. N. Y. Ent. Soc., VI, 46.—N. C., Ga.  
*assimilis* MACQUART, Dipt. Exot., Suppl. IV, 2, 306, pl. XXVIII, f. 9.—N. A.  
 WALKER, List, IV, 1120 (*bistriatus*).—Martin Falls, Canada.  
 FITCH, 1st N. Y. Rept., 299 (*Siphonella obesa*).—N. Y.  
 LOEW, Cent., III, 87 (*trivialis*).—D. C.  
 GIGLIO-TOS, Ditt. del Mess., IV, 65, oc. at Puebla, Mex.  
 COQUILLET, Jour. N. Y. Ent. Soc., VI, 47, above synonymy; Bull. 10, n. ser., Div. of Ent., records larvæ among roots of *Poa* and in sugar-beet leaves; also in earth about roots of horse-radish.—Cal., D. C.  
 CHITTENDEN, Bull. 17, n. ser., Div. Ent., 86, larvæ affecting roots of millet.  
 N. J.—Smith Cat.; Montreal—Chagnon; St. Augustine, Fla.—Johnson;  
 White Mts., N. H.—Slosson; Beulah, N. M.—Skinner.  
*atra* MACQUART, Dipt. Exot., Suppl. IV, 2, 307, pl. XXVIII, f. 12.—N. A.  
*bilineata* ADAMS, Kans. Univ. Sci. Bull., II, 40.—North Park, Col.  
*cinereipennis* ADAMS, Kans. Univ. Sci. Bull., II, 40 (*cinerapennis*).—Riley Co., Kans.  
*crocata* LOEW, Cent., III, 89.—Pa. N. J.—Smith Cat.  
*graminea* COQUILLET, Jour. N. Y. Ent. Soc., VI, 47; Bull. 10, n. ser., Div. of Ent., 71, larvæ in grass.—Lancaster, Cal.  
*grata* LOEW, Cent., III, 92 (*Chloropisca*).—Pa.  
 N. J.—Smith Cat.; Montreal—Chagnon; White Mts., N. H.—Slosson;  
 St. Augustine, Fla.—Johnson.  
*halteralis* ADAMS, Kans. Univ. Sci. Bull., II, 41.—Ariz.  
*ingrata* WILLISTON, Bull. Ohio Expt. Sta., Tech. ser., I, No. 3, p. 156.—Ohio;  
 larvæ in gall on *Muhlenbergia mexicana*.  
 COQUILLET, Bull. 10, n. ser., Div. Ent., 71, larvæ in gall on *Muhlenbergia*.  
 —Ind.  
*liturata* ADAMS, Kans. Univ. Sci. Bull., II, 41.—Lusk, Wyo.  
*melanocera* LOEW, Cent., III, 91.—D. C. N. J.—Smith Cat.  
*mella* LOEW, Cent., x, 100.—Texas.  
*obscuricornis* LOEW, Cent., III, 90.—D. C.  
 N. J.—Smith Cat.; Montreal—Chagnon.

- palpalis* ADAMS, Kans. Univ. Sci. Bull., 11, 42.—Atherton, Mo.
- parva* ADAMS, Kans. Univ. Sci. Bull., 11, 42.—Douglass Co., Kans.
- perflava* WALKER, List, iv, 1120.—Martin Falls, Canada.
- producta* LOEW, Cent., III, 96.—Sitka.  
COQUILLET, Proc. Wash. Acad. Sci., 11, 463, recognized from Sitka.
- prolifera* OSTEN SACKEN, see *variceps*.
- proxima* SAY, Jour. Acad. Sci. Phil., vi, 187; Compl. Works, 11, 370.—Ind.  
COMSTOCK, Rept. Dept. Agric., 1879, 257, life hist.; larvæ between blades of wheat stalk.  
COQUILLET, Bull. 10, n. ser., Div. of Ent., 70, 71, larvæ in stems of wheat and *Elymus* (rye grass).—Ky., Cal.  
Montreal—Chagnon; White Mts., N. H.—Slosson.
- pubescens* LOEW, Cent., III, 88.—Fla. St. Augustine and Orlando, Fla.—Johnson.
- pullipes* COQUILLET, Jour. N. Y. Ent. Soc., vi, 47.—Santa Fé, N. M., and Canon City, Col.
- quinquepunctata* LOEW, Cent., III, 94.—Nebr.
- recurva* ADAMS, Kans. Univ. Sci. Bull., 11, 41.—Lusk, Wyo.
- rubicunda* ADAMS, Kans. Univ. Sci. Bull., 11, 43.—Lusk, Wyo.
- rubida* COQUILLET, Jour. N. Y. Ent. Soc., vi, 46.—Col. and Placer Co., Cal.  
Hagerman, Idaho—J. M. A.
- sahlbergi* LOEW, Cent., III, 95.—Sitka.  
Muir Inlet, Virgin Bay and Saldovia, Alaska—Coquillett.
- scabra* COQUILLET, Jour. N. Y. Ent. Soc., vi, 46.—Oswego, N. Y.  
Saldovia, Alaska—Coquillett.
- sulphurea* LOEW, Cent., III, 83.—English River, Canada.  
N. J.—Smith Cat.
- testacea* MACQUART, Dipt. Exot., Suppl. iv, 2, 306, pl. XXVIII, f. 10.—N. A.
- tibialis* FITCH, 1st N. Y. Rept., 300, pl. 1, f. 5.—N. Y.
- trivialis* LOEW, see *assimilis*.
- trivittata* WILLISTON, Trans. Ent. Soc. Lond., 1896, 425.—St. Vincent, W. I.  
Porto Rico—Coquillett.
- unicolor* LOEW, Cent., III, 93.—Miss. N. J.—Smith Cat.
- variceps* LOEW, Cent., III, 86.—Sitka.  
OSTEN SACKEN, in Lintner's 4th N. Y. Rept., 70, 71, fig. (*Chloropisca prolifica*).—N. Y.  
LINTNER, *ibid.*, 67-72, occurrence of adults in large numbers (*id.*); 7th N. Y. Rept., 234-241, habit of assembling, several instances noted, new figures (*id.*).  
COQUILLET, Jour. N. Y. Ent. Soc., vi, 48, syn.  
N. J.—Smith Cat.; White Mts., N. H.—Slosson; Montreal—Chagnon.
- versicolor* LOEW, see *Diplotoxa*.
- ? *vittata* WIEDEMANN, Auss. Zw., 11, 594.—W. I.  
OSTEN SACKEN, Cat., 209, note; genus doubtful.
- ? *vulgaris* FITCH, 2d N. Y. Rept., 532, pl. 1, f. 4.—N. Y.  
OSTEN SACKEN, Cat., 261, note; genus uncertain.

## ECTECEPHALA.

- MACQUART, Dipt. Exot., Suppl. iv, 2, 280, 1850.
- albistylum* MACQUART, loc. cit., pl. XXV, f. 17.—N. A.



## EURINA.

MEIGEN, Syst. Besch., vi, 3, 1830.

SCHINER, Fauna Austr., ii, 220, 1864.

COQUILLET, Jour. N. Y. Ent. Soc., vi, 45, notes; oc. in N. A.

**exilis** COQUILLET, Jour. N. Y. Ent. Soc., vi, 45.—Beverly, Mass.; Col.

## CERATOBARYS.

COQUILLET, Jour. N. Y. Ent. Soc., vi, 45, 1898 (no desc.; *culophus* designated as type).

**eulophus** LOEW, Cent., x, 88 (*Hippelates*).—Texas.

## HIPPELATES.

LOEW, Cent., iii, 67, 1863; x, 90, 1872 (*Opctiophora*).

WILLISTON, Trans. Ent. Soc. Lond., 417, 1896, table of St. Vincent species; 418, *Siphomyia*, subgenus novum.

*Note*.—This is an artificial group; the cinereous species are hardly distinguishable from *Siphonella*, and the rest from *Oscinis*.

**bicolor** COQUILLET, Jour. N. Y. Ent. Soc., vi, 48.—Lake Worth, Fla.

N. J.—Smith Cat.

**capax** COQUILLET, Jour. N. Y. Ent. Soc., vi, 48.—N. Ill.

**convexus** LOEW, Cent., vi, 94.—Cuba.

COQUILLET, Bull. 10, n. ser., Div. of Ent., 73; larvæ in burrows in sugarcane in Florida; Proc. U. S. N. M., xxii, 205, oc. in Porto Rico and Mex.

St. Augustine, Fla.—Johnson.

**dorsalis** LOEW, Cent., vii, 75.—Cuba.

St. Vincent, W. I.—Williston.

**dorsatus** WILLISTON, Trans. Ent. Soc. Lond., 1896, 419.—St. Vincent, W. I.

**equalis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 419.—St. Vincent, W. I.

**eulophus** LOEW, see *Ceratobarys*.

**flavipes** LOEW, Cent., vii, 95.—Cuba.

? WILLISTON, Trans. Ent. Soc. Lond., 1896, 420. oc. in St. Vincent, W. I.

SCHWARZ, Ins. Life, vii, 374, "The Hippelates Plague in Florida"; fig. and habits—the adults annoy people, dogs, etc.—Fla.

COQUILLET, Proc. U. S. N. M., xxii, 205, oc. in Porto Rico and notes; doubts the correctness of Williston's determination.

HOWARD, Proc. Wash. Acad. Sci., ii, 590, pl. xxxi, f. 1; occurs on human excrement, and perhaps carries putrefactive germs to open wounds, inducing blood poisoning. "Widely distributed in the United States."

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

*Note*.—I think this is the same as *Oscinis pallipes* LOEW, which I found in abundance attending the horn fly on cattle at Lawrence, Kans.

**genalis** THOMSON, Eugen. Resa, 608.—Cal.

**nobilis** LOEW, Cent., iii, 67.—Ill. N. J.—Smith Cat.

**pallidus** LOEW, Cent., vi, 93.—Cuba.

**plebeius** LOEW, Cent., iii, 68.—D. C.

SCHWARZ, Ins. Life, vii, 374, fig. and habits; same habits as *flavipes*, above.—Fla. N. J.—Smith Cat.

**plumbellus** WIEDEMANN, Auss. Zw., ii, 574 (*Homalura*).—W. I.

LOEW, Mon. N. A. Dipt., i, 46, refers to *Siphonella*.

N. J.—Smith Cat., oc. and gen. ref.

**proboscideus** WILLISTON, Trans. Ent. Soc. Lond., 1896, 418.—St. Vincent, W. I.

- pusio** LOEW, Cent., x, 87.—Texas.  
 SCHWARZ, Ins. Life, vii, 376, annoys people in Fla.  
 COQUILLET, Proc. U. S. N. M., xxii, 265, oc. in Porto Rico and "as far north as New Bedford, Mass." N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- scutellaris** WILLISTON, Trans. Ent. Soc. Lond., 1896, 420.—St. Vincent, W. I.
- stramineus** LOEW, Cent., x, 90 (*Opctiophora*, n. gen.).—Texas.  
 COQUILLET, Jour. N. Y. Ent. Soc., vi, 44, gen. ref. N. J.—Smith Cat.
- tener** COQUILLET, Proc. U. S. N. M., xxii, 265.—Porto Rico.

#### ELACHIPTERA.

- MACQUART, Hist. Nat. Dipt., ii, 621, 1835.  
 VON ROSER, Verz. Wurttemb. Dipt., Nachtrag, 1840 (*Crassiseta*).  
 LOEW, Dipt. Beitr., i, 48, 1845 (id.).  
 SCHINER, Fauna Austr., ii, 231, 1864, desc. and syn.
- costata** LOEW, Cent., iii, 62 (*Crassiseta*).—D. C.  
 COQUILLET, Bull. 10, n. ser., Div. of Ent., 72, larvæ in wheat, oats, radish, and root of melon.—Ohio, Ill., Pa.  
 HOWARD, Proc. Wash. Acad. Sci., ii, 591, note.  
 St. Augustine, Fla.—Johnson; N. J.—Smith Cat.
- dispar** WILLISTON, in Forbush and Fernald's Rept. on Gypsy Moth, 390.—Mass.  
 COQUILLET, Jour. N. Y. Ent. Soc., vi, 48, would make this a syn. of *Gaurax anchora*.
- eunota** LOEW, Cent., x, 89 (*Crassiseta*).—Texas. N. J.—Smith Cat.
- flavida** WILLISTON, Trans. Ent. Soc. Lond., 1896, 417.—St. Vincent, W. I.
- formosa** LOEW, Cent., iii, 61 (*Crassiseta*).—D. C.  
 White Mts., N. H.—Slosson; Ormond, Fla.—Johnson.
- longula** LOEW, Cent., iii, 64 (*Crassiseta*).—D. C.  
 WEBSTER, Canad. Ent., 1900, 213, reared from wheat plants in Ohio.  
 COQUILLET, Bull. 10, n. ser., Div. of Ent., 72, larvæ infesting *Panicum*, oats, and wheat.—Ind., Ohio. White Mts., N. H.
- nigriceps** LOEW, Cent., iii, 63 (*Crassiseta*).—D. C.  
 COQUILLET, Bull. 10, n. ser., Div. of Ent., 72, 73; larvæ in decaying pond-lilies, also in *Panicum* and oats.—D. C., Ind. N. J.—Smith Cat.  
 CHITTENDEN, Bull. 33, n. ser., 76, note.
- nigricornis** LOEW, Cent., iii, 65 (*Crassiseta*).—D. C.  
 COQUILLET, Bull. 10, n. ser., Div. of Ent., 72; larvæ in wheat.—Ind. White Mts., N. H.—Slosson.

#### MOSILLUS.

- LATREILLE, Hist. Nat. Crust. et Ins., xiv, 389, 1804.  
 FALLÉN, Oscinides, 10, 1820 (*Gymnopa*).  
 MEIGEN, Syst. Besch., vi, 135 (id.), 1830.  
 ZETTERSTEDT, Dipt. Scand., vii, 2678, 1848 (id.).  
 SCHINER, Fauna Austr., ii, 234, 1864.  
 LOEW, Jahrbuch d. K. K. Gelehrt. Ges. Krakau, 1870, 15 (*Gymnopa*).  
 OSTEN SACKEN, Cat., 1878, 262, note 323.
- nigroæneus** WALKER, Dipt. Saund., 413 (*Gymnopa*).—U. S.  
 Unrecognizable—perhaps a *Psilopa*—J. M. A.
- tarsalis** WALKER, Dipt. Saund., 413 (*Gymnopa*).—U. S.  
 Unrecognizable—perhaps a *Psilopa*—J. M. A.

## GAURAX.

LOEW, Cent., III, 66, 1863.

**anchora** LOEW, Cent., VII, 94.—N. Y.; larvæ inquilinous in cocoons of *Attacus cecropia* L.

COQUILLET, Bull. 10, n. ser., Div. of Ent., 71; larvæ in eggshells of *Corydalis*, also in old cocoons of *Orgyia*.—D. C.

See *Elachiptera dispar*.

**araneæ** COQUILLET, Ent. News, VII, 320.—Cal.; reared from egg-sacs of spider.

COQUILLET, Bull. 10, n. ser., Div. of Ent., 72, reared from egg-sacs of *Argiope riparia* in Cal.

? **ephippium** ZETTERSTEDT, Dipt. Scand., VII, 2664 (*Oscinis*).—Sweden.

Beulah, N. M.—Skinner, with a doubt.

**festivus** LOEW, Cent., III, 66.—Pa.

**lancifer** COQUILLET, Proc. U. S. N. M., XXII, 265.—Porto Rico and Montserrat, W. I.; bred from egg-sacs of spiders.

**montanus** COQUILLET, Jour. N. Y. Ent. Soc., VI, 48.—White Mts., N. H.

**signatus** LOEW, Zeitsch., f. Ges. Naturwiss., 1876, 338.—Texas.

## SIPHONELLA.

MACQUART, Hist. Nat. Dipt., II, 584, 1835.

LOEW, Wien. Ent. Monatsch., II, note to *Oscinis gilvipes*. [O. S.]

SCHINER, Fauna Austr., II, 228, 1864.

**annulitarsis** ZETTERSTEDT, Dipt. Scand., VII, 2674 (*Madiza*).—Europe.

SCHINER, Fauna Austr., II, 231, gen. ref.

VAN DER WULP, Tijdschr., v. Ent., X, 80, oc. in N. A.—Wis.

**cinerea** LOEW, Cent., III, 81.—Fla.

N. J.—Smith Cat.; Charlotte Harbor, Fla.—Johnson.

**inquilina** COQUILLET, Jour. N. Y. Ent. Soc., VI, 48.—St. Louis and Kirkwood, Mo.; Va.

COQUILLET, Bull. 10, n. ser., Div. of Ent., 75; larvæ found in cecidomyid gall on *Aster*, in cavity in apple, in twigs of *Cephalanthus*, and in berry of *Solanum carolinense*.—Mo., Va., Md.

**lævigata** FALLÉN, Oscinides, 9 (*Madiza*).—Europe.

ZETTERSTEDT, Dipt. Scand., VII, 2668 (*Madiza oscinina* FALL.).

SCHINER, Fauna Austr., II, 229, desc. and syn.

White Mts., N. H.—Slosson, det. by Coquillet.

Beulah, N. M.—Skinner.

**latifrons** LOEW, Cent., X, 91.—Texas. White Mts., N. H.—Slosson.

**obesa** FITCH, see *Chlorops assimilis*.

**oscinina** FALLÉN, Oscinides, 9 (*Madiza*).—Europe.

SCHINER, Fauna Austr., II, 229, note.

COQUILLET, Bull. 10, n. ser., Div. of Ent., 75.—Md.; larvæ in egg-sac of a spider.

**plumbella** WIEDEMANN, see *Hippelates*.

**pumilionis** BJERKANDER, K. Vetensk. Akad. Handl., 1778, 240 (*Musca*).—Europe.

ZETTERSTEDT, Dipt. Scand., VII, 2662.

SCHINER, Fauna Austr., II, 229.

Occurs in N. J.—Smith Cat.

**reticulata** LOEW, Cent., VIII, 78.—Cuba.

## OSCINIS.

LATREILLE, Hist. Nat. Crust. et Ins., XIV, 385, 1804.

FALLÉN, Oscinides, 3, 1820.

- SCHINER, Fauna Austr., II, 223, 1864.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 421, 1896, table of St. Vincent species.
- WEBSTER, Dept. Agric. Rept., 1886, 574, notes on a species infesting wheat straws; op. cit., 582, notes on a species infesting clover stems; Ins. Life, III, 81, on the infestation of wheat in U. S. and Canada.
- RILEY and HOWARD, Ins. Life, I, 346, note on a species affecting chrysanthemums in Pa.
- anonyma** WILLISTON, Trans. Ent. Soc. Lond., 1896, 423.—St. Vincent, W. I. Porto Rico—Coquillett.
- apicalis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 422.—St. Vincent, W. I.
- atriceps** LOEW, Cent., III, 74.—Pa.
- brassicæ** RILEY, see *Agromyza trifolii*.
- carbonaria** LOEW, Cent., VII, 76.—D. C.  
 FLETCHER, Trans. Royal Soc. Canada, 2d ser., v, 209, ref. and fig.  
 GARMAN, Bull. 30, Ky. Expt. Sta. (probably *variabilis*).—Ky.; larvæ live in young wheat plants.  
 FLETCHER, Rept. Ent. and Bot., 1898, 176, figs. and habits; additional items are given in the 1890 report; Trans. Royal Soc. Canada, 2d ser., v, 209, ref. and figure.—Ottawa, Can.
- WEBSTER, Canad. Ent., 1900, 212, reared from wheat plants in Ohio.
- COQUILLET, Bull. 10, n. ser., Div. of Ent., 74; larvæ in wheat and in *Agropædium caninum*.—Ind., Nebr., Ottawa, Canada.
- HOWARD, Proc. Wash. Acad. Sci., II, 591, note.—D. C., Va.
- WEBSTER, Bull. 42, Div. of Ent., 1903, 51–56, life hist. The Lesser Wheat Stem-Maggot.  
 Hudsonian Zone, N. M.—Cockerell; Alaska—Coquillett.
- collusor** TOWNSEND, Proc. Cal. Acad. Sci., IV, 619.—Lower Cal.; causes irritation to the eyes of travelers, and the disease called “mal de ojo.”
- concinna** WILLISTON, Trans. Ent. Soc. Lond., 1896, 424.—St. Vincent, W. I.
- coxendix** FITCH, 2d N. Y. Rept., 533.—N. Y.  
 COQUILLET, Proc. U. S. N. M., XXII, 266, oc. in Porto Rico, and “from N. H. to Fla., and westward to Col.”
- COQUILLET, Bull. 10, n. ser., Div. of Ent., 73, habits; larvæ in burrows of *Elasmopalpus lignosellus* ZELL. in corn-stalks; also in *Poa* and wheat.—Ga., Va., Ind., D. C.
- WEBSTER, Canad. Ent., 1900, 212, reared from wheat plants.  
 HOWARD, Proc. Wash. Acad. Sci., II, 591, larvæ in roots of *Ambrosia artemisiifolia*.—D. C.
- crassifemoris** FITCH, see *Platypalpus*, family Empididæ.
- decipiens** LOEW, Cent., III, 76.—Sitka.
- dorsalis** LOEW, Cent., III, 72.—Pa. White Mts., N. H.—Slosson.
- dorsata** LOEW, Cent., VIII, 77 (*dorsalis*, precoc.); App., p. 291, change of name.—Newport, R. I.  
 WEBSTER, Canad. Ent., 1900, 212, reared from wheat plants in Ohio. White Mts., N. H.—Slosson.
- flaviceps** LOEW, Cent., III, 71.—Cuba.
- fur** WILLISTON, Trans. Ent. Soc. Lond., 1896, 425.—St. Vincent, W. I.
- hirta** LOEW, Cent., III, 75.—Ill.
- incipiens** WILLISTON, Trans. Ent. Soc. Lond., 1896, 425.—St. Vincent, W. I.
- longipes** LOEW, Cent., III, 77.—D. C.  
 COQUILLET, Bull. 10, n. ser., Div. of Ent., 74; larvæ in pods and seeds of *Catalpa*.—Pa.

