
ARTICLE VI. — *A Partial Bibliography of the Phalangiinae of North America.* By CLARENCE M. WEED, M. Sc.

It is believed that there are included below most of the references to this group in our American literature. I have placed an interrogation point after the genus of several species of *Phalangium* of which I have seen no specimens, but which probably do not belong to that genus as now restricted.

GENERAL ARTICLES.

1821. SAY, THOMAS. An account of Arachnides of the United States. Jour. Phil. Acad. Nat. Sci., Vol. II., (*Phalangiinae*, pp. 65-68). Complete Writings, Vol. II., pp. 13-15.

The first descriptive paper treating of the group. Four species of *Phalangium* described; viz., *dorsatum*, *vittatum*, *nigrum*, and *grandis*.

1868. WOOD, HORATIO C., JR., M. D. On the Phalangeæ of the United States of America. Communications of the Essex Institute, Vol. VI., pp. 10-40.

An elaborate paper on the family as a whole. Anatomy and habits discussed. 15 species of *Phalangiinae* described under genus *Phalangium*, 11 being new. Fair wood-cuts illustrate most of the species.

1885. UNDERWOOD, LUCIEN M., Ph.D. A Preliminary List of the Arthrogastra of North America (excluding Mexico). Canadian Entomologist, Vol. XVII. (*Phalangiinae*, pp. 167-169).

An enumeration of the described species with bibliographical references.

1887. WEED, CLARENCE M. The Genera of North American Phalangiinae. American Naturalist, Vol. XXI., p. 935 (October, 1887).

Attention is called to the proper generic position of several species. Method of extruding the genital organs of *Phalangiinae* described.

1889. WEED, CLARENCE M. A Descriptive Catalogue of the Phalanginæ of Illinois. Bulletin Illinois State Laboratory of Natural History, Vol. III., Article V., pp. 79-97.

Extended descriptions of ten species, two being new. Notes on distribution, life history, and habits.

REFERENCES TO SPECIES.

1. *LIOBUNUM DORSATUM*, (Say).

Phalangium dorsatum. Say, Jour. Phil. Acad. Nat. Sci., Vol. II., p. 66 (1821). Complete Writings, Vol. II., p. 13.

Original descriptions from specimens in the cabinet of the Academy. "Inhabits the United States."

Phalangium dorsatum, Say. Wood, Commun. Essex Institute, Vol. VI., pp. 18-19, 21, 39, figures 1a-1c. (1868).

Extended descriptions and measurements of both sexes. Collected in N. Y., D. C., and Penn. An out-door species. Supposed young are whitish. Compared with *P. vittatum*, of which it is supposed to be the northern representative.

Phalangium dorsatum, Say. Packard, Guide to the Study of Insects, pp. 656-657, fig. 632 (1869).

Mention of its distribution. Common at Salem, Mass.

Phalangium dorsatum, Say. Gratacap, American Naturalist, Vol. XVI., p. 120.

Experiments on influence of oxygen on harvest-men. Specimens placed in the gas were somewhat excited, and lived twenty-four hours.

Phalangium dorsatum. Kingsley, Standard Natural History, Vol. II., p. 122 (1884).

Mention.

Phalangium dorsatum, Say. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical references.

Liobunum dorsatum, (Say). Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887).

Referred from *Phalangium* of previous authors to *Liobunum* of C. Koch, as defined by Simon.

Liobunum dorsatum, (Say). Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., pp. 83-85 (1889).

Elaborate description and measurements. Taken in northern and central Illinois and Michigan. Developed largely in fields and woods, and migrates to houses and barns. Commonest species in northern Illinois. Compared with *L. vittatum*, which is considered its southern representative.

2. LIOBUNUM VITTATUM, (Say).

Phalangium vittatum. Say, Jour. Phil. Acad. Nat. Sci., Vol. II., p. 65 (1821). Complete Writings Vol. II., p. 13.

Original description from specimens in the cabinet of the Academy. "Inhabits the Southern States."

Phalangium vittatum, Say. Wood, Commun. Essex Institute, Vol. VI., pp. 20-21, 39, figs. 2a-2d. (1868).

Extended description and measurements. Taken in Texas and Nebraska. Compared with *P. dorsatum*, which is supposed to be its northern representative.