- malvæ** BURGESS, see *Agromyza jucunda*.
- mitis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 424.—St. Vincent, W. I.
- nana** WILLISTON, Trans. Ent. Soc. Lond., 1896, 423.—St. Vincent, W. I.  
COQUILLETT, Proc. U. S. N. M., XXII, 267, oc. in Porto Rico.
- nudiuscula** LOEW, Cent., III, 70.—Ga.
- obscura** COQUILLETT, Proc. U. S. N. M., XXII, 266.—Porto Rico.
- pallipes** LOEW, Cent., III, 69.—Cuba.  
LUGGER, 2d Minn. Rept., 170, fig.; adults affecting cattle, etc.  
COQUILLETT, Bull., 10, n. ser., Div. Ent., 74; bred from artichoke.—Fla.  
See *Hippelates flavipes*, which I think is the same; I found it attending the horn fly on cattle in Kans., and this is evidently what Lugger mentions, or a similar habit.  
White Mts., N. H.—Slosson.
- pectoralis** COQUILLETT, Jour. N. Y. Ent. Soc., VI, 49.—White Mts., N. H.
- quadrilineata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 422.—St. Vincent, W. I.  
Porto Rico—Coquillett.
- soror** MACQUART, Dipt. Exot., Suppl. IV, 306, pl. XXVIII, f. II (*Chlorops*).—N. A.  
LUGGER, 2d Minn. Rept., 1896, 6-10, fig.—Minn.; infests stems of wheat near ground.  
COQUILLETT, Bull. 10, n. ser., Div. of Ent., 73; larvæ in *Panicum*, *Poa*, oats, strawberries, cucumber roots, and seed pods of *Vernonia*.—Mich., Md., Ind., Ohio, D. C. N. J.—Smith Cat.  
WEBSTER, Bull. 42, Div. of Ent., 1903, 57-62, figs., life history, etc. The American Frit-Fly.
- subvittata** LOEW, Cent., III, 78.—D. C.
- tibialis** FITCH, 2d N. Y. Rept., 532, pl. 1, f. 5.—N. Y.
- triangularis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 421, pl. XIV, f. 153a.—St. Vincent, W. I.
- trifolii** BURGESS, see *Agromyza*.
- trigramma** LOEW, Cent., III, 80.—D. C.  
WEBSTER, Canad. Ent., 1900, 212, reared from wheat plants in Ohio.  
COQUILLETT, Bull. 10, n. ser., Div. of Ent., 73, habits; larvæ in burrows of *Elasmopalpus lignosellus* ZELL. in cornstalks; also reared from fall wheat.—Ga., Ind., Ida., Cal.  
HOWARD, Proc. Wash. Acad. Sci., II, 591, reared from human excrement.—D. C., Md.  
N. J.—Smith Cat.
- umbrosa** LOEW, Cent., III, 73.—Pa.  
WEBSTER, Canad. Ent., 1900, 212, reared from wheat plants.  
COQUILLETT, Bull. 10, n. ser., Div. of Ent., 74, larvæ in *Poa* and wheat; Proc. U. S. N. M., XXII, 267, oc.—D. C. and Ind.; Porto Rico.
- variabilis** LOEW, Cent., III, 79.—D. C.  
*Note.*—The supposed *variabilis* that affects wheat has been referred to *carbonaria*.
- virgata** COQUILLETT, Jour. N. Y. Ent. Soc., VI, 49.—Col.  
Porto Rico—Coquillett.

## DROSOPHILIDÆ.

*Note.*—Mr. Kahl informs me that *Leucophenga* MIK, Wien. Ent. Zeit., 1886, 317, occurs in N. A.

## ASTEIA.

- MEIGEN, Syst. Besch., vi, 88, 1830.  
 LOEW, Berl. Ent. Zeitsch., ii, 114.  
 SCHINER, Fauna Austr., ii, 280, 1864.  
**tenuis** WALKER, Trans. Ent. Soc., n. ser., v, 331.—U. S.: genus with a query.  
 OSTEN SACKEN, Cat., gives the genus without the query.

## SIGALOËSSA.

- LOEW, Cent., vi, 100, 1865; family Asteidæ.  
 SCHINER, Novara, 238, 1868; family Drosophilidæ.  
 WILLISTON, Manual, 107, 1896; same.  
 COQUILLET, Jour. N. Y. Ent. Soc., vi, 45, refers to Oscimidæ.  
**bicolor** LOEW, Cent., vi, 100.—Cuba.  
 COQUILLET, Proc. U. S. N. M., xxii, 267, oc. in Porto Rico.  
**flaveola** COQUILLET, Jour. N. Y. Ent. Soc., vi, 49.—D. C.; Fla.; White Mts., N. H.

## PHORTICA.

- SCHINER, Wien. Ent. Monatsch., vi, December, 1862.  
 LOEW, Cent., ii, 93, May, 1862 (*Amiota*, without desc.); l. c., appendix, p. 288, recognizes *Phortica*.  
 OSTEN SACKEN, Cat., 262, note.  
**albuguttata** WAHLBERG, K. Vetensk. Akad. Handl., 1838, 22 (*Drosophila*).—Europe.  
 ZETTERSTEDT, Dipt. Scand., vi, 2547 (id.).  
 SCHINER, Fauna Austr., ii, 279 (*Drosophila sens. str.*).  
 OSTEN SACKEN, Cat., 205, oc. in N. A., on authority of "Loew in litt."  
**humeralis** LOEW, Cent., ii, 3 (*Amiota*).—D. C. N. J.—Smith Cat.  
**leucostoma** LOEW, Cent., ii, 94 (*Amiota*).—Pa. N. J.—Smith Cat.; Axton, N. Y.—M. and H.  
**scutellaris** WILLISTON, Trans. Ent. Soc. Lond., 1896, 416.—St. Vincent, W. I.  
**vittata** COQUILLET, Proc. U. S. N. M., xxiii, 618.—Avalon and Del. Water Gap, N. J.; N. Y.

## STEGANA.

- MEIGEN, Syst. Besch., vi, 207, 1830.  
 SCHINER, Fauna Austr., ii, 270, 1864.  
 WILLISTON, Kans. Univ. Quart., vi, 12, 1897, note.  
**coleoptata** SCOPOLI, Ent. Carniol., 338 (*Musca*), 1763.—Europe.  
 MEIGEN, Syst. Besch., vi, 80 (*hypolcuca*).  
 SCHINER, Fauna Austr., ii, 271.  
 LOEW, in Silliman's Jour., oc. in N. A. (*hypolcuca*).  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson.  
**curvipennis** FALLÉN, Geomyzides, 4 (*Drosophila*).—Europe.  
 MEIGEN, Syst. Besch., vi, 79, pl. LVIII, f. 24, 25 (*nigra*).  
 WALKER, Ins. brit., iii, xiv (*furta*).  
 SCHINER, Fauna Austr., ii, 271.  
 LOEW, in Silliman's Jour., oc. in N. A. (*nigra*).  
**horæ** WILLISTON, Trans. Ent. Soc. Lond., 1896, 405, pl. XIII, f. 150.—St. Vincent, W. I.  
**tarsalis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 404, pl. XIII, f. 149.—St. Vincent, W. I.



## CYRTONOTUM.

- MACQUART, Dipt. Exot., II, 3, 193, 1844 (*Curtonotum*).  
 SCHINER, Fauna Austr., II, 22, 1864 (id.).  
 LOEW, Centuries, App., p. 288, changed to *Diplocentra*, on account of alleged preoccupation of *Curtonotum*.  
 OSTEN SACKEN, Berl. Ent. Zeitsch., 1882, 243 (*Diplocentra*).  
 MIK, Wien. Ent. Zeit., XVII, 168, 1898, discussion of supposed preoccupation; adopts *Cyrtonotum*.
- gibbum** FABRICIUS, Syst. Antl., 297 (*Musca*).—S. A.  
 WIEDEMANN, Auss. Zw., II, 586 (*Hclomyza*).—S. A.  
 MACQUART, Dipt. Exot., II, 3, 193, pl. XXV, f. 9, 10.—S. A.  
 RONDANI, Ins. Ditt. Brasil., 1848, 18, 30.—S. A.  
 SCHINER, Novara, 237.—S. A.  
 WALKER, List, IV, 1090, oc. at Para, S. A.  
 GIGLIO-TOS, Ditt. del Mess., IV, 36, oc. in Tuxpango, Mex. (*Diplocentra*).
- helvum** LOEW, Cent., II, 91 (*Diplocentra*).—North Red River.  
 N. J.—Smith Cat.
- simplex** SCHINER, Novara, 237.—Brazil.  
 GIGLIO-TOS, Ditt. del Mess., IV, 36 (*Diplocentra*), oc. in Tuxpango, Mex.

## DROSOPHILA.

- FALLÉN, Geomyzides, 4, 1823.  
 MEIGEN, Syst. Besch., VI, 81, 1830.  
 SCHINER, Fauna Austr., II, 275, 1864.  
 WILLISTON, Trans. Ent. Soc. Lond., 1896, 406, table of 23 St. Vincent species.  
*Note*.—The genus *Scaptomyza* (HARDY, Proc. Berwickshire Nat. Club, 349, 1849) is accepted by Mr. Coquillett; it would include a considerable number of the species of *Drosophila*. See Schiner, Fauna Austr., II, 276, and Coquillett, Proc. Wash. Acad. Sci., II, 462.  
*Note 2*.—The apple burrowing habit attributed to *Drosophila* sp. in Amer. Nat., II, 641, does not seem to be sufficiently corroborated. More likely the actual burrower was *Trypeta pomonella*, and *Drosophila* lived in the cavities.
- adusta** LOEW, Cent., II, 98.—D. C. N. J.—Smith Cat.  
 CHITTENDEN, Bull. 33, n. ser., 76, mining leaves of cabbage, etc. (*Scaptomyza*).—Maine to Fla. and Ill.
- albipes** WALKER, Dipt. Saund., 410.—U. S.
- amœna** LOEW, Cent., II, 96.—D. C.  
 COMSTOCK, Dept. Agric. Rept., 1881-2, 201, pl. XVI; larvæ living in decaying apples: "The Pretty Pomace Fly."  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson; Kans., Mich.—J. M. A.
- ampelophila** LOEW, Cent., II, 99.—Cuba; S. Europe and N. Africa.  
 COMSTOCK, Dept. Agric. Rept., 1881-2, 198-201, full life history; larvæ reared from decaying apples, etc.: "The Vine-loving Pomace Fly."  
 WILLISTON, Canad. Ent., 1882, 138; larvæ in apple pomace, etc.  
 HOWARD and MARLATT, Bull. 4, n. ser., Div. of Ent., 110, figs., habits and remedies.  
 COCKERELL, Bull. 32, Ariz. Expt. Sta., 290-294, account of larvæ injuring oranges—not, however, until they had been attacked by rot.  
 HOWARD, Proc. Wash. Acad. Sci., II, 589, pl. XXXI, f. 2, review of habits; reared from human excrement; Farmers' Bull. 155, Dept. Ag., figs. all stages.

- LINTNER, 1st N. Y. Rept., 216-221, transl. of orig. desc.; habits; larvæ in pickles and jam.—N. Y.
- MOTTER, Jour. N. Y. Ent. Soc., vi, 223, oc. in human graves.
- MELICHAR, Wien. Ent. Zeit., xx, 7, oc. in Austria, common.
- HENDEL, Verh. Zool.-Bot. Ges., 1900, 327, footnote, asserts on authority of Mik that the European *uvarum* is the same (this I take to be a later name, not finding it in Schiner).
- Forbes has reported this species as living in the larval stage in grapes; I have not the reference at hand.
- annulata* WILLISTON, Trans. Ent. Soc. Lond., 1896, 409.—St. Vincent, W. I.
- apicata* THOMSON, Eugen. Resa, 597.—Cal.  
White Mts., N. H.—Slosson (*Scaptomyza*).
- bellula* WILLISTON, Trans. Ent. Soc. Lond., 1896, 410.—St. Vincent, W. I.
- bilineata* WILLISTON, Trans. Ent. Soc. Lond., 1896, 409.—St. Vincent, W. I.
- bimaculata* LOEW, Cent., vi, 91.—Cuba.
- brevis* WALKER, Dipt. Saund., 411.—U. S.
- busckii* COQUILLET, Ent. News, xii, 18.—D. C., W. Va., Ill.  
HOWARD, Proc. Wash. Acad. Sci., ii, 590, reared from rotten potatoes; also found in the burrows of *Chion cinctus*.—W. Va., Ill.  
Lawrence, Kans.—Kahl, in litt.
- [*cellaris* LINNÉ, of Walker, is a mistake—O. S. Cat., 206.]
- coffeata* WILLISTON, Trans. Ent. Soc. Lond., 1896, 409.—St. Vincent, W. I.
- colorata* WALKER, List, iv, 1110.—N. Y. N. J.—Smith Cat.
- confusa* STÆGER, Kröyer's Tidskr., i, 18.—Europe.  
MEIGEN, Syst. Besch., vi, 83 (*fenestrarum*).  
ZETTERSTEDT, Dipt. Scand., vi, 2565.  
SCHINER, Fauna Austr., ii, 279, syn., etc.  
Smith Cat., oc. in N. A.—N. J.
- decemguttata* WALKER, Dipt. Saund., 411.—U. S.
- dimidiata* LOEW, Cent., ii, 95.—Ill.
- excita* GIGLIO-TOS, Boll. R. Univ. Torino, viii, No. 158; Ditt. del Mess., iv, 66.—Mex.
- fasciola* WILLISTON, Trans. Ent. Soc. Lond., 410.—St. Vincent, W. I.
- flaveola* MEIGEN, Syst. Besch., vi, 66.—Europe.  
WALKER, Ins. brit., ii, 238 (*apicalis*).  
HARDY, Proc. Berwickshire Nat. Club, 362 (*Scaptomyza apicalis*).  
ZETTERSTEDT, Dipt. Scand., vi, 2571 (*pallida*).  
SCHINER, Fauna Austr., ii, 279, syn., etc.  
COQUILLET, Ins. Life, vii, 381, figs. and life hist.; larvæ mine leaves of radishes; Proc. Wash. Acad. Sci., ii, 462 (*Scaptomyza*).—D. C.; Alaska, Conn., and White Mts., N. H.  
CHITTENDEN, Bull. 33, n. ser., Div. Ent., 75, fig. mining leaves of cabbage, etc. (*Scaptomyza*).—D. C.; Ky.
- flexa* LOEW, Cent., vi, 89.—Cuba.
- frontalis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 413.—St. Vincent, W. I.
- fronto* WALKER, Dipt. Saund., 410.—U. S.
- funebri* FABRICIUS, Mant. Ins., ii, 345; Ent. Syst., iv, 323; Syst. Antl., 299 (all *Musca*).—Europe.  
SCOPOLI, Ent. Carniol., 337 (*Musca anopota*).  
PANZER, Fauna German., xvii, 24 (*Musca erythrophthalma*).  
MACQUART, Dipt. Exot., Suppl. iv, 305, oc. in N. A.  
ZETTERSTEDT, Dipt. Scand., vi, 2563.  
SCHINER, Fauna Austr., ii, 278, syn. and desc.

- COQUILLET, Proc. U. S. N. M., xxii, 264, oc. in Porto Rico and "over the greater portion of the United States."
- HOWARD, Proc. Wash. Acad. Sci., ii, 590, bred from rotten cherries in Mass., and recorded as breeding in the waste of pressed olives in Mauritius; oc. in Md.
- WEBSTER, Canad. Ent., 1900, 213, oc. in Ohio.
- Notc.*—Schiner states that the larvæ live in fermenting fruits, etc., and in fungi.
- fusca** COQUILLET, Proc. U. S. N. M., xxii, 264.—Porto Rico.
- graminum** FALLÉN, Geomyzides, 8.—Europe.
- ZETTERSTEDT, Ins. Lapp., 777 (*sordida* and *flavipennis*); Dipt. Scand., vi, 2560.
- SCHINER, Fauna Austr., ii, 279.
- LOEW, in Silliman's Jour., oc. in N. A. N. J.—Smith Cat.
- CHITTENDEN, Bull. 33, n. ser., Div. of Ent., 76, mining leaves of cabbage, etc. (*Scaptomyza*).—N. H. to La.
- guttifera** WALKER, List, iv, 1110.—Fla.
- illota** WILLISTON, Trans. Ent. Soc. Lond., 1896, 415.—St. Vincent, W. I.
- quinaria** LOEW, Cent., vi, 90.—N. Y.
- RILEY and HOWARD, Ins. Life, i, 259, reared from a mass of cochineal insects—"however, of course, not a parasite."—Texas.
- White Mts., N. H.—Slosson.
- sigmoides** LOEW, Cent., x, 86.—Texas.
- inversa** WALKER, Trans. Ent. Soc., n. ser., v, 331.—U. S.
- White Mts., N. H.—Slosson.
- limbata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 414.—St. Vincent, W. I.
- linearis** WALKER, Dipt. Saund., 411.—U. S.
- maculosa** COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 317.—Charlotte Harbor, Fla.
- mexicana** MACQUART, Dipt. Exot., ii, 3, pl. xxxv, f. 1.—Mex.
- GIGLIO-TOS, Ditt. del Mess., iv, 66, oc. in Mexico.
- minuta** WALKER, Dipt. Saund., 412.—U. S.
- multipuncta** LOEW, Cent., vii, 93.—D. C.
- nana** WILLISTON, Trans. Ent. Soc. Lond., 1896, 416.—St. Vincent, W. I.
- obesa** LOEW, Cent., x, 85.—Texas.
- obscuripennis** LOEW, Cent., vi, 92.—Cuba.
- opaca** WILLISTON, Trans. Ent. Soc. Lond., 1896, 411.—St. Vincent, W. I. Also in Brazil; Will., Kans., Univ. Quart., vi.
- ornatipennis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 407, pl. xiii, f. 151.—St. Vincent, W. I.
- pallida** WILLISTON, Trans. Ent. Soc. Lond., 1896, 415.—St. Vincent, W. I.
- pleuralis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 411.—St. Vincent, W. I.
- pollinosa** WILLISTON, see *Paratissa*.
- procnemis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 412.—St. Vincent, W. I.
- Mr. Kahl informs me that this occurs at Lawrence, Kans.
- punctulata** LOEW, Cent., ii, 100.—Cuba.
- St. Vincent, W. I.—Will.; St. Augustine, Fla.—Johnson.
- quadrifaculata** WALKER, Dipt. Saund., 410.—U. S.
- N. J.—Smith Cat.; Charlotte Harbor, Fla.—Johnson.
- similis** WILLISTON, Trans. Ent. Soc. Lond., 415.—St. Vincent, W. I.
- sororia** WILLISTON, Trans. Ent. Soc. Lond., 1896, 408.—St. Vincent, W. I.
- splendida** WILLISTON, Trans. Ent. Soc. Lond., 1896, 412.—St. Vincent, W. I.
- terminalis** LOEW, Cent., iii, 60.—Sitka.

*thoracis* WILLISTON, Trans. Ent. Soc. Lond., 411.—St. Vincent, W. I.

*transversa* FALLÉN, Geomyzides, 6.—Europe.

MEIGEN, Syst. Besch., vi, 84.

SCHINER, Fauna Austr., II, 276.

LOEW, in Silliman's Jour., oc. in N. A.

White Mts., N. H.—Slosson.

*tripunctata* LOEW, Cent., II, 97.—D. C.

*valida* WALKER, Trans. Ent. Soc., II, ser., IV, 232.—U. S.

*varia* WALKER, List, IV, 1109.—Ga.

*verticis* WILLISTON, Trans. Ent. Soc. Lond., 1896, 413.—St. Vincent, W. I.

*vittata* COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 318.—Charlotte Harbor, Fla.

COQUILLET, Proc. U. S. N. M., XXII, 264, oc. in Porto Rico.

*vittatifrons* WILLISTON, Trans. Ent. Soc. Lond., 1896, 408, pl. XIII, f. 152.—St. Vincent, W. I.

#### STENOMICRA.

COQUILLET, Proc. U. S. N. M., XXII, 262, 1900.

*angustata* COQUILLET, loc. cit.—Porto Rico.

#### CLADOCHÆTA.

COQUILLET, Proc. U. S. N. M., XXII, 263, 1900.

*nebulosa* COQUILLET, loc. cit.—Porto Rico.

### GEOMYZIDÆ.

#### BALIOPTERA.

LOEW, Berl. Ent. Zeitsch., VIII, 347-356, 1864.

*lurida* LOEW, Cent., v, 98 (*Opomyza*); Berl. Ent. Zeitsch., VIII, 356, gen. ref.—Sitka.

#### DIASTATA.

MEIGEN, Syst. Besch., VI, 211, 1830.

SCHINER, Fauna Austr., II, 288, 1864.

COMSTOCK, Dept. Agric. Rept., 1880, 245, mentions a species that mines leaves of Indian corn.—D. C.

*eluta* LOEW, Cent., III, 59.—Sitka.

*nebulosa* FALLÉN, Geomyzides, 3 (*Geomyza*).—Europe.

MEIGEN, Syst. Besch., VI, 98 (*ornata*). [Syn. by Schiner, who would also add *nebulosa*, p. 99, with a doubt.]

ZETTERSTEDT, Dipt. Scand., VI, 2536.

SCHINER, Fauna Austr., II, 289.

WEBSTER, Canad. Ent., 1900, 213, oc. in Ohio; det. Coquillett.

N. J.—Smith Cat.

*pulchra* LOEW, Cent., I, 100.—Pa. N. J.—Smith Cat.

*tenuipes* WALKER, List, IV, 1112.—Martin Falls, Canada.

[*vagans* LOEW MS., mentioned in O. S. Cat., 204, note.]

#### ISCHNOMYIA.

LOEW, Cent., IV, 97, 1863; Berl. Ent. Zeitsch., IX, 16, 1865.

CZERNY, Wien. Ent. Zeit., XXI, 249, 1902; XXII, 63, 1903.

*vittula* LOEW, Cent., IV, 97.—Pa. N. J.—Smith Cat.

WALKER, List, IV, 1112 (*Diastata* ? *albicosta*).—No locality. [Czerny, from Walker's type.]

## TAUROMYIA.

GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158, 1833; Ditt. del Mess., IV, 37, 1895.

VAN DER WULP, Biologia, Dipt., II, 354, note on position.

*pachyneura* GIGLIO-TOS, Boll. R. Univ. Torino, VIII, No. 158; Ditt. del Mess., IV, 37, f. 7, 8.—Mex.

## ANTHOMYZA.

FALLÉN, Specimin. Entomol., 1810; Agromyzides, 7, 1823.

MACQUART, Hist. Nat. Dipt., II, 580, 1835 (*Leptomyza*).

ZETTERSTEDT, Ins. Lapp., 785, 1840 (*Anthophilina*; the *Anthomyza* of Zetterstedt is entirely different).

SCHINER, Fauna Austr., II, 281, 1864 (*Leptomyza*).

LOEW, Berl. Ent. Zeitsch., IX, 16, 1865.

OSTEN SACKEN, Cat., 261, 1878, note (adopts *Anthophilina*).

CZERNY, Wien. Ent. Zeit., XXI, 249, 1902; XXII, 63, 1903.

*cinerea* WILLISTON, see *Rhiculoëssa*.

? *nigrimanus* COQUILLET, Proc. U. S. N. M., XXII, 264.—Porto Rico.

Does not belong to this genus: Hendel, quoted by Czerny, W. E. Z., XXI, 256.

*tenuis* LOEW, Cent., IV, 95 (*Anthophilina*).—Sitka. White Mts., N. H.—Slosson.

*terminalis* LOEW, Cent., IV, 94 (*Anthophilina*).—Carolina; O. S. corrects in Cat. to White Mts., N. H.

*variegata* LOEW, Cent., IV, 96 (*Anthophilina*).—D. C. N. J.—Smith Cat.

*xanthopoda* WILLISTON, see *Rhiculoëssa*.

## OPOMYZA.

FALLÉN, Opomyzides, 10, 1820.

MEIGEN, Syst. Besch., VI, 100, 1830.

SCHINER, Fauna Austr., II, 283, 1864.

*nigricosta* WALKER, Trans. Ent. Soc., n. ser., V, 330.—U. S.

## SCYPHELLA.

DESVOIDY, Myodaires, 650, 1830.

SCHINER, Fauna Austr., II, 282, 1864.

*flava* LINNÉ, Fauna Suecica, 2d edit., 459, No. 1869 (*Musca*).—Europe.

FALLÉN, Ortalides, 34 (*Sapromyza*).

SCHINER, Fauna Austr., II, 283.

LOEW, in Silliman's Jour., oc. in N. A.—N. Y., on windows.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

## AGROMYZIDÆ.

WILLISTON, Ent. News, VII, 185, reports the genus *Lciomyza*; no species have been described.

## Subfamily PHYTOMYZINÆ.

## PHYTOMYZA.

FALLÉN, Phytomyzides, 2, 1823.

SCHINER, Fauna Austr., II, 312, 1864 (including *Napomyza*).

WILLISTON, Manual, 103, 1896, the first *Phytomyza* in the table; the second is *Napomyza*, q. v.

- affinis** FALLÉN, *Phytomyzides*, 3.—Europe.  
 MACQUART, *Hist. Nat. Dipt.*, II, 618 (*nigricornis*).  
 MEIGEN, *Syst. Besch.*, VII, 404 (id.).  
 ZETTERSTEDT, *Dipt. Scand.*, VII, 2827.  
 SCHINER, *Fauna Austr.*, II, 316.  
 LUNDBECK, *Dipt. Grœnl.*, II, 306, oc. in Greenland.  
 HEEGER, *Sitzungsber. Kais. Akad. Wiss.*, XX, 297, figs., larva; it mines in parsnip leaves.  
*Note*.—Schiner mentions the rearing of this from various European species of *Aconitum*, in which it mines the tips of the leaves.
- equilegiæ** HARDY, *Annals Nat. Hist.*, IV, 385.—England; larva mines the leaves of *Aquilegia vulgaris*.  
 COQUILLET, *Bull.* 10, n. ser., Div. of Ent., 78.—D. C., Conn.; larva mines in nasturtium and columbine.
- bicolor** COQUILLET, *Jour. N. Y. Ent. Soc.*, X, 191.—Niagara Falls, N. Y.
- clematidis** LOEW, *Cent.*, III, 100.—D. C.; larva mines the leaves of *Clematis*.
- diminuta** WALKER, *Trans. Ent. Soc.*, n. ser., IV, 232.—U. S.; see *Agromyza trifolii*.
- flavicornis** FALLÉN, *Phytomyzides*, 4.—Europe.  
 MEIGEN, *Syst. Besch.*, VI, 192, pl. LXII, f. 6.  
 ZETTERSTEDT, *Dipt. Scand.*, VII, 2825.  
 SCHINER, *Fauna Austr.*, II, 315.  
 COQUILLET, *Proc. Wash. Acad. Sci.*, II, 464, oc. at Yakutat, Alaska.
- genualis** LOEW, *Cent.*, VIII, 100.—D. C.
- ilicicola** LOEW, *Cent.*, App., p. 290, change of name; *Cent.*, III, 99 (*ilicis*, preoc.).  
 —D. C.; larva mines the leaves of *Ilex opaca*.  
 COQUILLET, *Proc. Wash. Acad. Sci.*, II, 464, oc. in Alaska, Mass., Cal., and Ore.
- nervosa** LOEW, *Cent.*, VIII, 99.—D. C.
- obscura** FALLÉN, *Phytomyzides*, 4.—Europe.  
 MEIGEN, *Syst. Besch.*, VI, 2815.  
 ZETTERSTEDT, *Dipt. Scand.*, VII, 2815.  
 SCHINER, *Fauna Austr.*, II, 315.—Europe; larvæ reared from the leaves of *Lonicera xylosteum* and *Sambucus*.  
 STÆGER, *Grœnl. Antl.*, 369, oc. in Greenland.  
 COQUILLET, *Bull.* 10, n. ser., Div. of Ent., 79, records larvæ mining in leaves of *Lupinus* in Cal.  
 LUNDBECK, *Dipt. Grœnl.*, II, 305, oc. in Greenland.
- solita** WALKER, *Trans. Ent. Soc.*, n. ser., IV, 232.—U. S.
- palliata** COQUILLET, *Jour. N. Y. Ent. Soc.*, X, 191.—Mesilla Park, N. M.
- zetterstedtii** SCHINER, *Fauna Austr.*, II, 305.—Europe.  
 ZETTERSTEDT, *Dipt. Scand.*, VII, 2821 (*maculipes*, preoc.).  
 LUNDBECK, *Dipt. Grœnl.*, II, 307, oc. in Greenland.

#### NAPOMYZA.

- HALIDAY, *Westwood's Introd. to Mod. Classif. Ins.*, II, Appendix, 152, 1840.  
 SCHINER, *Fauna Austr.*, II, 313, 1864, as a subg. of *Phytomyza*.  
 WILLISTON, *Manual*, 1896, 104, the second division of *Phytomyza*.
- anomala** STROBL, *Wien. Ent. Zeit.*, 1893, 307 (*Phytomyza*).—Europe.  
 HOUGH, in litt., reports from Wash., collected by Kincaid (id.).
- chrysanthemi** KOWARZ, in *Lintner's 7th N. Y. Rept.*, 243-246 (*Phytomyza*).—N. Y.; larva is a leaf-miner in *Chrysanthemum*.



LINTNER, 4th N. Y. Rept., 73-79 (*Phytomyza lateralis*); 7th Rept., 242-246, more on habits (*Phytomyza*).

COQUILLET, Ins. Life, VII, 399, figs. and life hist.; Bull. 10, n. ser., Div. of Ent., 79 (id.).—N. Y., Pa., Conn.; larvæ mine in chrysanthemum, marguerite, daisy and fever-few.

**lateralis** FALLÉN, Phytomyzides, 3, 1823 (*Phytomyza*).—Europe.

MEIGEN, Syst. Besch., VI, 190 (id.).

SCHINER, Fauna Austr., II, 313 (id.).

GLOVER, MS. Notes Jour., Dipt., 1874, 40, mention (id.).

BRAUER, Denkschr. Kaiserl. Akad. Wiss., XLVII, 90 (id.).

COQUILLET, Proc. Wash. Acad. Sci., II, 464, oc. in N. A.—Popof Id.

*Note*.—According to Schiner, the larvæ live in the pith of the stem of *Verbena*, *Centaurea*, etc., and the flower-head of *Pyrethrum*.

**nigritella** ZETTERSTEDT, Dipt. Scand., VII, 2816 (*Phytomyza*).—Europe.

LUNDBECK, Dipt. Grœnl., II, 306, oc. in Greenland (id.).

### PARAMYIA.

WILLISTON, Kans. Univ. Quart., VI, 1, 1897.

**nigra** WILLISTON, loc. cit., 2.—Grenada, W. I.

## Subfamily AGROMYZINÆ.

### CERATOMYZA.

SCHINER, Wien. Ent. Monatsch., VI, 1862; Fauna Austr., II, 390, 1864.

MACQUART, Hist. Nat. Dipt., II, 614 (*Odontocera*, preoc.).

**dorsalis** LOEW, Cent., III, 96 (*Odontocera*).—D. C.

? WILLISTON, Trans. Ent. Soc. Lond., 1896, 427, pl. XIV, f. 155, doubtful oc. in St. Vincent, W. I.

COQUILLET, Bull. 10, n. ser., Div. of Ent., 77, larvæ in timothy and wheat in Ind.; Proc. U. S. N. M., XXII, 269, oc. in Porto Rico.

HOPKINS, Bull. 17, n. ser., Div. of Ent., larvæ mining in timothy.

WEBSTER, Canad. Ent., 1900, 212, reared from wheat plants.

HOWARD, Proc. Wash. Acad. Sci., II, 593, reared from human excrement—probably an unusual habit for the species.—D. C.

N. J.—Smith Cat.; White Mts., N. H.—Slosson.

*Note*.—An undescribed *Ceratomyza* has been reared from young wheat plants at Pullman, Wash., by Professor C. V. Piper; it causes considerable damage.

### AGROMYZA.

FALLÉN, Agromyzides, 3, 1823.

SCHINER, Fauna Austr., II, 299, 1864.

**æneiventris** FALLÉN, Agromyzides, 4.—Europe.

MEIGEN, Syst. Besch., VI, 169 (*ænea*).

ZETTERSTEDT, Dipt. Scand., VII, 2777.

SCHINER, Fauna Austr., II, 304.

OSTEN SACKEN, Cat., 210, oc. in N. A.—“Loew in litt.”

COQUILLET, Bull. 10, n. ser., Div. of Ent., 78; larvæ in burrows in roots of clover and stems of Ambrosia.—U. S.

N. J.—Smith Cat.; Porto Rico—Coquillett; Beulah, N. M.—Skinner.

*Note*.—Schiner says the larvæ have been reared from the pith of *Arctium*, and from the stems of *Angelica*, *Centaurea*, and *Carduus*.

**angulata** LOEW, Cent., VIII, 87.—Pa. N. J.—Smith Cat.

- anthrax** WILLISTON, Trans. Ent. Soc. Lond., 1896, 430.—St. Vincent, W. I.
- arctica** LUNDBECK, Dipt. Grœnl., II, 304, fig.—Greenland.
- coronata** LOEW, Cent., VIII, 89.—Pa. N. J.—Smith Cat.  
Beulah, N. M.—Skinner.
- flaviventris** JOHNSON, see *melampyga*.
- flavonigra** COQUILLET, Jour. N. Y. Ent. Soc., x, 189.—Beulah, N. M.
- innominata** WILLISTON, Trans. Ent. Soc. Lond., 1896, 443, pl. XIV, f. 158.—St. Vincent, W. I.
- invaria** WALKER, Trans. Ent. Soc., new ser., IV, 232.—U. S.
- jucunda** VAN DER WULP, Tijdschr. v. Ent., x, 161, pl. v, f. 19, 20.—Wis.  
BURGESS, Dept. Agric. Rept., 1879, 202 (*Oscinis malvæ*).—D. C. [Coq.]  
COMSTOCK, Dept. Agric. Rept., 1879, 201, mines in leaves of *Malva rotundifolia* (id.).  
COQUILLET, Proc. U. S. N. M., XXII, 268, oc.; Bull. 10, n. ser., Div. Ent., 77, larvæ mine in *Verbena*, *Malva*, *Xanthium*, *Aplopappus*, *Helianthus*, *Solidago*, and *Aster*.—St. Vincent and U. S. generally; Mo., D. C., Cal. N. J.—Smith Cat.; White Mts., N. H.—Slosson; Georgetown, Fla.  
See *lateralis* WILL.
- lacteipennis** FALLÉN, Agromyzides, 4.—Europe.  
ZETTERSTEDT, Dipt. Scand., VII, 2768.  
SCHINER, Fauna Austr., II, 300.  
COQUILLET, Proc. Wash. Acad. Sci., II, 464, oc. in N. A.—Saldovia, Alaska.
- lateralis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 428, pl. XIV, f. 156.—St. Vincent, W. I.  
COQUILLET, Proc. U. S. N. M., XXII, 268, makes this a syn. of *jucunda*; but the description seems to exclude this interpretation. The name is preoccupied.
- longipennis** LOEW, Cent., VIII, 90.—D. C. Lawrence, Kans.—J. M. A.
- magnicornis** LOEW, Cent., VIII, 86.—Pa. N. J.—Smith Cat.
- marginata** LOEW, Cent., VIII, 91.—D. C.
- melampyga** LOEW, Cent., VIII, 88.—D. C.  
COQUILLET, Bull. 10, n. ser., Div. of Ent., 77; larvæ mine in *Philadelphus* and *Plantago*.—D. C.  
JOHNSON, Canad. Ent., 1902, 242 (*flaviventris*).—Niagara Falls, N. Y. [JOHNSON, in litt.] N. J.—Smith Cat.; White Mts., N. H.—Slosson.
- ? **metallica** BIGOT, in Sagra's Cuba, 825 (*Ulidia*).—Cuba.  
Gen. ref. doubtfully from Osten's note, Cat., 211.
- neptis** LOEW, Cent., VIII, 93.—Nebr.  
COQUILLET, Bull. 10, n. ser., Div. of Ent., 78, larvæ in Indian corn and *Solidago*; Proc. U. S. N. M., XXII, oc.; Proc. Wash. Acad. Sci., II, 463, oc.—D. C., Va.; Porto Rico and "from Mass. to Fla. and Texas"; Juneau, Alaska.
- parvicella** COQUILLET, Jour. N. Y. Ent. Soc., x, 189.—St. Paul Id., Alaska.
- parvicornis** LOEW, Cent., VIII, 92.—D. C. N. J.—Smith Cat.
- picta** COQUILLET, Jour. N. Y. Ent. Soc., x, 188.—Frontera in Tabasco, Mex.
- pictella** THOMSON, Eugen. Resa, 609.—Cal.
- platyptera** THOMSON, Eugen. Resa, 608.—Cal.
- pruinosa** COQUILLET, Jour. N. Y. Ent. Soc., x, 189.—Col.
- setosa** LOEW, Cent., VIII, 83.—D. C.  
HINE, Ohio Naturalist, II, 169, notes; reared from wild rice, *Zizania aquatica*.—Ohio.  
COQUILLET, Bull. 10, n. ser., Div. of Ent., 78, larvæ in *Zizania*, *Chrysanthemum* and *Fragaria*.—D. C., N. Y., Cal.