Phalangium vittatum, Say. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical references.

Liobunum vittatum, (Say). Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887).

Referred from *Phalangium* of previous authors to *Liobunum* of C. Koch, as defined by Simon.

Liobunum vittatum, (Say). Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., pp. 85-87. (1889).

Elaborate description and measurements. Common in southern Illinois where it frequents rocky ledges. Taken also in Kentucky. Compared with *L. dorsatum*, which it closely resembles, and of which it is supposed to be the southern representative.

3. LIOBUNUM NIGROPALPI, (Wood).

Phalangium nigropalpi. Wood, Commun. Essex Institute, Vol. VI., pp. 22-23, 39, figs. 3a-3c. (1868).

Original description from specimens taken in woods in Huntingdon Co., Penn. Males six times as numerous as females.

Phalangium nigropalpi, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical references.

Liobunum nigropalpi, (Wood). Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887). *

Referred from *Phalangium* of previous authors to *Liobunum* of C. Koch.

Liobunum nigropalpi, (Wood). Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., pp. 87-88 (1889).

Elaborate description and measurements. Taken in southern Illinois about rocky ledges. Males much more numerous than females. Remarkable for length of legs.

4. *LIOBUNUM VERRUCOSUM*, (Wood).

Phalangium verrucosum. Wood, Commun. Essex Institute, Vol. VI., pp. 29-30, 40 (1868).

Original description of some males of unknown locality in the Essex Institute Collection.

Phalangium verrucosum, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical reference.

Liobunum verrucosum, (Wood). Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887).

Referred from *Phalangium* of previous authors to *Liobunum* of C. Koch.

Liobunum verrucosum, (Wood). Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., p. 88-89 (1889).

Extended description of male from specimens collected in Champaign Co., Ill.

5. *LIOBUNUM ELEGANS*, Weed.

Liobunum elegans. Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., p. 89 (1889).

Original description from males taken in Champaign Co., Ill.

6. *LIOBUNUM POLITUS*, Weed.

Liobunum politus. Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., pp. 89-90 (1889).

Original description from males collected at Champaign, Ill.

7. *LIOBUNUM (?) CALCAR*, (Wood).

Phalangium calcar. Wood, Commun. Essex Institute, Vol. VI., pp. 26-27, 39, figs. 6a-6b. (1868).

Original description of male collected in mountains of southwestern Virginia. Two females that are conjectured to belong to same species also described.

Phalangium calcar, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical reference.

Liobunum (?) *calcar*, (Wood). Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887).

Taken from *Phalangium* of previous authors and provisionally referred to *Liobunum*, although the palpal spur renders its generic position doubtful.

Liobunum (?) *calcar*, (Wood). Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., pp. 90-91 (1889).

Extended description of males collected in Champaign Co., Ill. Provisionally retained in *Liobunum*.

8. *LIOBUNUM* (?) *FORMOSUM*, (Wood).

Phalangium formosum. Wood, Commun. Essex Institute, Vol. VI., pp. 30, 40 (1868).

Original description of females collected in the District of Columbia.

Phalangium formosum, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 168.

Bibliographical reference.

Liobunum (?) *formosum*, (Wood). Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887).

Taken from *Phalangium* of previous authors and provisionally referred to *Liobunum*, although on account of palpal angle it does not strictly belong there.

Liobunum (?) *formosum*, (Wood). Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., pp. 91-92 (1889).

Extended description of both sexes. Unlike other species, it hibernates as an adult. Provisionally retained in *Liobunum*.

9. *LIOBUNUM* (?) *BICOLOR*, (Wood).

Phalangium bicolor. Wood, Commun. Essex Institute, Vol. VI., pp. 28, 39, fig. (1868).

Original description from two females taken in Delaware county, Penn.

Phalangium bicolor, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical reference.

Liobunum (?) *bicolor*, (Wood). Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887).

In absence of specimens, it is conjectured that the species may belong to *Liobunum* rather than *Phalangium*.

10. *LIOBUNUM* (?) *VENTRICOSUM*, (Wood).

Phalangium ventricosum. Wood, Commun. Essex Institute, Vol. VI., pp. 32-33, 39, fig. 7 (1868).