- Palatka, Fla.—Johnson; Porto Rico—Coquillett; Beulah, N. M.—Skinner.
- simplex** LOEW, Cent., VIII, 84.—Pa. N. J.—Smith Cat.
- SIRRINE, Bull. 189. N. Y. Expt. Sta., 1900; larvæ mine in asparagus; biology, etc.—N. Y.
- sorosus** WILLISTON, Trans. Ent. Soc. Lond., 1896, 429.—St. Vincent, W. I.
- terminalis** COQUILLET, Proc. Acad. Nat. Sci. Phil., 1895, 318.—Pa.; Welaka, Fla.
- White Mts., N. H.—Slosson.
- trifolii** BURGESS, Dept. Agric. Rept., 1879, 201 (*Oscinis*).—D. C.
- COMSTOCK, Dept. Agric. Rept., 1879, 200 (id.), larvæ mine in white clover leaves.
- RILEY, Dept. Agric. Rept., 1884, 322, pl. VIII, f. 5 (*Oscinis brassicae*); larvæ mine cabbage leaves.
- COQUILLET, Bull. 10, n. ser., Div. of Ent., 78, makes both the preceding synonyms of *Agromyza* (*Phytomyza*) *diminuta* WALKER, which last seems quite unrecognizable to me.
- CHITTENDEN, Bull. 33, n. ser., 77, mining leaves of cabbage, etc. (*diminuta*).
- tritici** FITCH, 2d N. Y. Rept., 534, pl. II, f. I.—N. Y.; larvæ in wheat straws.
- varifrons** COQUILLET, Jour. N. Y. Ent. Soc., x, 189.—D. C.
- virens** LOEW, Cent., VIII, 85.—Pa.
- viridula** COQUILLET, Jour. N. Y. Ent. Soc., x, 190.—D. C., Mass., Ga., and Porto Rico.
- xanthophora** SCHINER, Novara, 291.—S. A.
- WILLISTON, Trans. Ent. Soc. Lond., 1896, pl. XIV, f. 157.—St. Vincent, W. I.

## HEMEROMYIA.

- COQUILLET, Jour. N. Y. Ent. Soc., x, 190, 1902.
- obscura** COQUILLET, loc. cit.—Las Vegas Hot Spr., N. M.

## PLATOPHYRMIA.

- WILLISTON, Trans. Ent. Soc. Lond., 1896, 426.
- nigra** WILLISTON, loc. cit.—St. Vincent, W. I.

## DESMOMETOPA.

- LOEW, Cent., VI, 96, 1865.
- WILLISTON, Manual, 104, note, 1896.
- MIK, Wien. Ent. Zeit., XVII, 146, 1898, generic characters, etc.; a species in New Guinea has been observed clinging in pairs on the back of an Asilid while the latter was flying.
- halteralis** COQUILLET, Proc. U. S. N. M., XXII, 267.—Porto Rico, Fla., N. M., Col., Mass. N. J.—Smith Cat.
- latipes** MEIGEN, Syst. Besch., VI, 177 (*Agromyza*).—Europe.
- SCHINER, Fauna Austr., II, 308 (id.).
- OSTEN SACKEN, Cat., 210, oc. in N. A., by "Loew in litt."
- HOWARD, Proc. Wash. Acad. Sci., II, 592, reared from human excrement.—D. C., Pa.
- luteola** COQUILLET, Jour. N. Y. Ent. Soc., x, 188.—Frontera in Tabasco, Mex.
- m-nigrum** ZETTERSTEDT, Dipt. Scand., VII, 2743 (*Agromyza*).—Europe.
- OSTEN SACKEN, Cat., 210, oc. in N. A., by "Loew in litt." N. J.—Smith Cat.
- tarsalis** LOEW, Cent., VI, 96.—Cuba.

## RHICNOËSSA.

- LOEW, Wien. Ent. Monatsch., vi, 1862; Berl. Ent. Zeitsch., 1865, 34.  
 HENDEL, Wien. Ent. Zeit., XXI, 261, 1902.  
**albula** LOEW, Cent., VIII, 80.—Newport, R. I.  
**cinerea** WILLISTON, Trans. Ent. Soc. Lond., 1896, 444, pl. XIV, f. 170 (*Anthomyza*).—St. Vincent, W. I.  
 CZERNY, Wien. Ent. Zeit., XXI, 256, gen. ref.  
**coronata** LOEW, Cent., VI, 98.—Ga.  
**parvula** LOEW, Cent., VIII, 81.—Newport, R. I.  
 Kukak Bay and Saldovia, Alaska—Coquillett.  
**xanthopoda** WILLISTON, Trans. Ent. Soc. Lond., 1896, 445 (*Anthomyza*).—St. Vincent, W. I.  
 CZERNY, Wien. Ent. Zeit., XXI, 256, gen. ref.

## EUSIPHONA.

- COQUILLET, Revis. Tachin., 49, 1897; Canad. Ent., XXX, 53, family ref.  
**mira** COQUILLET, Revis. Tachin., 49; Canad. Ent., XXX, 53, note.—Ind., Col.

## ARCTOBIELLA.

- COQUILLET, Jour. N. Y. Ent. Soc., x, 188, 1902.  
**obscura** COQUILLET, loc. cit.—Laggan, British Columbia.

## PHYLLOMYZA.

- FALLÉN, Ochthiphilides, 8, 1823.  
 SCHINER, Fauna Austr., II, 311, 1864.  
**magnipalpis** WILLISTON, Trans. Ent. Soc. Lond., 1896, 443, pl. XIV, f. 169.—St. Vincent, W. I.  
**nitens** LOEW, Cent., VIII, 82.—Pa.

## CRYPTOCHÆTUM.

- RONDANI, Bull. Soc. Ent. Ital., 1875, 172.  
 WILLISTON, Ins. Life, I, 21, 1888 (*Lcstophonus*); p. 329, places in the Ochthiphilinae and suggests synonymy.  
 MIK, Wien. Ent. Zeit., Aug., 1899, confirms synonymy; mentioned by Riley and Howard, Ins. Life, II, 91.  
**iceryæ** WILLISTON, Ins. Life, I, 21, fig. (*Lcstophonus*).—S. Australia; the larvæ feed on the coccids *Icerya purchasi* and *Monophlebus crawfordi*—the last not occurring in N. A.  
 RILEY and HOWARD, Ins. Life, I, 166, 199, 232, etc., introduction into California (id.).  
 RILEY, Dept. Agric. Rept., 1889, 340, pl. III, f. 3, 4, 5, gen. ref., and notes on food habits, etc.  
*Note*.—Mr. Skuse of Australia and Dr. Riley thought there were two distinct species, the second named *monophlebi* SKUSE, that were introduced into the U. S.; see Ins. Life, II, 261.

## AULACIGASTER.

- MACQUART, Hist. Nat. Dipt., II, 579, 1835.  
 DUFOUR, Ann. Soc. Ent. France, 1845, 455 (*Apotemella*).  
 WAHLBERG, K. Svenska Vet. Akad. Förh., 1847, 261 (*Amphycophora*).  
 SCHINER, Fauna Austr., II, 269, 1864, desc. and syn.

*rufitarsis* MACQUART, Hist. Nat. Dipt., II, 580.—Europe.

ZETTERSTEDT, Dipt. Scand., VII, 2707.

SCHINER, Fauna Austr., II, 270.

OSTEN SACKEN, Cat., 210. oc. in N. A.—D. C., Texas ("Loew in litt.").

### Subfamily MILICHINÆ.

#### MILICHIA.

MEIGEN, Syst. Besch., VI, 131, 1830.

WAHLBERG, Vetensk. Akad. Förh., 1847, 259 (*Lobioptera*).

SCHINER, Fauna Austr., II, 296, 1864 (id.).

COQUILLET, Jour. N. Y. Ent. Soc., X, 185, footnote, 1902.

*arcuata* LOEW, Zeitsch. f. Ges. Naturwiss., 1876, 339 (*Lobioptera*).—Long Id., N. Y.

Ormond, Fla. (id.)—Johnson.

*indecora* LOEW, Cent., VIII, 94 (*Lobioptera*).—Nebr.

COQUILLET, Proc. U. S. N. M., XXII, 263, oc. in Porto Rico and in U. S., "ranging from N. H. to Ga." (id.).

*lacteipennis* LOEW, see *Ophthalmomyia*.

*leucogaster* LOEW, Wien. Ent. Monatsch., V, 43, 20; Centuries, VIII, 95 (the latter as *Lobioptera*).—Cuba.

St. Vincent, W. I.—Williston.

*robertsoni* COQUILLET, Jour. N. Y. Ent. Soc., X, 187.—Inverness, Fla.

#### OPHTHALMOMYIA.

WILLISTON, Trans. Ent. Soc. Lond., 1896, 426.

*cinerea* COQUILLET, Proc. U. S. N. M., XXII, 268.—Porto Rico.

*lacteipennis* LOEW, Cent., VI, 97 (*Lobioptera*).—Cuba.

WILLISTON, Trans. Ent. Soc. Lond., 1896, pl. XIV, f. 154.—St. Vincent, W. I.

COQUILLET, Proc. U. S. N. M., XXII, oc. in Porto Rico and U. S. from "D. C. to Fla. and west to N. M." Charlotte Harbor, Fla.—Johnson.

#### PHOLEOMYIA.

BILIMEK, Verh. Zool.-Bot. Ges., 1867, 903.

*leucozona* BILIMEK, loc. cit.—Mex.

#### ODINIA.

DESVOIDY, Myodaires, 648. 1830.

LOEW, Stett. Ent. Zeit., 1843, 310, 322 (*Milichia* MEIG.).

SCHINER, Fauna Austr., II, 297, 1864 (id.).

COQUILLET, Jour. N. Y. Ent. Soc., X, 185, 1902, footnote.

*immaculata* COQUILLET, Jour. N. Y. Ent. Soc., X, 185.—Mt. Washington, N. H.

*picta* LOEW, Centuries, I, 99 (*Milichia*).—Ga.

#### PARODINIA.

COQUILLET, Jour. N. Y. Ent. Soc., X, 186, 1902.

*cinerea* COQUILLET, loc. cit.—Los Angeles Co., Cal.

*costalis* COQUILLET, Proc. Wash. Acad. Sci., III, 378 (*Rhinoëssa*); Jour. N. Y. Ent. Soc., X, 187, oc. and gen. ref.—Galapagos Ids.; Ariz.

## PSEUDODINIA.

- COQUILLET, Jour. N. Y. Ent. Soc., x, 187, 1902.  
**varipes** COQUILLET, loc. cit.—Las Vegas Hot Spr., N. M.

## TRAGINOPS.

- COQUILLET, Ent. News, 1900, 429.  
**irrorata** COQUILLET, loc. cit., figs.—Ga., N. J.

## CACOXENUS.

- LOEW, Wien. Ent. Monatsch., 1858, 217, 213.  
 SCHINER, Fauna Austr., II, 298, 1864.  
**semiluteus** LOEW, Cent., VIII, 97.—Cuba.

## Subfamily OCHTHIPHILINÆ.

## LEUCOPIS.

- MEIGEN, Syst. Besch., VI, 217, 1830.  
 SCHINER, Fauna Austr., II, 294, 1864.  
 COQUILLET, Bull. 10, n. ser., Div. of Ent., 76, 77, notes of various species of aphids and coccids affected by *L. nigricornis*, *simplex*, *bella* and *bellula*.  
 BRODIE, Canad. Ent., XXIV, 14, reports the rearing of an undet. sp. from galls on *Nabalis altissimus*.  
**bella** LOEW, Cent., 99.—Cuba.  
 TOWNSEND, Trans. Amer. Ent. Soc., XXII, 80, bred from plant-lice in Col.  
 COQUILLET, Proc. U. S. N. M., XXII, 269, oc. in Porto Rico and "extending from Nova Scotia to Cal. and Mex." Bred in Porto Rico from larvæ feeding on *Dactylopius citri*.  
 WEBSTER, Canad. Ent., XXX, 19, reared from Melon louse.  
 Fla.—Johnson; Nova Scotia and Ottawa, Can.—Coquillett.  
**bellula** WILLISTON, Ins. Life, I, 258.—Texas; the larvæ feed on cochineal insect—*Coccus cacti*.  
 COQUILLET, Bull. 10, n. ser., Div. of Ent., 77.—Texas, N. M., Mex.; occurrence, etc.  
**nigricornis** EGGER, Verh. Zool.-Bot. Ges., XII, 782.—Europe.  
 SCHINER, Fauna Austr., II, 295.  
 N. J.—Smith Cat.; Texas, Cal., N. H., and Ind.—Coquillett, Bull. 10; Beulah, N. M.—Skinner.  
**simplex** LOEW, Cent., VIII, 96.—N. Y.  
 N. J.—Smith Cat.; White Mts., N. H.—Slosson; Va., Mich., Nebr., D. C.—Coquillett, Bull. 10.

## OCHTHIPHILA.

- FALLÉN, Ochthidia, 1823.  
 LOEW, Wien. Ent. Monatsch., 1858, 219, in an article about *Cacoxenus*.  
 SCHINER, Fauna Austr., II, 291, 1864.  
**elegans** PANZER, Fauna Germanica, CV, 12 (*Chamomyia*).—Europe.  
 SCHINER, Fauna Austr., II, 292.  
 N. J.—Smith Cat.  
**lispina** THOMSON, Eugen. Resa, 599.—Cal.  
**polystigma** MEIGEN, Syst. Besch., VI, 92.—Europe.  
 SCHINER, Fauna Austr., II, 293.  
 N. J.—Smith Cat.; Montreal—Chagnon.



## ACROMETOPA.

SCHINER, Wien. Ent. Monatsch., vi, 1862; Fauna Austr., ii, 290, 1864.

COQUILLET, Jour. N. Y. Ent. Soc., x, 185, 1902, note.

*punctata* COQUILLET, loc. cit.—Ga.

*maculata* COQUILLET, loc. cit.—Baracoa, Cuba.

## HIPPOBOSCIDÆ.

BIGOT, Annales, 1885, 230-234, table of all genera of Pupipara.

SPEISER, Wien. Ent. Zeit., xviii, 201, 1899, table of genera of Hippoboscidæ; Zeitsch. f. Hym. u. Dipterol., 1902, 145-180, an important generic revision, including Nycteribidæ.

## HIPPOBOSCA.

LINNÉ, Fauna Suecica, 471, 1761.

SCHINER, Fauna Austr., ii, 644, 1864.

*equina* LINNÉ, Fauna Suec., 471.—Europe: a winged horse-tick.

SCHINER, Fauna Austr., ii, 644.

LOEW, in Silliman's Jour., oc. in N. A.; but it must be extremely rare, as I have never seen it in any collection, nor known of its capture by any entomologist. Lugger mentions it, 2d Minn. Rept., 1896, 143, but without positively asserting that it occurs in Minn. It is possible that Loew was mistaken in the locality of his specimen.

## LIPOPTENA.

NITSCH, Germ. Mag. f. Ent., iii, 310, 1818.

SCHINER, Fauna Austr., ii, 648, 1864.

COOPER CURTICE, Animal Parasites of Sheep, Washington, 1890.

*depressa* SAY, Jour. Acad. Sci. Phil., iii, 104; Compl. Works, ii, 88 (*Melophagus*).—Pa.; on *Cervus virginianus*, the common deer.

Gen. ref. by "Loew in litt."—O. S. Cat.

TOWNSEND, Annals and Mag. Nat. Hist., xx, 289, describes var. *mexicana*, on the Mexican variety of the common deer.—Vera Cruz.

*mazamæ* RONDANI, Annali Mus. Civ., etc., Genova, 1878, 153.—Central America, on *Cervus mexicanus*.

## ORNITHEZA.

SPEISER, Termész. Füzetek, xxv, 327, 1902.

*pilosula* VAN DER WULP, Biologia, Dipt., ii, 432, pl. XIII, f. 6 (*Ornithomyia*).—Costa Rica.

AUSTEN, Ann. and Mag. Nat. Hist., ser. 7, xii, 262, gen. ref. and notes.

? *varipes* WALKER, List, iv, 1146 (*Ornithomyia*).—Colombia.

VAN DER WULP, Biologia, Dipt., ii, 431 (*Ornithomyia avicularia* LINN.).—Costa Rica.

AUSTEN, Ann. and Mag. Nat. Hist., ser. 7, xii, 262, syn. from Walker's and Van der Wulp's specimens; oc. in Peru, Orizaba and Hawaiian Islands; gen. ref. with a doubt.

## ORNITHOMYIA.

LATREILLE, Hist. Nat. Crust. et Ins., iii, 466, 1802; xiv, 402, 1804.

SCHINER, Fauna Austr., ii, 646, 1864.

SPEISER, Termész. Füzetek, 1902, 327, subdivides.

- avicularia* LINNÉ, Fauna Suec., 472, No. 1922 (*Hippobosca*).—Europe; “habitat in passeribus.”
- LEACH, Eprob. Insects, 15, pl. xxv, f. 4-5 (id.); p. 14 (*viridis*).
- DEGEER, Mém. Hist. Nat. Ins., VI, 114, pl. xvi, f. 21-27 (id.).
- MEIGEN, Syst. Besch., VI, 232.
- SCHINER, Fauna Austr., II, 647.
- ? FITCH, Trans. N. Y. Agl. Soc., IX, 799, 1849, popular acct.
- VAN DER WULP, Tijdschr. v. Ent., XII, 80, oc. in N. A.; this, however, may be *Ornithoza varipes*.
- bellardiana* RONDANI, see *Ornithoctona*.
- butalis* COQUILLET, Dipt. of the Commander Ids., 346.—Bering Id., on *Butalis sibirica*.
- erythrocephala* LEACH, see *Ornithoctona*.
- fulvifrons* WALKER, List, IV, 1145.—Jamaica; on *Ortyx virginiana*.
- fusciventris* WIEDEMANN, AUSS. ZW., II, 611.—Ky.
- ? MACQUART, Dipt. Exot., Suppl. I, 346 (*testacea*).—Colombia.
- RONDANI, Annali Mus. Civ. etc., Genova, 1878, XII, 9, desc. and syn. with a ?.—Mexico.
- hadiensis* BIGOT, see *Ornithoctona*.
- nebulosa* SAY, Jour. Acad. Sci. Phil., III, 102; Compl. Works, II, 87.—West of Mo. River, on *Strix nebulosa*.
- WIEDEMANN, AUSS. ZW., II, 610.
- nitens* BIGOT, see *Ornithopertha*.
- pallida* SAY, Jour. Acad. Sci. Phil., III, 103; Compl. Works, II, 87.—West of Mo. River, on *Sylvia sialis*.
- WIEDEMANN, AUSS. ZW., II, 610.—N. A.
- N. J., on reed-bird and red-winged black-bird—Smith Cat.
- unicolor* WALKER, see *Pseudolfersia spinifer*.
- vicina* WALKER, see *Ornithoctona*.
- villadæ* DUGÉS, is referred by Wulp to *Olfersia*, q. v.

#### ORNITHOCTONA.

- SPEISER, Térmez. Füzetek, xxv, 327, 1902.
- bellardiana* RONDANI, Annali Mus. Civ. Genova, 1878, 157 (*Ornithomyia*).—Mex. Gen. ref. by Speiser.
- erythrocephala* LEACH, Eprob. Ins., 13, pl. xxvii, f. 4-6 (*Ornithomyia*).—Brazil.
- WIEDEMANN, AUSS. Zweifl., II, 610 (id.).—Cuba.
- WALKER, List, IV, 1143 (id.), oc. in Jamaica.
- ? WILLISTON, Trans. Ent. Soc. Lond., 1896, 439, doubtfully recognized from St. Vincent, W. I. (id.).
- VAN DER WULP, Biologia, Dipt., II, 431, pl. XII, f. 5 (*Ornithomyia robusta*).—Mexico. Guatemala, Costa Rica, Panama.
- AUSTEN, Ann. and Mag. Nat. Hist., ser. 7, XII, 262, syn. and notes on type of Van der Wulp.
- Porto Rico, on sparrow hawk—Coquillett; Quebec and Guadeloupe—O. S.
- haitiensis* BIGOT, Annales, 1885, 242 (*Ornithomyia*).—Hayti.
- SPEISER, Zeitsch. f. Hym. u. Dipt., II, 168, notes on type and gen. ref.
- vicina* WALKER, List, IV, 1144 (*Ornithomyia*).—Jamaica, on *Ephialtes grammicus*.

#### STILBOMETOPA.

- COQUILLET, Canad. Ent., xxxi, 336, 1899.
- fulvifrons* WALKER, List, 1145 (*Ornithomyia*).—Jamaica.

Gen. ref. by Coquillett, *Canad. Ent.*, xxxi, 336.

*impressa* BIGOT, *Annales*, 1885, 237 (*Olfersia*).—Cal.

SPEISER, *Zeitsch. f. Hym. u. Dipt.*, 1902, 163, type redesc.

#### ORNITHOICA.

RONDANI, *Annali del Mus. Civ. etc. Genova*, xii, 1878, 159.

*confluens* SAY, *Jour. Acad. Sci. Phil.*, iii, 103; *Compl. Works*, ii, 87 (*Ornithomyia*).—Pa.

WIEDEMANN, *Auss. Zw.*, ii, 611.

OSTEN SACKEN, *Cat.*, 263, note.

COQUILLET, *Canad. Ent.*, xxxi, 335, refers to this genus (by mistake it is printed *Anthoica*, an entirely different genus).

SPEISER, *Termész. Füzetek*, xxv, 334, redesc. from Brazil.

#### LYNCHIA.

WEYENBERG, *Cordoba*, 1881, "Dos nuev. esp. del Grupo d. l. Dipt. Púparos." (I take the ref. from Bigot.)

SPEISER, *Zeitsch. f. Hym. u. Dipt.*, 1902, 157.

*pusilla* SPEISER, *Zeitsch. f. Hym. u. Dipt.*, 1902, 157.—Cuba.

#### OLFERSIA.

WIEDEMANN, *Auss. Zw.*, ii, 605, 1830.

SCHINER, *Fauna Austr.*, ii, 1864.

VAN DER WULP, *Biologia, Dipt.*, ii, 429, 1903, table of Mex. species.

SPEISER, *Zeitsch. f. Hym. u. Dipt.*, ii, 152, 1903.

*americana* LEACH, *Eprob. Insects*, ii, pl. xxvii, f. 1-3 (*Feronia*).—Ga.

WIEDEMANN, *Auss. Zw.*, ii, 606.

MACQUART, *Hist. Nat. Dipt.*, ii, 641.

PACKARD'S Guide, 1st edit., 417 (*Hippobosca bubonis*).

OSTEN SACKEN, *Cat.*, 213, oc. in Ill., Mass., and Dallas, Texas; on *Bubo virginianus* and *Butco borealis*.

N. J., on screech owl—Smith Cat.; St. Augustine, Fla., on same—Johnson.

*albipennis* SAY, *Jour. Acad. Sci. Phil.*, iii, 101; *Compl. Works*, ii, 87.—West of Mo. River, on *Ardea herodias*.

*angustifrons* VAN DER WULP, *Biologia, Dipt.*, ii, 430, pl. xiii, f. 3.—Teapa, Mex.; Costa Rico.

*ardeæ* MACQUART, *Hist. Nat. Dipt.*, ii, 640.—Europe; on *Ardea*.

LOEW, in *Silliman's Jour.*, oc. in N. A.

N. J., on American bittern, night heron, and little blue heron.—Smith Cat.

*brunnea* OLIVIER, *Encycl. Méth.*, viii, 544 (*Ornithomyia*).—Carolina.

Gen. ref. in O. S. Cat.

*coriacea* VAN DER WULP, see *Pseudolfersia*.

*impressa* BIGOT, see *Stilbometopa*.

*intertropica* WALKER, *List*, iv, 1144 (*Ornithomyia*).—Galapagos Ids.

AUSTEN, *Ann. and Mag. Nat. Hist.*, ser. 7, xii, 264, gen. ref. from type; oc. in Honolulu, Bahia and Orizaba, one specimen "from the ear of an owl."

*mexicana* MACQUART, see *Pseudolfersia*.

*obliquinervis* RONDANI, *Annali Mus. Civ.*, etc., Genova, xii, 1878, 162.—Mex.

*pallidilabris* RONDANI, *Annali Mus. Civ.*, etc., Genova, xii, 1878, 161.—Mex.

- propinqua* WALKER, List, IV, 1141.—Jamaica.  
*sordida* BIGOT, see *Pseudolfersia*.  
*sulcifrons* THOMSON, see *Pseudolfersia*.  
*villadæ* DUGÉS, La Naturelleza, I, 20, pl. III, f. 3 (*Ornithomyia*).—Mex.  
*vulturis* VAN DER WULP, see *Pseudolfersia*.

## PSEUDOLFERSIA.

- COQUILLET, Canad. Ent., XXXI, 336, 1899.  
 SPEISER, Zeitsch. f. Hym. u. Dipt., IV, 145, 1902.  
*coriacea* VAN DER WULP, Biologia, Dipt., II, 430, pl. XIII, f. 2 (*Olfersia*).—Guatemala.  
 AUSTEN, Ann. and Mag. Nat. Hist., ser. 7, XII, 265, note on type and gen. ref.; oc. in Mexico and Brazil.  
*maculata* COQUILLET, Canad. Ent., XXXI, 336.—Wis.; on loon and osprey (*Pandion halictus carolinensis*).  
 N. J., from a fish hawk—Smith Cat.  
*sulcifrons* THOMSON, Eugen. Resa, 611 (*Olfersia*).—Panama.  
 SPEISER, Zeitsch. f. Hym. u. Dipt., II, 149, gen. ref. from desc.; op. cit., IV, 82, notes on type and gen. ref. confirmed.  
*mexicana* MACQUART, Dipt. Exot., II, 3, 78 (*Olfersia*).—Mexico.  
 SPEISER, Zeitsch. f. Hym. u. Dipt., II, 179, gen. ref. and notes on type.  
*sordida* BIGOT, Annales, 1885, 239 (*Olfersia*).—Guatemala.  
 SPEISER, Zeitsch. f. Hym. u. Dipt., II, 164, notes on type and gen. ref.  
*spinifera* LEACH, Eprob. Ins., 557, pl. XXVI, f. 1-3 (*Feronia*).  
 WALKER, List, IV, 1144 (*Ornithomyia unicolor*)—Jamaica, "on *Ephialtes grammicus* and *Frigata aquilus*."  
 SPEISER, Zeitsch. f. Hym. u. Dipt., II, 147, 148, long discussion and syn.  
 AUSTEN, Ann. and Mag. Nat. Hist., ser. 7, XII, 265, confirms syn. from types; oc. in Brazil, Ascension, Arabia, Australia, etc., on *Fregata aquila* and *Sula sula*, the frigate-bird and booby respectively. Speiser doubts correct identification of the latter bird.  
*vulturis* VAN DER WULP, Biologia, Dipt., II, 429, pl. XIII, f. 1 (*Olfersia*).—Costa Rica; "parasite of vulture."  
 AUSTEN, Ann. and Mag. Nat. Hist., ser. 7, XII, 264, gen. ref. and notes on types.

## BRACHYPTEROMYIA.

- WILLISTON, Ent. News, VII, 184, 1896.  
*femorata* WILLISTON, Ent. News, VII, 185.—Wyo., on *Macropis melanoleucus*.  
 SPEISER, Wien. Ent. Zeit., XVIII, 202, note on similarity to *Anapera* (sic) *imbriata* WATERHOUSE.

## MELOPHAGUS.

- LATREILLE, Hist. Nat. Crust. et Ins., XIV, 402, 1804.  
 SCHINER, Fauna Austr., II, 649, 1864.  
*ovinus* LINNÉ, Fauna Suec., 472, No. 1923 (*Hippobosca*).—Europe; "habitat inter *Ovium lanam*."  
 LEACH, Eprob. Ins., 18, pl. XXVI, f. 14.  
 MEIGEN, Syst. Besch., VI, 236, pl. LXIV, f. 16.  
 CURTIS, Brit. Entomol., 142.  
 SCHINER, Fauna Austr., II, 649.  
 FITCH, Trans. N. Y. Ag. Soc., IX, 799, popular account.—N. Y.; the sheep tick.

COOPER CURTICE, Animal Parasites of the Sheep, Washington, 1890, full study of the sheep tick.

LUGGER, 2d Rept. Ent. Minn., 1896, 139-143, figs., life hist., etc.

### STREBLA.

WIEDEMANN, Analecta Ent., 1824.

RONDANI, Annali Mus. Civ., etc., Genova, XII, 1878, 18.

*mexicana* RONDANI, Annali Mus. Civ., etc., Genova, XII, 1878, 168.—Mex.

*vespertilionis* FABRICIUS, Syst. Antl., 339 (*Hippobosca*).—S. A.; "habitat in vespertilione."

WIEDEMANN, Analecta Ent., 19, f. 7; Auss. Zw., II, 612, pl. x, f. 7.—S. A.

MACQUART, Hist. Nat. Dipt., II, 637, pl. XXIV, f. 7; Dipt. Exot., Suppl. v, 127 (*avium*).—S. A.; San Domingo, on pigeons and parrots. [Lw.]

KOLENATI, Horæ Soc. Ent. Ross., II, 96, pl. xv, f. 36 (*wiedemanni*). [Lw.]

WALKER, List, IV, 1140, oc. in Jamaica.

### TRICHOBIUS.

GERVAIS, Atlas de Zool., 1844.

TOWNSEND, Ent. News, II, 106, 1891; III, 177, note on orig. desc.

*dugesii* TOWNSEND, Ent. News, II, 106.—Guanaxuato, Mex., on bat.

COQUILLET, Proc. U. S. N. M., XXII, oc. in Porto Rico, Ariz., and Jamaica.

*major* COQUILLET, Canad. Ent., XXXI, 334.—Fla. and Ariz., on bats.

### ASPIDOPTERA.

COQUILLET, Canad. Ent., XXXI, 334, 1899.

*busckii* COQUILLET, Canad. Ent., XXXI, 335.—Bayamon, Porto Rico, on bats (*Artibeus* sp.).

### ORNITHOPTERHA.

SPEISER, Zeitsch. f. Hym. u. Dipt., 1902, 167.

*nitens* BIGOT, Annales, 1885, 241 (*Ornithomyia*).—Panama.

SPEISER, Zeitsch. f. Hym. u. Dipt., 1902, 166, type redesc. and gen. ref.

### NYCTERIBIID.Æ.

#### NYCTERIBIA.

LAURELLE, Hist. Nat. Crust. et Ins., III, 467, 1802; XIV, 403, 1804.

WESTWOOD, Trans. Zool. Soc., I, 275, 1834.

SCHINER, Fauna Austr., II, 650, 1864.

OSTEN SACKEN, Cat., 214, mentions an undet. sp. from Cal.

*antrozoi* TOWNSEND, Jour. N. Y. Ent. Soc., I, 79, 1893.—Las Cruces, N. M.; on the bat *Antrozous fallidus*.

*mexicana* BIGOT, see *Penicillidia*.

### MEGISTOPODA.

MACQUART, Annales Soc. Ent. France, 1852, 331.

*pilatei* MACQUART, loc. cit., pl. IV, No. 4.—Mex.

KOLENATI, Horæ Soc. Ent. Ross., II, 89, pl. XIV, f. 32 (*Megistopodia*).

Cuba—O. S.

**PTERELLIPSIS.**

COQUILLET, Canad. Ent., xxxi, 333, 1899.

*araneæ* COQUILLET, Canad. Ent., xxxi, 334.—Jamaica, Montserrat, and Porto Rico, on bats.

**PENICILLIDIA.**

KOLENATI, Horæ Soc. Ent. Ross., ii, 69, 1862.

*mexicana* BIGOT, Annales, 1885, 245 (*Nycteribia*).—Mex.

SPEISER, Zeitsch. f. Hym. u. Dipt., 1902, 171, type redesc. (the real type may be the female of Townsend's *antrozoï*, given above).



## APPENDIX.

Literature of North American Diptera for the year 1904, with enumeration of new species, genera, etc.

### Adams, C. F.

Notes and Descriptions of New North American Diptera. Kans. Univ. Sci. Bull., 11, 433-455; June, 1904.

New: *Simulium notatum*, *Mydas abdominalis*, *Xylophagus nitidus*, *Chrysopila lucifera*, *bella* and *flavibarbis*, *Symphoromyia flavipalpis*, *Leptis pleuralis* and *palpalis*, *Psiloccephala occipitalis* and *lateralis*, *Therexa anomala*, *Scenopinus mirabilis* and *electa*, *Nausigaster scutellaris*, *Sphyrinomorpha snowi*, *Conops gracilis*, *Tetanocera inopa*, *Icterica fasciata*, *Urellia flava*, *conjuncta* and *occidentalis*, *Elachiptera bilineata*, *Hippelates splendens*, *Limosina exigua*, *occidentalis* and *sordipes*.

Tables of Species: *Xylophagus*, *Chrysopila*, *Leptis*, *Icterica*, *Urellia* and *Limosina*.

On the North American Species of Siphonella. Psyche, xi, 103, 104; Oct., 1904.

New: *S. parva* and *nigra*.

European species from this realm: *S. trilineata* MEIG.

Descriptions of New Oscinidæ. Ent. News, xv, 303, 304; Nov., 1904.

New: *Chlorops pulla*, *lasciva*, *rubrivittata*, *annulata* and *certima*.

### Aldrich, J. M.

New Species of Phoridae in Brues's Monograph. Trans. Amer. Ent. Soc., xxxix, 331-400. Pub. Jan., 1904. Four species, included in the body of the Catalogue.

The Genus *Psilopus* of Authors. Canad. Ent., xxxvi, 246, 247; Aug., 1904.

Bibliography and synonymy of *Psilopodinus* and *Agonosoma*; no new species.

A Contribution to the Study of North American Dolichopodidæ. Trans. Amer. Ent. Soc., xxx, 269-286; 1904.

New: *Pelastoneurus scutatus*, *parvus*, *falcatus* and *proximus*, *Paraclius vicinus*, *Psilopodinus pilicornis*, *crinitus*, *viridicoxa* and *flavipes*, *Agonosoma rotundiceps* and *costale*; also two Brazilian species. Table of genera and tables of species in several genera.

### Back, E. A.

New Species of North American Asilidæ. Canad. Ent., xxxvi, 289-293; Oct., 1904.

New: *Dasyllis cinerea* and *fernaldi*, *Saropogon rufus* and *albifrons*, *Ospriocerus albifasciatus*, *Anisopogon johnsoni*.

### Baker, C. F.

Invertebrata Pacifica, 1, 17-40; Feb. 10, 1904. Printed by the Author, Claremont, Cal.

A long faunal list of Diptera from California and Nevada. The new species are described by Coquillett, q. v. The following European are new to North America: *Lonchoptera lacustris* MEIG., *Psilopa comta* MEIG., *Mosillus ancus* FALL.

Note.—The *Limnophora borealis* STEIN is a clerical error; there is no such species—Coquillett in litt.

**Banks, Nathan.**

The "Yellow Fly" of the Dismal Swamp. Ent. News, xv, 290, 291; Nov., 1904.

Identified as *Diachlorus ferrugatus* FAER.

**Bezzi, Mario.**

Verzeichniss der bis jetzt bekannten Arten der Dipteren-Gattung *Drapetis* Meig. Wien. Ent. Zeit., xxiii, 143-146, 1904.

Includes the North American species; none new.

**Brimley, C. S. and Sherman, Franklin.**

List of the Tabanidæ of North Carolina. Ent. News, xv, 270-275.

No new species.

**Brues, C. T.**

Monograph of N. A. Phoridae. This is included in the body of the Catalogue; see the family, p. 334.

Notes on Trichobins and the Systematic Position of the Streblidæ. Bull. Amer. Mus. Nat. Hist., xx, Art. viii.

No new species.

**Card, F. W. and Stene, A. E.**

Article on the Apple Maggot (*Rhagoletis pomonella*) in 17th Rept. of R. I. Expt. Station, 1904, 191-201. Purely economic.

**Chagnon, G.**

Additions to the Syrphidæ of the Province of Quebec. 34th Ann. Rept. Ent. Soc. of Ontario, 1904, 48, 49.

Eight species mentioned; none new.

**Chittenden, F. H.**

The Cherry Fruit Fly. Bulletin No. 44, Div. of Ent., 70-75, 1904.

Review of the habits, etc., of *Rhagoletis cingulata* Lw.

**Cockerell, T. D. A.**

Three New Cecidomyiid Flies. Canad. Ent., xxxvi, 155, 156; June, 1904.

New: *Diplosis coloradella*, *Rhabdophaga porterae*, *Cecidomyia peroculta*.

**Cook, Melville T.**

Galls and the Insects Producing Them. Ohio Naturalist, 1904.

A series of articles from a botanical standpoint chiefly; several Dipterous galls described; no new species.

**Coquillett, D. W.**

Several New Diptera from North America. Canad. Ent., xxxvi, 10-12; Jan., 1904.

New: *Culex dupreei*, *Janthinosoma (Conchyliastcs) varipes*, *Metricnemus knabi*, *Cuterebra grisea*, *Bischofia varia* (the last a genus of Sciomyzidæ heretofore known from Europe).

Notes on *Culex nigrutilus*. Ent. News, xv, 73, 74; Feb., 1904.

The American species formerly called *nigrutilus* is distinct, and the name *salinarius* is proposed for it. *Nigrutilus* is not North American.

Invertebrata Pacifica. Reports on the Californian and Nevadan Diptera. 1

(See notice under C. F. Baker.) Mr. Coquillett described the new species as follows: *Mycetophila trifasciata* and *fenestrata*, *Neompheria pullata*, *Sciophila calcarata*, *Dilophus occipitalis*, *Leptis flavonigra*, *Phencus opacus*, *Tabanus opacus*, *Thereva flavicauda*, *Acrocera bakeri*, *Rhamphomyia curzipes*, *Chilosia plumosa*, *Zagonia* (n. gen. Geomyzidæ) *flava*, *Hippelates microcentrus*, *Chyliza robusta*, *Melicieria occidentalis*, *Spilo-*

*grapha inaequalis*, *Tephritis palpalis*, *Euaesta adspersa*, *Sapromyza casia* and *unicittata*, *Eccoptomera* (Europ. gen. Helomyzidae) *simplex*, *Carnosia argentata* and *majuscula*, *Lispa polita*, *Phaonia fimbriata*, *Admontia scitigera*, *Biomyia mutabilis*, *Scleropogon jubatus*, *Leptomydas hirtus* and *concinuus*.

Diptera from Southern Texas, with Descriptions of New Species. Jour. N. Y. Ent. Soc., XII, 31-35; March, 1904.

Eight described species listed; the following new: *Cyphomyia schafferi*, *Phthiria unimaculata*, *Holopogon latus*, *Stenopogon tenebrosus*, *pumilus* and *nitens*, *Erax tuberculata*, *Anastrepha pallens*, *Sepsis pleuralis*.

New Diptera from Central America. Proc. Ent. Soc. Wash., VI, 90-98; May, 1904.

New: *Ceratopogon terminalis*, *Sciara trifasciata*, *Dilophus fumosus* and *rhyngops*, *Psiloccephala pruinosa*, *Conops pallifrons*, *Paradidyma orbitalis*, *Hypostena gracilis*, *Chatoclusia* (n. gen. Heteroneuridae) *bakeri*, *Sapromyza varia*, *albipes* and *triseriata*, *Euxesta juncta* and *fenestrata*, *Icterica apicalis*, *Notiphila frontalis*, *Scutops* (n. gen. Geomyzidae) *fascipennis*, *Chlorops capillata*.

New North American Diptera. Proc. Ent. Soc. Wash., VI, 166-192; July, 1904.

New: *Ceratopogon medius*, *Taniorhynchus nigricans* and *signipennis*, *Culex nivitarsis* and *pullatus*, *Eugnoriste brevirostris*, *Acnemia varipennis*, *Phronia tenebrosa*, *Calosia* (Europ. gen. Mycetophilidae) *pygophora*, *Platyura pullata*, *Bibiodex* (n. gen. Bibionidae) *halteralis*, *Symphoromyia securifera*, *Phthiria melanoscuta*, *fulvida*, *marginata*, *vittiventris*, *nubeculosa*, *inornata*, *badia*, *picturata*, *flavcola*, *ampliocella* and *bicolor*, *Aercotrichus atratus*, *Psiloccephala aurantiaca*, *Leptogaster virgatus* and *hirtipes*, *Ablautus flavipes* and *rubens*, *Stenopogon nigritulus*, *Laphystia flavipes*, *limatula* and *opaca*, *Diectrodes* (n. gen. Asilidae) *flavipes*, *Metapogon* (n. gen. Asilidae) *gilvipes* and *punctipennis*, *Cyrtopogon nigricolor*, *tibialis*, *maculosus* and *varipennis*, *Saropogon luteus*, *hyalinus* and *semustus*, *Psilopodinus* (*Sciapus*) *pruinosis*, *Distichona auriceps*, *Sarcophaga amblycorypha*, *Pegomyia bucculenta*, *Nerius longicornis*, *Lauxania signalifrons*, *Sapromyza picticornis*, *Drosophila ordinaria*, *Sinophthalmus* (n. gen. Geomyzidae) *pictus*, *Agromyza taniola*.