Original description of female and supposed male. Taken in Penn. and Neb.

Phalangium ventricosum, Wood. Packard, Guide to the Study of Insects, p. 657, fig. 633 (1869).

Mention. Said to be widely distributed in United States.

Phalangium ventricosum, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 169 (1885).

Bibliographical reference.

Liobunum (?) *ventricosum*, (Wood). Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887).

In absence of specimens, it is conjectured that this species belongs to *Liobunum* rather than *Phalangium*.

11. *PHALANGIUM CINEREUM*, Wood.

Phalangium cinereum. Wood, Commun. Essex Institute, Vol. VI., pp. 25-26, 39 (1868).

Original description from specimens taken in northern New York.

Phalangium cinereum, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical reference.

Phalangium cinereum, Wood. Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887).

Said to belong to the genus *Phalangium*, as restricted by Simon.

Phalangium cinereum, Wood. Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., pp. 93-94. (1889).

Extended descriptions of both sexes. Taken in Champaign Co., Ill., and at Lansing, Mich.

12. *PHALANGIUM* (?) *MACULOSUM*, Wood.

Phalangium maculosum. Wood, Commun. Essex Institute, Vol. VI., pp. 31-32, 40, fig. (1868).

Original description of both sexes from specimens collected in Penn. and W. Va.

Phalangium maculosum, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical reference.

13. PHALANGIUM (?) FAVOSUM, Wood.

Phalangium favosum. Wood, Commun. Essex Institute, Vol. VI., pp. 28-29, 40 (1868).

Original description from a single female collected in Nebraska.

Phalangium favosum, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical reference.

14. PHALANGIUM NIGRUM, Say.

Phalangium nigrum. Say, Jour. Phil. Acad. Nat. Sci., Vol. II., pp. 66-67 (1821). Complete Writings, Vol. II., p. 14. Original description. "Not uncommon in the Carolinas and Georgia."

Phalangium nigrum, Say. Wood, Commun. Essex Institute, Vol. VI., pp. 34-35, 40 (1868).

Form from Texas and Nebraska, supposed to be same as Say's species described. Say's description also quoted.

Phalangium nigrum, Say. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical references.

15. PHALANGIUM (?) GRANDE, Say.

Phalangium grandis. Say, Jour. Phil. Acad. Nat. Sci., Vol. II., pp. 67-68 (1821). Complete Writings, Vol. II., p. 14. Original description. "Inhabits the Southern States."

Phalangium grande, Say. Wood, Commun. Essex Institute, Vol. VI., pp. 34, 40 (1868).

Simple quotation of Say's description. Had seen no specimens.

Phalangium grande, Say. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical references.

16. PHALANGIUM (?) EXILIPES, Wood.

Phalangium exilipes. Wood, Commun. Essex Institute, Vol. VI., pp. 23-24, 39 (1868).

Original description from three specimens collected in California and Nevada.

Phalangium exilipes, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 168 (1885).

Bibliographical reference.

17. OLIGOLOPHUS PICTUS, (Wood).

Phalangium pictum, Wood, Commun. Essex Institute, Vol. VI., pp. 30-31, 40.

Original description from a single female, taken near Salem, Mass.

Phalangium pictum, Wood. Underwood, Canadian Entomologist, Vol. XVII., p. 169 (1885).

Bibliographical reference.

Oligolophus pictus, (Wood). Weed, American Naturalist, Vol. XXI., p. 935 (October, 1887).

Referred from *Phalangium* of previous authors to *Oligolophus*.

Oligolophus pictus, (Wood). Weed, Bull. Ill. St. Lab. Nat. Hist., Vol. III., pp. 95-97 (1889).

Extended descriptions of both sexes, collected in Champaign Co., Ill.

ADDENDA AND ERRATA.

To complete the list of species recognized by Stål as belonging to this family, the following are appended, not from the belief that they belong here, but because there should be no hasty change made in the classification of the Homoptera until they have been more carefully studied.*

SUBFAMILY CENTROTINÆ, STÅL.

LXVI. TOLANIA, STÅL.

276. T. OPPONENS, Walk.

1858. *Centrotus opponens*. Walk. List Hom. B. M. Suppl. 159.