The Genera of the Dipterous Family Empididae (addenda). Proc. Ent. Soc. Wash., VI, 51.

No new species.

Notes on the Syrphid Fly *Pipiza radicum* Walsh and Riley. Proc. Ent. Soc. Wash., VI, 200.

#### Czerny, P. Leander.

Revision der Helomyziden. I. Wien. Ent. Zeit., XXIII, 199-244, 1904. II. Op. cit., 263-286, 1 pl.; Dec. 31, 1904.

Quotes descriptions of North American species; records *Helomyza nemorum* MEIG., a European species, from Colorado. The work is still incomplete.

#### Dyar, H. G.

The Life History of *Culex cantans* Meig. Jour. N. Y. Ent. Soc., XII, 36-38, 1904.

The Life History of *Culex varipalpus* Coq. Jour. N. Y. Ent. Soc., XII, 90-99, 1904.

- Larva of *Culex punctor* Kirby, with Notes on an Allied Form. Jour. N. Y. Ent. Soc., xii, 169-171, 1904.  
New: *Culex trichurus*.
- Brief Notes on Mosquito Larvæ. Jour. N. Y. Ent. Soc., xii, 172-174, 1904.  
No new species.
- Notes on the Mosquitoes of British Columbia. Proc. Ent. Soc. Wash., vi, 37-41, 1904.  
Notes on biology of 17 species; none new.
- Dyar, H. G. and Knab, Frederick.**  
Diverse Mosquito Larvæ that produce Similar Adults. Proc. Ent. Soc. Wash., vi, 143, 144, 1904.  
No new species.
- Emerton, J. H.**  
A Dipterous Parasite of the Box Turtle. Psyche, xi, 34; Apr., 1904.  
Brief note on *Sarcophaga* sp.
- Felt, E. P. and Young, D. B.**  
Importance of Isolated Rearings of Culicid Larvæ. Science, xx, 312, 313; 1904.  
New, briefly diagnosed: *Culex fitchii*, *lazarensis*, *cinereoborcalis*, *abserratus*.
- Felt, E. P.**  
Mosquitoes or Culicidæ of New York State. Bull. 79, N. Y. State Museum. Albany, 1904; pp. 241-402, 57 plates and many text figures.  
New genera: *Culicada*, *Culicelsa*, *Ecculex*, *Culicella*, *Culiseta*, *Protoculex*.  
New species: *Culicada onondagensis*, *Culiseta absobrinus* and *magnipennis*, *Corethra karnerensis* and *littneri*, *Sayomyia rotundifolia* and *hudsoni*, *Culex abfitchii*.
- Fletcher, Jas.**  
Notes of Captures. Diptera. 34th Ann. Rept. Ent. Soc. Ontario, 1904, pp. 98, 99.  
Fifty-five species listed from Canada, none new.
- French, G. H.**  
*Gastrophilus epilepsalis* Larvæ and Epilepsy. Canad. Ent., xxxvi, 83, 84; March, 1904.  
Reasserts his theory.
- Girault, A. Arsène.**  
*Tanypus dyari*: Pupa and Adult Exclusion. Psyche, xi, 81, 82; Aug., 1904.
- Grossbeck, John A.**  
Description of a new *Culex*. Canad. Ent., xxxvi, 332; Nov., 1904.  
*Culex siphonalis*.  
Descriptions of Two New Species of *Culex*. Ent. News, xv, 332, 333; Dec., 1904.  
*Culex pretans* and *inconspicuus*.
- Herrick, Glenn W.**  
Notes on the Life History of *Grabhamia jamaicensis*. Ent. News, xv, 81-84, 1 pl.; Mar., 1904.
- Hine, Jas. S.**  
New Species of Tabanidæ. Canad. Ent., xxxvi, 55, 56; Feb., 1904.  
New: *Chrysops fulvistigma* and *brimleyi*.  
On Diptera of the Family Ephydridæ. Ohio Naturalist, Feb., 1904.

New: *Psilopa fulvipennis*, *Cania virida*.

European species identified from U. S.: *Cania fumosa* STEN.

Tables of species of *Dichata* and *Cania*.

The Diptera of British Columbia. *Canad. Ent.*, xxxvi, 85-92; Apr., 1904.

Extensive list of described species.

New: *Euparyphus obliquus*, *Anthrax larvaei*.

European reported: *Pyrellia anca* ZETT.

Insects Injurious to Stock in the Vicinity of the Gulf Biologic Station.

In Bull. No. 44, Div. of Ent., 57-60, 1904.

A few Tabanidæ mentioned; no new species.

Tabanidæ of the Western United States and Canada. *Ohio Naturalist*, v, 217-249; Dec., 1904.

Keys to genera and species. New species: *Chrysops coquilletti*, *Snowicellus* (n. gen.) *atratus*, *Tabanus flavidus*, *laticeps*, *laticornis*, *osburni*, *productus*; some new synonymy.

#### Johnson, C. W.

Some Notes and Descriptions of Four New Diptera. *Psyche*, xi, 15-20; Feb., 1904.

New: *Tabanus whitneyi*, *Oncodes albiventris*, *Argyra aldrichi*, *Alophora magnapennis*.

*Tabanus politus* changed to *hinci*, on account of preoccupation.

Several important notes.

When to Collect Tabanidæ. *Psyche*, xi, 35; Apr., 1904.

List of species collected at Riverton, N. J.; some other notes; no new species.

Some of the Diptera to be collected during April and May. *Psyche*, xi, 37, 38; Apr., 1904.

General notes; no new species.

A Supplementary List of the Diptera of New Jersey. *Ent. News*, xv, 157-163; May, 1904.

Supplementary to the Smith Catalogue; no new species.

#### Knab, Frederick.

The Epistomal Appendages of Mosquito Larvæ. *Jour. N. Y. Ent. Soc.*, xii, 175-177, 1904.

#### Ludlow, C. S.

Mosquito Notes. *Canad. Ent.*, xxxvi, 233-236; Aug., 1904.

New: *Grahamia de-Niedmannii*.

#### McCracken, Isabel.

Anopheles of California, with Description of a New Species. *Ent. News*, xv, 9-14, 1 pl.; Jan., 1904.

New: *Anopheles franciscanus*.

#### Melander, A. L.

Notes on Stratiomyidæ. *Canad. Ent.*, xxxvi, 14-24 and 53, 54; Jan. and Feb., 1904.

New: *Sargus terranus*. Several tables of species, and other matter.

Additional Notes on Nematelus. *Psyche*, xi, 33, 34; Apr., 1904.

No new species.

#### Osburn, R. C.

The Diptera of British Columbia: The Syrphidæ. *Canad. Ent.*, xxxvi, 213-220 and 257-262; Aug. and Sept., 1904.

List of 78 species; none new.

**Slingerland, M. V. and Johnson, Fred.**

A New Grape Enemy; the Grape Blossom-Bud Gnat. Bull. 224, Cornell Expt. Station, p. 71; Nov., 1904.

An undetermined Cecidomyid; habits described.

**Smith, John B.**

Report on the Mosquito Investigation. Annual Report N. J. Expt. Station for 1903, published 1904, pp. 645-659.

No new species.

Notes on the Life History of *Culex dupreei* Coq. Ent. News, xv, 49-51, 1 pl.; Feb., 1904.

No new species.

Notes on Some Mosquito Larvæ found in New Jersey. Ent. News, xv, 145-152, 1 pl.; May, 1904.

No new species.

The Common Mosquitoes of New Jersey. Bull. No. 171, N. J. Expt. Station, 1904; 40 pp., 12 plates and some text figures.

Valuable for biology; no new species.

**Snodgrass, Robt. E.**

The Terminal Abdominal Segments of Female Tipulidæ. Jour. N. Y. Ent. Soc., xi, 177-188, 2 pl.; Dec., 1903.

The Hypopygium of the Tipulidæ. Trans. Amer. Ent. Soc., xxx, 179-236, 11 pl.; Aug., 1904.

The Hypopygium of the Dolichopodidæ. Proc. Cal. Acad. Sci., 3d ser., III, No. 10, pp. 273-288, 4 pl.; Sept., 1904.

The three preceding papers are purely anatomical, but not less valuable for classification, as a large number of genera are compared in each group.

**Snow, F. H.**

Lists of Coleoptera, Lepidoptera, Diptera and Hemiptera collected in Arizona by the Entomological Expeditions of the University of Kansas in 1902 and 1903. Kans. Univ. Sci. Bull., May, 1904, Vol. II. Diptera on pp. 341-346; 201 species, none new.

**Speiser, P.**

Typenuntersuchungen an Hippobosciden. Zeitsch. f. syst. Hym. und Dipterologie, iv, 82-89; March, 1904.

Type of *Olfersia sulcifrons* THOMSON is referred to *Pseudolfersia*.

Zur Nomenclatur Blutsaugender Dipteren Amerikas. Insekten-Börse, 1904, 148, brief notice.

On account of preoccupation, *Simulium cinereum* BELLARDI is changed to *tephrodes*, and *Culex affinis* ADAMS to *pæus*.

**Stein, P.**

Die Amerikanischen Anthomyiden des Königlichen Museums für Naturkunde zu Berlin und des Ungarischen National Museums zu Budapest. Annales Musei Nationalis Hungarici, II, 414-495, 1904.

Mostly South American. New from N. A.: *Aricia pulvillata*, *Trichopticus spiniger*, *Hylemyia spinilamellata* and *carnosiaformis*, *Carnosia compressa*.

European from N. A.: *Aricia serva* MEIG., *Spilogaster obscuripes* ZETT., *Spilogaster anceps* ZETT., *Homalomyia ornata* MEIG.

South American from N. A.: *Spilogaster gemina* WIED., *Limnophora serva* WIED.



**Washburn, F. L.**

Eighth Report of the State Entomologist of Minnesota, for the year 1903 (pub. Jan., 1904). 184 pp., with plates, etc.

Article on Hessian fly. pp. 1-11.

Ninth Report of the State Entomologist of Minnesota, for the year 1904 (pub. Dec., 1904). 197 pp., with col. plate, etc.

P. 185, notes on mostly undetermined Cecidomyid gall-makers on bass-wood, soft maple and box elder; p. 188, fumigation for *Diplosis violicola* Coq.

**Webster, F. M.**

Studies of the Habits and Development of Neocarata rhodophaga Coq. Bull. Ill. State Lab. Nat. Hist., VIII, 15-25, 1 col. pl.; Feb., 1904.

**Wood, Clarence M.**

Experiments in destroying Black Flies. Bull. 112, N. H. Expt. Station; May, 1904.

The species is *Simulium venustum* SAY.

**Weeks, Henry Clay.**

First Anti-Mosquito Convention. Brooklyn, 1904. 84 pp.

Several general papers.

Bulletin No. 1, National Mosquito Extermination Society. Nov., 1904. 25 pp. and supplements.

**Whitney, C. P.**

Descriptions of Some New Species of Tabanidæ. Canad. Ent., XXXVI, 205-207; July, 1904.

New: *Chrysops lupus* and *pikci*, *Tabanus benedictus* and *typhus*.

## ADDITIONS AND CORRECTIONS.

The following papers are to be added to the bibliography:

**Coquillett, D. W.**

Papers from the Hopkins-Stanford Galapagos Expedition, 1898-1899. Diptera. Wash. Acad. Sci., III, 371-379; Nov. 7, 1901.

Contains a small list of Diptera: one of the new species, *Canacc snodgrassi*, was afterward reported from N. A., and will be found in the catalogue.

**Marten, John.**

New Tabanidæ. Canadian Entomologist, XIV, 210-212; Nov., 1882.

Contains the following four species (synonymy by Hine): *Tabanus californicus* (syn. of *epistates*), *T. hamophorus* (syn. of *sonomensis*), *T. captonis* (of which *comastes* is a syn.), and *T. centron* (from Col.; the second form of *rhombicus*, in Osten Sacken's Western Diptera, 218).

**Piper, C. V., and Doane, R. E.**

Insects injurious to Currants and Gooseberries. Bull. 36, Wash. Ex. Sta.; May, 1898.

Biology of *Rhagoletis ribicola* and *Epochra canadensis*; the entries are included in the catalogue.

**Ricardo, Miss.**

Several articles on Bigot's and Walker's types of Tabanidæ, in Annals and Mag. of Nat. History, ser. 7, VIII.

Not seen; no new species.

Corrections:

Page 6, omit Lonchæidæ from the list of families, as it was finally united with Sapromyzidæ.

Page 8, third line from bottom, for *opposita* read *opposita*.

Page 115, third line from top, for *Chiconomus* read *Chironomus*.

Pages 134 and 136, for *Ædes* and *Ædcomyia* read *Aedes* and *Aedcomyia*.

Page 264, *Deromyia cuantlensis* should be *cuantlensis*, and the locality Cuantla, Mex., wherever occurring, should be changed to Cuautla; see Townsend, Annals and Mag. Nat. Hist., ser. 6, XX, 279.

Page 287, *Agonosoma tenr* should be *tenrum*.

Page 319, add the following species under *Leptopeza*:

*disparilis* MELANDER, Monogr. Empid., 258, f. 69.—Cal., Ida.

Page 321, for *Empis arobaticus* read *Empis aërobaticus*.

Page 664, line 6, *Limnophora sacra* had already been reported by Van der Wulp under the genus *Leucomelina*.

## INDEX OF FAMILIES.

- ACANTHOMERID.E, 209  
 AGROMYZID.E, 645  
 ANTHOMYID.E, 534  
 APIOCERID.E, 253  
 ASILID.E, 253  
 BIBIONID.E, 164  
 BLEPHAROCERID.E, 171  
 BOMBYLIID.E, 221  
 BORBORID.E, 574  
 CECIDOMYID.E, 151  
 CHIRONOMID.E, 107  
 CONOPID.E, 407  
 CULICID.E, 119  
 CYRTID.E, 219  
 DEXID.E, 495  
 DIOPSID.E, 622  
 DIXID.E, 105  
 DOLICHOPODID.E, 283  
 DROSOPHILID.E, 639  
 EMPIDID.E, 310  
 EPHYRID.E, 623  
 GEOMYZID.E, 644  
 HELOMYZID.E, 571  
 HETERONEURID.E, 570  
 HIPPOBOSCID.E, 653  
 LEPTID.E, 210  
 LONCHOPTERID.E, 333  
 MICROPEZID.E, 614  
 MUSCID.E, 515  
 MYCETOPHILID.E, 138  
 MYDAID.E, 250  
 NEMESTRINID.E, 218  
 NYCTERIBID.E, 657  
 ŒSTRID.E, 413  
 ORPHNEPHILID.E, 173  
 ORTALID.E, 587  
 OSCINID.E, 631  
 PHORID.E, 334  
 PHYCODROMID.E, 577  
 PIPUNCULID.E, 342  
 PLATYZEID.E, 340  
 PSILID.E, 621  
 PSYCHODID.E, 105  
 RHOPALOMERID.E, 599  
 RHYPHID.E, 172  
 SAPROMYZID.E, 581  
 SARCOPHAGID.E, 509  
 SCATOPHAGID.E, 564  
 SCENOPINID.E, 249  
 SCIOMYZID.E, 577  
 SEPSID.E, 618  
 SIMULID.E, 168  
 STRATIOMYID.E, 173  
 SYRPHID.E, 344  
 TABANID.E, 192  
 TACHINID.E, 419  
 THEREVID.E, 246  
 TIPULID.E, 77  
 TRYPETID.E, 600



## INDEX OF GENERA.

Synonyms and a few other names inserted merely for convenience of reference are in italics.

- Ablautatus*, 255  
 Ablautus, 255  
 Acanthina, 191  
 Acanthomera, 209  
 Acaulona, 426  
 Acemyia, 467  
 Achætoneura, 462  
 Achalcus, 294  
 Acecephala, 566  
 Acidia, 603  
 Acidogona, 609  
 Aciura, 607  
 Acnemia, 142  
 Acontistoptera, 340  
 Acrotrichus, 239  
 Acrocera, 220  
 Acrochaeta, 176  
*Acrochordonodes*, 397  
*Acroglossa*, 479  
 Acrometopa, 653  
*Acromyia*, 317  
 Aeronacantha, 503  
 Acrosticta, 595  
 Acrotænia, 608  
*Acrotaxa*, 601  
 Actia, 432  
 Actina, 174  
 Actora, 578  
 Admontia, 428  
 Aedeomyia, 136  
 Aedes, 134  
 Enigmatias, 340  
 Agathomyia, 340  
*Agathon*, 171  
 Agonosoma, 286  
 Agromyza, 647  
 Aldrichia, 224  
*Allocotus*, 243  
 Allodia, 145  
*Allaoncurus*, 298  
 Allognosta, 174  
 Allograptæ, 368  
 Allophyla, 572  
 Allotrichoma, 624  
 Alophora, 423  
 Amalopsis, 93  
*Amedoria*, 429  
 Amiota, 640  
 Amobia, 482  
 Amphicnephes, 588  
 Amphicosmus, 238  
*Ampyx*, 267  
 Anacampta, 592  
 Anaclina, 142  
 Analcocerus, 176  
 Anarmostus, 275  
 Anastæchus, 237  
 Anastrepha, 601  
*Ancyclosyrphus*, 364  
*Ancylogaster*, 442  
*Andrenosoma*, 269  
 Anepsomyia, 293  
*Anepsius*, 293  
*Angiorhina*, 482  
 Anisia, 431  
 Anisomera, 91  
*Anisopogon*, 262  
 Anisotamia, 235  
 Anopheles, 121  
 Anorostoma, 572  
*Anthoica*, 437, 655  
 Anthomyia, 548  
 Anthomyza, 645  
 Anthophilina, 645  
 Anthracophaga, 632  
 Anthrax, 228  
 Antocha, 83  
 Aochletus, 191  
 Apatolestes, 194  
*Aphantotimus*, 296  
 Aphestia, 268  
 Aphiochaeta, 335  
 Aphæbantus, 242  
 Aphria, 450  
 Aphrosylus, 298  
 Apinops, 438  
 Apiocera, 253  
 Apocephalus, 338  
 Apomydas, 253  
*Aporia*, 435  
 Appeleia, 221  
*Apterina*, 574  
 Aptilotus, 574  
*Aptorthus*, 287  
 Araba, 476  
*Archilestes*, 256  
 Archilestris, 256  
 Archytas, 485  
 Arcobiella, 650  
 Aretophila, 383  
 Ardoptera, 316  
 Argyra, 291  
*Argyromima*, 430  
*Argyromaba*, 221

- Argyrophylax*, 420, 464  
*Aricia*, 540  
*Arrenopus*, 447  
*Arribalzagia*, 123  
*Arthroceras*, 213  
*Arthroclacta*, 540  
*Arthropeas*, 211  
*Arthrostylum*, 214  
*Ascia*, 375  
*Asemosyrphus*, 394  
*Asilus*, 282  
*Asindulum*, 139  
*Asphondylia*, 156  
*Aspidoptera*, 657  
*Aspistes*, 167  
*Asteia*, 640  
*Astrophanes*, 227  
*Asynapta*, 161  
*Asyndetus*, 286  
*Atacta*, 449  
*Atarba*, 82  
*Ateloglossa*, 502  
*Atemnocera*, 376  
*Atherix*, 217  
*Athyroglossa*, 626  
*Atomosia*, 268  
*Atonia*, 268  
*Atractia*, 274  
*Atropharista*, 450  
*Atrophopalpus*, 475  
*Atrophopoda*, 474  
*Atylotus*, 200  
*Aulacigaster*, 650  
*Automola*, 588  
*Avihospita*, 523  
*Azelia*, 537  
*Baccha*, 354  
*Balioptera*, 644  
*Baryplegma*, 610  
*Bathydextia*, 498  
*Baumhaueria*, 481  
*Belvosia*, 449  
*Beris*, 173  
*Berismyia*, 174  
*Bertieria*, 154  
*Beskia*, 443  
*Besseria*, 442  
*Biblio*, 165  
*Bibiocephala*, 171  
*Bicellaria*, 329  
*Biomyia*, 448  
*Bittacomorpha*, 95  
*Blacodes*, 266  
*Blax*, 266  
*Blepharepium*, 263  
*Blepharipeza*, 472  
*Blepharipoda*, 464  
*Blepharocera*, 171  
*Blepharoneura*, 607  
*Blepharoprocta*, 320  
*Blepharoptera*, 573  
*Bogeria*, 417  
*Bolbomyia*, 213  
*Boletina*, 142  
*Bolitophila*, 147  
*Bolomyia*, 453  
*Bombyliomyia*, 491  
*Bombylius*, 235  
*Borborus*, 575  
*Boreomyia*, 316  
*Brachiomyia*, 134  
*Brachycampta*, 145  
*Brachycoma*, 477  
*Brachydeutera*, 628  
*Brachymyia*, 402  
*Brachyopa*, 375  
*Brachyophyra*, 536  
*Brachypalpus*, 400  
*Brachypremna*, 96  
*Brachypteromyia*, 656  
*Brachystoma*, 320  
*Bremia*, 158  
*Bricinnia*, 590  
*Briciniella*, 590  
*Cacoxenus*, 652  
*Cænia*, 631  
*Callicera*, 347  
*Callimyia*, 341  
*Callinicus*, 262  
*Calliphora*, 519  
*Calliprobola*, 403  
*Callomyia*, 341  
*Callopietria*, 593  
*Calobata*, 616  
*Calodextia*, 507  
*Calotarsa*, 341  
*Camaronia*, 501  
*Campeprosopa*, 175  
*Campsicnemus*, 290  
*Camptocladus*, 115  
*Camptoneura*, 591  
*Campylomyza*, 153  
*Cardiacephala*, 615  
*Caricea*, 559  
*Carphotricha*, 608  
*Cartosyrphus*, 351  
*Catabomba*, 363  
*Cecidomyia*, 158, 161  
*Celatoria*, 433  
*Cellia*, 123  
*Ccnosoma*, 439  
*Centor*, 632  
*Cephalia*, 590  
*Cephenomyia*, 415  
*Cephenus*, 244  
*Ceratititis*, 600  
*Ceratobarys*, 635  
*Ceratomyiella*, 427  
*Ceratomyza*, 647  
*Ceratopogon*, 107  
*Ceraturgopsis*, 258  
*Ceraturgus*, 258  
*Ceria*, 406  
*Ceriogaster*, 400  
*Ceromasia*, 420, 465  
*Ceroplatus*, 139  
*Cerotainia*, 268  
*Ceroxys*, 592  
*Cestonia*, 475  
*Chaetocelia*, 587



- Chatogredia, 481  
 Chatogena, 462  
 Chatoglossa, 446  
 Chatolyga, 420  
*Chatolyga*, 473  
 Chatona, 506  
*Chatopelcteria*, 484  
 Chatophleps, 432  
 Chatoplagia, 475  
 Chatopsis, 597  
 Chætosa, 566  
*Chatotachina*, 469  
 Chalarus, 342  
 Chalomyia, 354  
 Chamæsyrrhus, 374  
 Charadrella, 546  
 Chasmatonotus, 119  
*Chauna*, 191  
 Chilisia, 351  
 Chionea, 86  
 Chiromantis, 315  
 Chiromyza, 210  
 Chironomus, 111  
 Chirosia, 559  
*Chloropisca*, 633  
 Chloroprocta, 518  
 Chlorops, 632  
 Cholomyia, 504  
 Chordonota, 180  
 Choristomma, 540  
*Chortophila*, 554  
 Chrysochlamys, 400  
 Chrysochlora, 180  
 Chrysochroma, 178  
 Chrysogaster, 348  
 Chrysoomyia, 516  
*Chrysoomyia*, 180  
 Chrysoomyza, 595  
*Chrysonotus*, 178  
 Chrysopila, 215  
 Chrysops, 195  
 Chrysotimus, 294  
 Chrysotoxum, 347  
 Chrysotus, 289  
 Chyliza, 621  
 Cistogaster, 421  
 Cladochæta, 644  
 Cladura, 83  
*Clasiopa*, 626  
 Clausicella, 430  
*Clavator*, 265  
 Clinocera, 316  
 Clinodiplosis, 161  
 Clinogaster, 442  
*Clinoncura*, 503  
 Clinopera, 533  
 Clista, 429  
 Clistomorpha, 440  
 Clitellaria, 189  
 Clusia, 571  
*Clytia*, 440  
 Clytiomyia, 440  
*Cnephalia*, 479  
 Cœloglutus, 296  
 Cœlometopia, 598  
 Cœlomyia, 539  
 Cœlopa, 577  
 Cænomyia, 211  
 Cœnosia, 560  
 Coloboneura, 314  
*Comastes*, 237  
 Comatacta, 448  
 Commoptera, 340  
 Compsomyia, 516  
 Comyops, 508  
*Conchyliastes*, 124  
 Coniceps, 598  
 Conicera, 338  
*Conophorus*, 238  
 Conops, 407  
 Contarinia, 158  
 Copestylum, 376  
 Cophura, 266  
 Coquillettia, 221  
 Cordyligaster, 506  
 Cordylura, 565  
 Corethra, 136  
 Corethrella, 138  
*Coronimyia*, 443  
 Corynoneura, 111  
*Crassiseta*, 636  
 Cricotopus, 116  
 Crioprora, 401  
 Criorhina, 402  
*Cryptincura*, 348  
 Cryptochaetum, 650  
 Cryptolabis, 83  
 Cryptomeigenia, 427  
 Cryptopalpus, 491  
 Ctenophora, 97  
 Culex, 126  
 Cuphocera, 483  
 Cuterebra, 417  
 Cyclolepteron, 123  
 Cylindrotoma, 94  
 Cynipimorpha, 191  
 Cynomyia, 518  
*Cynorhina*, 402  
 Cyphomyia, 181  
 Cyrtoma, 329  
 Cyrtometopa, 597  
*Cyrtoncura*, 531  
 Cyrtoncurina, 533  
 Cyrtonotum, 641  
 Cyrtophlæba, 445  
 Cyrtopogon, 259  
 Cyrtosoma, 508  
*Dactylomyia*, 293  
 Dæochæta, 471  
 Dalmannia, 411  
 Damalis, 255  
 Dasyllis, 270  
 Dasyneura, 155  
 Dasyopogon, 267  
*Daulopogon*, 260  
*Degcceria*, 429  
 Deinocerites, 134  
 Dejeania, 492  
 Dendromyia, 136  
 Dermatobia, 419

- Deromyia, 264  
 Demoticus, 471  
 Desmatomyia, 243  
 Desmatoneura, 242  
 Desmometopa, 649  
 Dexia, 501  
 Dexiopsis, 562  
 Dexiosoma, 503  
*Dexodes*, 465  
 Diachlorus, 199  
 Diacrita, 591  
 Diadocidia, 148  
*Dialineura*, 248  
 Dialysis, 213  
 Dialyta, 562  
 Diamesa, 117  
 Diaphorus, 288  
 Diastata, 644  
 Dichata, 623  
 Dichelaccra, 199  
 Dichocera, 481  
 Dicus, 192  
 Dicolonus, 258  
 Dicranomyia, 78  
 Dicranoptycha, 82  
 Dicranota, 92  
 Dicranus, 255  
 Didea, 362  
 Didyma, 435  
 Dilophus, 167  
*Dimorphomyia*, 421  
 Dioctria, 259  
*Diognites*, 264  
 Diomonus, 141  
 Dionaea, 440  
 Diostracus, 295  
 Diotrepha, 82  
 Dipalta, 227  
*Diplocentra*, 641  
*Diplosis*, 158  
 Diplotox, 633  
 Discobola, 78  
*Discoccephala*, 261  
 Discocerina, 626  
 Discomyza, 624  
 Distichona, 446  
 Ditomyia, 138  
 Dixia, 105  
 Dizonias, 257  
 Docosia, 143  
 Dolichogaster, 250  
 Dolichoglossa, 554  
 Dolichomyia, 244  
 Dolichopeza, 96  
 Dolichopus, 298  
 Doliosyrphus, 383  
*Doros*, 369  
 Doryclus, 267  
 Drapetis, 310  
*Drepanoglossa*, 443  
*Drepanomyia*, 295  
 Drosophila, 641  
 Drymeia, 535  
 Dryomyza, 578  
 Dynatosoma, 147  
 Eccritotia, 274  
 Echinodexia, 496  
 Echinomyia, 487  
 Ecthodopa, 259  
 Ecitomyia, 340  
 Eclimus, 241  
 Ectecephala, 634  
 Ecthypus, 250  
*Efferia*, 275  
*Eggonia*, 421  
*Elachipalpus*, 483  
 Elachiptera, 636  
 Elaphropeza, 311  
 Elephantomyia, 81  
 Eliozeta, 422  
 Elliponeura, 631  
 Elliptera, 82  
 Empeda, 86  
*Emphanopteryx*, 427  
*Empheria*, 141  
 Emphysomera, 273  
 Empimorpha, 320  
 Empis, 321  
 Enicopus, 621  
*Ennyomma*, 426  
*Enoplempis*, 321  
 Ensina, 610  
 Epacmus, 242  
 Epalpus, 489  
 Ephydra, 629  
*Ephygrobia*, 624  
*Epibatcs*, 241  
 Epicypta, 143  
 Epidapus, 148  
 Epigrymyia, 443  
 Epiphragma, 88  
 Epiplatea, 598  
 Epitriptus, 281  
 Epochra, 603  
 Erax, 275  
 Eremomyia, 554  
 Eretmoptera, 119  
*Erigone*, 453  
 Eriocera, 91  
 Erioptera, 84  
 Eriphia, 535  
*Eristalinus*, 384  
 Eristalis, 384  
*Eristalomyia*, 384  
*Eristicus*, 278  
 Ervia, 437  
 Erythrandra, 515  
 Euantha, 505  
 Euaresta, 611  
*Eucratomyia*, 374  
 Eucressia, 242  
 Eucnephalia, 480  
*Eucorthra*, 138  
 Eudexia, 498  
*Eugeniomyia*, 375  
 Eugnoriste, 148  
*Euhybys*, 318  
 Eulasiona, 428  
 Eulonchus, 221  
*Eumacronychia*, 476

- Eumetopia, 598  
 Eumythyria, 438  
 Euastrorhasia, 439  
 Euparyphus, 188  
 Eupeodes, 362  
 Euphorocera, 459  
 Eurhymia, 392  
 Eurhinomallota, 402  
 Eurigaster, 421  
 Eurina, 635  
 Eurosta, 609  
 Eurycephala, 594  
 Euryceromyia, 432  
 Eurycnemus, 117  
 Euryneura, 189  
 Euryomma, 540  
 Euscopolia, 424  
 Eusiphona, 650  
 Eustalomyia, 553  
 Eutachina, 469  
 Eutanypus, 119  
 Eutarsus, 290  
 Euthera, 469  
 Euthyneura, 328  
 Euthyprosopa, 478  
 Eutolmus, 280  
 Eutreta, 608  
 Eutrixia, 440  
 Euxesta, 595  
 Evibrissa, 441  
 Exaireta, 174  
 Exechia, 145  
 Exepacmus, 238  
 Exocheila, 375  
 Exoprosopa, 225  
 Exoptata, 225  
 Exorista, 455  
 Exoristoides, 454  
 Fabricia, 421, 448, 487  
 Frontina, 462  
 Gædiophana, 484  
 Gædiopsis, 480  
 Gastrophilus, 413  
 Gastrops, 624  
 Gaurax, 637  
 Geminaria, 238  
 Geranomyia, 77  
 Geron, 245  
 Ginglymyia, 444  
 Glaphyoptera, 144  
 Glaurotricha, 351  
 Gloma, 327  
 Glossigona, 412  
 Glutops, 213  
 Gnamplopsilopus, 286  
 Gnophomyia, 87  
 Gonia, 478  
 Goniochaeta, 446  
 Goniomyia, 85  
 Goniops, 104  
 Gonirhynchus, 412  
 Gnoriste, 142  
 Grabhamia, 132  
 Graphomyia, 528  
 Griphoneura, 583  
 Gymnochaeta, 453  
 Gymnoclytia, 421  
 Gymnodexia, 498  
 Gymnomma, 482  
 Gymnopa, 636  
 Gymnophania, 426  
 Gymnophora, 339  
 Gymnoprosope, 476  
 Gymnopternus, 305  
 Gymnosoma, 422  
 Gymnostylia, 433  
 Gynoplistia, 91  
 Habropogon, 262  
 Hamagogus, 136  
 Hamatobia, 530  
 Hamatopota, 199  
 Hadromyia, 401  
 Hammerschmidtia, 375  
 Hammomyia, 554  
 Haplegis, 632  
 Heleodromia, 315  
 Helicobia, 510  
 Heligmoneura, 281  
 Helobia, 86  
 Helomyza, 571  
 Helophilus, 392  
 Hemerodromia, 314  
 Hemeromyia, 649  
 Hemichlora, 531  
 Hemimasicera, 465  
 Hemithrixion, 426  
 Hemyda, 442  
 Hercostomus, 306  
 Hermetia, 175  
 Hesperinus, 164  
 Hesperodes, 151  
 Hesperomyia, 509  
 Heteracanthia, 173  
 Heterochaeta, 578  
 Heterochroa, 571  
 Heteromyia, 110  
 Heteromyza, 574  
 Heteroneura, 570  
 Heteropogon, 262  
 Heteropterina, 444  
 Heterostylum, 237  
 Hexacheta, 601  
 Hexamitocera, 567  
 Hilara, 325  
 Hilarella, 476  
 Hilarimorpha, 218  
 Himantostoma, 424  
 Himaroëssa, 590  
 Hippelates, 635  
 Hippobosca, 653  
 Hirmonneura, 218  
 Histiodroma, 177  
 Holcocephala, 261  
 Hohnbergia, 347  
 Holoclera, 328  
 Holopogon, 261  
 Holorusia, 99  
 Homalomyia, 537  
 Homodexia, 509  
 Homogenia, 426

- Hoplogaster, 559  
 Hormoepiza, 327  
 Houghia, 469  
 Howardina, 135  
 Hyadesimyia, 533  
 Hyadina, 627  
*Hyalomyia*, 423  
 Hyalomycles, 439  
 Hyalurgus, 436  
 Hybos, 318  
 Hydrellia, 627  
*Hydrina*, 627  
 Hydromyza, 567  
 Hydrophoria, 551  
 Hydrophorus, 296  
 Hydrotea, 534  
 Hyetodesia, 540  
*Hygrocleuthus*, 298  
 Hylemyia, 551  
 Hylephila, 557  
 Hyperalonia, 224  
 Hypercchia, 269  
 Hypertrophocera, 462  
 Hyphantrophaga, 454  
 Hypocera, 335  
 Hypochæta, 436  
 Hypocharassus, 295  
 Hypoderma, 416  
 Hypostena, 433  
 Hystrichodexia, 497  
 Hystricia, 491  
 Hystrisiphona, 496  
 Ictericæ, 610  
 Idana, 591  
 Idioplasta, 95  
*Illigeria*, 495  
 Ilythea, 625  
 Ischnomyia, 644  
*Ischyrosyrphus*, 364  
 Isoglossa, 443  
*Isopenthes*, 228  
*Itamus*, 281  
 Iteaphila, 328  
 Janthinosoma, 124  
 Joblotia, 134  
 Johnsonia, 515  
 Jurinella, 494  
 Jurinia, 493  
*Labidigaster*, 440  
*Laccoprosopa*, 477  
 Lachnomma, 474  
 Lampremphis, 327  
 Lampria, 270  
*Laparus*, 263  
 Laphria, 272  
 Laphystia, 257  
 Lasia, 221  
*Lasiargyra*, 291  
 Lasiona, 428  
 Lasioneura, 432  
 Lasiophthicus, 363  
 Lasiopogon, 260  
 Lasiops, 543  
 Lasioptera, 153  
 Lasiosoma, 141  
 Lastaurus, 265  
*Lathyrophthalmus*, 384  
 Lauxania, 583  
 Leia, 143  
 Lepidanthrax, 227  
*Lepidomyia*, 348  
 Lepidophora, 240  
 Lepidosclaga, 198  
 Lepromyia, 348  
 Leptis, 214  
*Leptochilus*, 242  
 Leptocorypha, 309  
 Leptoda, 505  
 Leptogaster, 253  
 Leptomorphus, 143  
 Leptomydas, 250  
 Leptopeza, 319  
 Leptorhethum, 287  
 Leptoxys, 601  
 Leria, 573  
 Leskia, 437  
 Leskiomima, 438  
 Lestodiplosis, 161  
 Lestomyia, 265  
*Lestophonus*, 650  
 Lestremia, 153  
 Leucomelina, 547  
 Leucophenga, 639  
 Leucopis, 652  
 Leucostola, 291  
 Leucostoma, 438  
 Leucozona, 362  
 Liancalus, 298  
 Limnobia, 80  
 Linnophila, 89  
 Limnophora, 546  
 Limnospila, 562  
 Limosina, 574  
 Linnæmyia, 451  
 Liogma, 94  
 Lipochæta, 631  
*Liponcura*, 171  
 Lipoptena, 653  
 Lispa, 563  
 Lispidea, 430  
*Lispocephala*, 562  
*Lissa*, 622  
 Litanomyia, 315  
*Lobiptera*, 651  
*Loewia*, 421  
*Loewiella*, 266  
 Louchæa, 581  
 Lonchoptera, 333  
 Longurio, 99  
 Lophonotus, 283  
*Lophosia*, 421  
 Lophoteles, 192  
 Lordotus, 238  
 Loxocera, 621  
 Lucilia, 520  
 Lutzia, 126  
 Lycastirrhyncha, 390  
*Lydella*, 421, 455  
 Lynchia, 655  
 Lyroncurus, 288

- Macellocerus*, 307  
*Machimus*, 281  
*Macquartia*, 435  
*Macrocera*, 147  
*Macroceromys*, 212  
*Macromeigenia*, 453  
*Macrometopa*, 503  
*Macronychia*, 482  
*Macrosargus*, 180  
*Macrostomus*, 330  
*Madiza*, 618  
*Mallophora*, 278  
*Mallota*, 394  
*Mancia*, 227  
*Manota*, 151  
*Mansonia*, 134  
*Mantipeza*, 314  
*Masicera*, 465  
*Masiphya*, 448  
*Masipoda*, 455  
*Masistylum*, 450  
*Mauromyia*, 427  
*Mayetiola*, 157  
*Medeterus*, 295  
*Medina*, 429  
*Megacyttarus*, 320  
*Megalemyia*, 209  
*Megamerina*, 622  
*Megametopon*, 382  
*Megaparia*, 501  
*Megapoda*, 267  
*Megaprosopus*, 503  
*Megarhinus*, 123  
*Megerlea*, 495  
*Meghyperus*, 317  
*Megistocera*, 96  
*Megistopoda*, 657  
*Megophthalma*, 567  
*Meigenia*, 455  
*Meigeniella*, 427  
*Melaleuca*, 505  
*Melanoconion*, 132  
*Melanodexia*, 508  
*Melanophora*, 501  
*Melanophrys*, 450  
*Melanosphora*, 421  
*Melanostoma*, 360  
*Meliera*, 592  
*Melithreptus*, 372  
*Melophagus*, 656  
*Merapioidus*, 402  
*Meriania*, 427  
*Merodon*, 396  
*Meromacrus*, 390  
*Meromyza*, 632  
*Merosargus*, 177  
*Mesembrina*, 527  
*Mesembrinella*, 518  
*Mesogramma*, 370  
*Mesografta*, 370  
*Mesorhaga*, 287  
*Metachæta*, 475  
*Metacosmus*, 243  
*Metadexia*, 506  
*Metadoria*, 436  
*Metapelastoneurus*, 308  
*Metaphragma*, 246  
*Metaphyto*, 454  
*Metaplagia*, 445  
*Metatrichia*, 249  
*Metopia*, 476  
*Metopina*, 339  
*Metoponia*, 174  
*Metricnemus*, 116  
*Microchætina*, 509  
*Microchira*, 495  
*Microchrysa*, 180  
*Microdon*, 344  
*Micropalpus*, 421, 451  
*Micropeza*, 615  
*Microphorus*, 328  
*Microphthalma*, 481  
*Microprosopa*, 567  
*Microstyfium*, 256  
*Microtrichomma*, 452  
*Milesia*, 403  
*Milichia*, 651  
*Miltogramma*, 447  
*Mixogaster*, 347  
*Mixtemyia*, 403  
*Mochlonyx*, 136  
*Mochlosoma*, 496  
*Mochtherus*, 281  
*Molobrus*, 148  
*Molophilus*, 85  
*Molynocelia*, 603  
*Mongoma*, 86  
*Morellia*, 526  
*Morinia*, 508  
*Morphomyia*, 502  
*Mosillus*, 636  
*Musca*, 527  
*Muscina*, 531  
*Muscopteryx*, 474  
*Mycetaulus*, 620  
*Mycetobia*, 138  
*Mycetophila*, 146  
*Mycothera*, 145  
*Mydaea*, 543  
*Mydas*, 250  
*Myelaphus*, 258  
*Myennis*, 593  
*Myiocera*, 500  
*Myiochrysa*, 180  
*Myiolepta*, 354  
*Myiomima*, 497  
*Myiopharus*, 462  
*Myiophasia*, 426  
*Myioscotiptera*, 498  
*Myiospila*, 531  
*Myobia*, 437  
*Myopa*, 412  
*Myothyria*, 467  
*Myrmecomyia*, 590  
*Mystacella*, 454  
*Mystacomyia*, 455  
*Mythicomomyia*, 218  
*Myzevorista*, 455  
*Myxosargus*, 188  
*Napomyza*, 646

- Nausigaster, 350  
 Neera, 430  
 Neaspilota, 610  
 Nebritus, 246  
 Nematoproctus, 292  
*Nemochata*, 485  
 Nemopoda, 619  
 Nemorea, 452  
 Nemotelus, 189  
 Neoscasia, 375  
 Neocerata, 156  
 Neochauna, 191  
 Neocota, 333  
 Neocemphera, 141  
 Neocristicus, 278  
 Neocxaireta, 174  
 Neoglaphyoptera, 144  
 Neoidiotypa, 508  
 Neoitamus, 281  
 Neolaparus, 263  
*Necomochtherus*, 281  
 Neophoneus, 273  
*Neoplasta*, 314  
*Ncoptera*, 439  
 Neorondania, 181  
 Neotractoera, 471  
 Nephrocerus, 342  
 Nerius, 614  
 Neurigona, 293  
 Neuroctena, 578  
 Nicoles, 266  
 Nostima, 627  
 Nothomyia, 188  
 Nothosympyenus, 293  
 Nothra, 219  
 Notiphila, 623  
 Notogramma, 594  
 Nusa, 269  
 Nycteribia, 657  
 Ocnæa, 221  
 Ochthera, 628  
 Ochtheroidea, 628  
 Ochthiphila, 652  
 Ocydromia, 319  
 Ocyptamus, 356  
 Ocyptera, 450  
*Ocypterosipho*, 443  
 Odinia, 651  
*Odontocera*, 647  
*Odontomera*, 599  
 Odontomyia, 182  
 Odontopoda, 144  
 Oeacta, 119  
 Oeothea, 572  
 Edalea, 319  
 Edaspis, 606  
 Edemagena, 417  
*Edicarena*, 604  
 Edopa, 594  
*Edoparca*, 578  
 Estrophasia, 439  
 Estrus, 415  
 Olbiogaster, 173  
*Olenochata*, 446  
 Olfersia, 655  
 Oligotrophus, 156  
*Omegasyrphus*, 344  
 Ommatius, 273  
 Oncodes, 219  
 Oncodocera, 239  
 Oncomyia, 411  
 Onesia, 509  
*Opetiophora*, 635  
*Ophromyia*, 382  
 Ophyra, 536  
*Oplacantha*, 173  
*Oplisa*, 421, 495  
 Opomyza, 645  
 Opselius, 220  
 Opsidia, 476  
 Opsomyia, 568  
 Ophthalmomyia, 651  
 Oreogeton, 327  
 Oreothalia, 315  
 Orimarga, 82  
*Orimargula*, 83  
 Ornitheza, 653  
 Ornithoctona, 654  
 Ornithodes, 94  
 Ornithoica, 655  
 Ornithomyia, 653  
 Ornithopertha, 657  
 Orphnephila, 173  
 Ortalis, 592  
 Orthochæta, 567  
 Orthochile, 309  
 Orthocladius, 114  
*Orthonera*, 348  
*Orthoneruomyia*, 257  
 Oscinis, 637  
 Ospricocerus, 255  
 Ostracocœlia, 588  
 Oxycera, 190  
*Oxydcæria*, 506  
 Ozodiceromyia, 246  
 Pachycerina, 582  
 Pachychæta, 421  
 Pachygaster, 192  
 Pachymeria, 320  
 Pachyneurella, 339  
 Pachyophthalmus, 447  
 Pachyrhina, 97  
 Palloptera, 582  
 Paltostoma, 171  
 Paneryma, 599  
 Pangonia, 192  
*Panoplites*, 134  
 Pantarbes, 235  
 Panzeria, 453  
 Paracantha, 608  
*Parachæta*, 472  
 Paraclius, 307  
 Paracosmus, 243  
 Paradejeania, 493  
 Paradidyma, 474  
 Paradmontia, 428  
*Parafabricia*, 485  
*Parafrontina*, 462  
 Paragædia, 473  
 Paragorgopis, 594



- Paragus, 351  
 Parahypochæta, 436  
 Paralimna, 624  
 Parallelomma, 566  
*Paralucilia*, 516, 521  
 Paramintho, 509  
 Paranyia, 647  
 Paraphyto, 472  
 Paraplagia, 445  
 Paraprosena, 500  
*Pararchytas*, 487  
*Pararicia*, 531  
*Parasymmictus*, 218  
 Parasyntormon, 292  
 Paratissa, 626  
 Paratropesa, 86  
 Parepalpus, 491  
 Parephydra, 626  
*Parxorista*, 455  
*Parhydrophorus*, 296  
 Parodinia, 651  
 Parœdopa, 594  
 Parydra, 629  
 Peckia, 510  
 Pedicia, 93  
 Pegomyia, 558  
 Pelagomyia, 191  
 Pelatoneurus, 308  
 Pelatachina, 437  
 Pelecocera, 374  
 Peleteria, 484  
 Pelina, 628  
 Pelomyia, 628  
 Pelorempis, 138  
 Peloroceodes, 296  
 Penicillidia, 658  
 Pentacricia, 599  
 Pentoptera, 92  
 Penthosia, 475  
 Peratochætus, 571  
 Pericoma, 105  
 Peronyma, 605  
 Peteina, 446  
 Phalacrocera, 95  
 Phalacromyia, 382  
*Phasia*, 421  
*Phasioclista*, 426  
 Phasiops, 502  
*Phasiopteryx*, 439  
 Pheneus, 214  
 Philodicus, 282  
 Philopota, 220  
 Philorus, 172  
 Philygria, 627  
 Pholeomyia, 651  
*Phoncus*, 273  
 Phoneustica, 310  
 Phoniomyia, 136  
 Phora, 334  
 Phorantha, 422  
 Phorbia, 554  
 Phorichæta, 475  
 Phormia, 523  
 Phorocera, 460  
*Phorostoma*, 495  
 Phortica, 640  
*Phrissopoda*, 510  
 Phronia, 144  
 Phtbinia, 143  
 Phtthiria, 239  
 Phylæhus, 295  
 Phyllogaster, 559  
 Phyllolabis, 87  
 Phyllomydas, 252  
 Phyllomyza, 650  
 Physocephala, 408  
 Physogenua, 583  
 Phyto, 427  
 Phytomyza, 645  
 Pialoidea, 221  
 Piophila, 620  
 Pipiza, 349  
 Pipunculus, 342  
 Pityocera, 200  
 Plagia, 445  
*Plagiocera*, 390  
 Plagiomima, 446  
 Plagioneurus, 298  
 Plagiotoma, 605  
 Plagiospherysa, 444  
 Planetolestes, 263  
 Platophrymia, 649  
 Platychirus, 359  
 Platynema, 342  
 Platynochætus, 392  
 Platypalpus, 311  
 Platypeza, 341  
 Platystoma, 588  
 Platyura, 139  
 Plecia, 164  
 Plectops, 430  
 Plectromyia, 92  
 Plesiastina, 138  
 Plesiomma, 260  
 Plethochaeta, 570  
 Ploas, 238  
 Pocota, 401  
 Podotachina, 421  
*Pacilobothrus*, 309  
 Pogonomyia, 536  
 Pogonosoma, 269  
 Pogonota, 567  
 Polidea, 436  
 Polionota, 602  
 Pollenia, 516  
 Polyangæus, 94  
*Polydonta*, 396  
 Polygaster, 433  
 Polylepta, 141  
 Polymedon, 308  
 Polymera, 87  
 Polymorphomyia, 606  
 Porphyrops, 291  
 Prionella, 614  
 Probolæus, 142  
 Proboscidomyia, 548  
 Prochyliza, 618  
 Proctacanthus, 274  
 Promachus, 279  
 Prorhynchops, 496

- Prosalpia*, 553  
*Proscna*, 496  
*Proscnoides*, 497  
*Prospheerisa*, 468  
*Prothecus*, 344  
*Protocalliphora*, 523  
*Protoplasta*, 95  
*Psairoptera*, 574  
*Pselaphephila*, 567  
*Pseudapinops*, 438  
*Pseudatrichia*, 249  
*Pseudochæta*, 467  
*Pseudodexia*, 507  
*Pseudodinia*, 652  
*Pseudogermaria*, 421, 446  
*Pseudogonia*, 479  
*Pseudohystricia*, 494  
*Pseudofersia*, 656  
*Pseudomorinia*, 508  
*Pseudomyothria*, 433  
*Pseudopyrellia*, 524  
*Pseudorus*, 267  
*Pseudotephritis*, 594  
*Pseudotractocera*, 448  
*Psila*, 622  
*Psilocphala*, 246  
*Psilocurus*, 257  
*Psilopa*, 624  
*Psilopodinus*, 283  
*Psilopus*, 283  
*Psilota*, 349  
*Psorophora*, 124  
*Psychoda*, 106  
*Ptecticus*, 177  
*Pterallastes*, 396  
*Pterellipsis*, 658  
*Pterocalla*, 593  
*Pterodontia*, 219  
*Pteroptila*, 390  
*Ptilocera*, 421  
*Ptilodexia*, 434, 496  
*Ptilodexia*, 503  
*Ptilomyia*, 624  
*Ptilolina*, 217  
*Ptychoptera*, 95  
*Puliciphora*, 340  
*Pycnoglossa*, 570  
*Pycnopogon*, 262  
*Pygostolus*, 266  
*Pyrellia*, 525  
*Pyrgota*, 587  
*Pyritis*, 383  
*Pyrophæna*, 358  
*Pyrosia*, 421, 437, 496  
*Racodineura*, 437  
*Ragas*, 327  
*Rhabdophaga*, 154  
*Rhabdopselaphus*, 246  
*Rhachicerus*, 211  
*Rhadirgus*, 283  
*Rhagoletis*, 606  
*Rhamphidia*, 81  
*Rhamphiniina*, 499  
*Rhamphomyia*, 329  
*Rhaphidolabis*, 92  
*Rhaphiocera*, 176  
*Rhaphiomydas*, 253  
*Rhaphiorhynchus*, 210  
*Rhaphium*, 292  
*Rhinoëssa*, 650  
*Rhingia*, 375  
*Rhinophora*, 428  
*Rhinotora*, 599  
*Rhipidia*, 77  
*Rhombothyria*, 508  
*Rhopalomera*, 600  
*Rhopalomyia*, 156  
*Rhopalomyia*, 600  
*Rhopalosyrphus*, 347  
*Rhymosia*, 145  
*Rhynchocephalus*, 218  
*Rhynchodexia*, 499  
*Rhypholophus*, 83  
*Rhyphus*, 172  
*Richardia*, 599  
*Rileya*, 472  
*Rileynmyia*, 472  
*Rivellia*, 588  
*Ræderioides*, 316  
*Romaleosyrphus*, 401  
*Rondania*, 181  
*Salpingogaster*, 358  
*Sapromyza*, 584  
*Sarcionus*, 308  
*Sarcoclista*, 429  
*Sarcodexia*, 514  
*Sarcomacronychia*, 447  
*Sarcophaga*, 510  
*Sarcophagula*, 514  
*Sarcophilodes*, 515  
*Sarcotachinella*, 477  
*Sardiocera*, 504  
*Sargus*, 178  
*Saropogon*, 263  
*Sarothromyia*, 515  
*Saucropus*, 293  
*Saundersia*, 489  
*Sayomyia*, 137  
*Scaptomyza*, 641  
*Scatella*, 630  
*Scatophaga*, 568  
*Scatopse*, 168  
*Scellus*, 297  
*Scenopinus*, 249  
*Schizotachina*, 430  
*Schenomyza*, 563  
*Schenophilus*, 295  
*Sciapus*, 283, 286  
*Sciara*, 148  
*Sciasma*, 439  
*Sciadromia*, 315  
*Sciomyza*, 577  
*Sciophila*, 140  
*Scleropogon*, 255  
*Scoliocentra*, 572  
*Scoliopelta*, 174  
*Scopolia*, 475  
*Scotiptera*, 468  
*Seyphella*, 645  
*Senogaster*, 397

- Senotainia, 447  
 Scoptera, 597  
 Sepedon, 580  
 Sepsis, 619  
*Sericocera*, 496  
*Sericomyia*, 382  
*Setigena*, 462  
 Sicus, 413  
*Sigaloëssa*, 640  
*Sigmatomera*, 84  
 Silvius, 184  
 Simulium, 168  
*Siphoclytia*, 443  
*Siphomyia*, 635  
*Siphona*, 444  
*Siphonella*, 637  
*Siphoniomyia*, 421  
*Siphoplagia*, 446  
*Siphophyto*, 443  
*Siphosturmia*, 449  
 Sisyropa, 455  
 Somomyia, 524  
*Somula*, 402  
 Spallanzania, 479  
 Spania, 217  
 Sparnopoliis, 240  
*Spathichira*, 298  
*Spathiophora*, 568  
*Spazigaster*, 355  
 Spharina, 432  
 Sphæroceræ, 576  
 Sphærophoria, 372  
 Sphageus, 256  
 Sphecomyia, 404  
 Sphegina, 374  
 Sphenoidoptera, 241  
*Sphinxca*, 404  
*Sphinximorpha*, 406  
 Sphyracephala, 62  
*Sphyromyia*, 484  
 Spilogaster, 543  
 Spilographa, 604  
 Spilomyia, 403  
 Spogostylum, 221  
 Stegana, 640  
 Stegomyia, 125  
 Steneretma, 598  
 Stenodexia, 503  
 Stenomacra, 599  
 Stenomicro, 644  
 Stenomyia, 598  
 Stenopa, 603  
 Stenopogon, 256  
 Stenoprosopus, 280  
 Stenopterina, 590  
 Stenoxenus, 107  
 Stevenia, 451  
*Stethopathus*, 340  
 Stibasoma, 199  
 Stichopogon, 262  
*Stictoccephala*, 594  
 Stictomyia, 594  
 Stilbometopa, 654  
 Stilpnogaster, 281  
 Stilpon, 310  
 Stomatodexia, 500  
 Stomoxys, 529  
*Stonyx*, 228  
*Stratiomyia*, 182  
 Straussia, 602  
 Strebla, 657  
 Sturmia, 464  
 Stygeropsis, 99  
 Stylogaster, 411  
*Subula*, 212  
 Sycorax, 107  
 Symphoromyia, 217  
*Symplecta*, 86  
 Sympycnus, 292  
*Synamphotera*, 316  
*Synarthrus*, 292  
 Syndyas, 318  
 Syneches, 317  
 Syneura, 339  
 Syntemna, 142  
 Synthesiomyia, 529  
 Syntormon, 292  
 Syritta, 397  
 Syrphus, 363  
 Systæchus, 237  
 Systropus, 244  
 Tabanus, 200  
 Tabuda, 246  
 Tachina, 469  
*Tachinodes*, 485  
*Tachinomyia*, 469  
*Tachinophyto*, 433  
 Tachinopsis, 471  
 Tachydromia, 313  
*Tachypæza*, 313  
 Tachytrechus, 307  
*Taniaptera*, 614  
 Taniorhynchus, 133  
 Tanypeza, 617  
 Tanypremna, 96  
 Tanypus, 117  
 Tanytarsus, 117  
 Tarracticus, 266  
 Tauromyia, 645  
 Telmatogeton, 114  
 Telothyria, 441  
*Temnocera*, 376  
 Temnostoma, 405  
 Tephritis, 611  
 Tephrochlamys, 573  
 Tephronota, 591  
 Tersesthes, 107  
 Tetanocera, 579  
 Tetanops, 592  
 Tetanura, 614  
 Tetrachata, 559  
*Tetrachata*, 484  
 Tetradiscus, 618  
 Trigononeura, 140  
 Tetragrapha, 471  
 Tetropismenus, 591  
 Teuchoenemis, 396  
 Teucholabis, 82  
 Teuchophorus, 290  
 Thalassomyia, 117

- Thelaira*, 507  
*Thelairoides*, 506  
*Themira*, 618  
*Theobaldia*, 126  
*Theresia*, 508  
*Thereva*, 247  
*Theriopteretes*, 200  
*Theruentomyia*, 241  
*Thesentomyia*, 241  
*Thinophilus*, 295  
*Thlipsogaster*, 237  
*Thrypticus*, 296  
*Thryptocera*, 431  
*Thysanomyia*, 421, 462  
*Tipula*, 99  
*Tolmerus*, 281  
*Townsendia*, 255  
*Toxophora*, 245  
*Toxorhina*, 81  
*Toxorhynchites*, 124  
*Toxotrypana*, 600  
*Traginops*, 652  
*Trichobius*, 657  
*Trichocera*, 88  
*Trichogena*, 477  
*Tricholyga*, 469  
*Trichomyia*, 107  
*Trichonta*, 145  
*Trichopalpus*, 566  
*Trichophora*, 483  
*Trichophthicus*, 542  
*Trichopoda*, 424  
*Trichoprosopon*, 134  
*Trichopteromyia*, 153  
*Trichosia*, 148  
*Triclis*, 257  
*Tricyphona*, 93  
*Trigonometopus*, 587  
*Trimicra*, 87  
*Trineura*, 338  
*Triodites*, 242  
*Triodonta*, 396  
*Triogma*, 94  
*Triplasius*, 235  
*Triptotricha*, 214  
*Tritoxa*, 590  
*Trixa*, 440  
*Triroclista*, 482  
*Trixodes*, 501  
*Trochilodes*, 482  
*Trochobola*, 78  
*Tromodesia*, 496  
*Tropidia*, 391  
*Tropidomyia*, 407  
*Tropidopsis*, 495  
*Trypeta*, 604  
*Tryphera*, 421  
*Tylenmyia*, 618  
*Tyreomma*, 515  
*Ula*, 92  
*Ulidia*, 595  
*Ulomorpha*, 87  
*Uramya*, 506  
*Uranotaenia*, 135  
*Urellia*, 613  
*Urophora*, 614  
*Vanderwulpia*, 468  
*Velocia*, 224  
*Verrallia*, 344  
*Viviana*, 421  
*Volucella*, 376  
*Wahlbergia*, 421, 442  
*Willistonella*, 449  
*Willistonella*, 600  
*Winthemia*, 473  
*Wulpia*, 469  
*Wyeomyia*, 136  
*Xainonotum*, 340  
*Xanthacrona*, 593  
*Xanthina*, 294  
*Xanthochlorus*, 294  
*Xanthodexia*, 507  
*Xanthogramma*, 369  
*Xanthomelana*, 440  
*Xanthotricha*, 296  
*Xenochæta*, 610  
*Xestomyza*, 246  
*Xiphura*, 96  
*Xylomyia*, 212  
*Xylophagus*, 212  
*Xylota*, 397  
*Xysta*, 421  
*Zabrachia*, 192  
*Zacompsia*, 597  
*Zodion*, 410  
*Zonosema*, 604  
*Zygomomyia*, 144  
*Zygoneura*, 148