1862. *Tolania opponens*. Stål. Öf. Vet.-Akad. Förh. 491.

Hab.—Mex. (Walker).

LXVII. † ÆTHALION, LATR.

277. A. GRATUS, Walk.

1858. *Æthalion gratum*. Walk. List Hom. B. M. Suppl. 169.

1864. *Æthalion dilatatum*. Stål, Hem. Mex. 73, 450.

1869. *Æthalion gratus*. Stål, Bid. Memb. Kän. 299, 14.

Hab.—Mex. (Walker).

278. A. NERVOSO-PUNCTATUS, Sign.

1851. *Æthalion nervoso-punctatum*. Sign. Ann. Ent. Soc. France, Sér. 2, ix, 679, 14, pl. 14, fig. 10.

1858. *Æthalion nervoso-punctatum*. Walk. List Hom. B. M. Suppl. 168.

1869. *Æthalion nervoso-punctatus*. Stål. Bid. Memb. Kän. 299, 12.

Hab.—Mex. (Walker).

*None of the species mentioned here have a prolongation of the prothorax backward, and they rightfully belong with the Jassidæ.

† There are 68 instead of 67 genera represented in this catalogue, and 282 species instead of 278, XIV., 41, 42, 43, and 44 being duplicated.

The following additional localities have been obtained since this catalogue was put in the printer's hands:

For numbers 7, 8, 140, 177, 203, 204, 205, 206, 211, and *Aconophora lanceolata*, Fairm., Guatemala (*Henshaw*); 14, 27, and 142, Me. and Mass. (*Henshaw*); 15, Ia. (*Osborn*), N. Y. (*Van Duzee*); 19, Mich. (*Cook*), Pa. (*Rathvon*), Me. (*Henshaw*); 21, N. Y. (*Lintner*); 14, 19, 22, 27, 28, 41, 53, 65, 71, 76, 85, 96, 107, 131, 216, 223, 261, Neb. (*Barber*); 28, Mich. (*Cook*), Me., Fla., Tex., Calif., and B. C. (*Henshaw*); 34, 44, 66, 91, 116, 122, 132, and 145, Mich. (*Cook*); 41, B. C. (*Henshaw*), Nev. (*Hillman*); 43, Miss. (*Weed*), Mich. (*Cook*); 46, Mass. (*Henshaw*), Mich. (*Cook*); 52, Mich. (*Cook*), Ia. (*Osborn*), Va. and Md. (*Henshaw*); 55, Mich. (*Cook*), Pa. (*Rathvon*), Ia. ? (*Osborn*), Me. (*Henshaw*); 57, Ill. (*Goding*); 65, 68, 75 (recorded as *jugata* Uhler, which is a MS. name), 131, and 261, Ia. (*Osborn*); 67, Mich. (*Cook*), Mass. and Me. (*Henshaw*); 72, Mass. (*Henshaw*); 73, 83, and 85, Ia. ? (*Osborn*); 86, Mass. and Pa. (*Henshaw*); 95, Pa. (*Rathvon*); 97, and 119, Ia. (*Osborn*), Mich. (*Cook*); 114, Mich. (*Cook*), Tex. (*Henshaw*); 121, Pa. (*Henshaw*); 136, and 192, Va. (*Henshaw*); 137, N. Mex. (*Townsend*), Col. (*Gillette*); 138, Col. (*Goding*); 188, Va., Tex., and Vict. (*Henshaw*); 194, Mass., Tex., Calif., Vict. (*Henshaw*); 198, Cent. Am. (*Henshaw*); 217, Me. (*Henshaw*); 223, Mich. (*Cook*), Anticosti, Mass., Pa., Md., Va., D. C., Oregon, and Wash. (*Henshaw*); 248, Tex. (*Henshaw*).

Page 391, line 19, for *Entomolgique* read *Entomologique*.

Page 393, for No. 5 substitute as follows: *

P. DISPAR, Fabr.

1803. *Darnis dispar*. Fabr. Syst. Rhyng. 32, 23.

1836. *Entylia dispar*. Burm. Silb. Rev. iv, 182, 2.

1869. *Parmula dispar*. Stål, Hem. Fabr. ii, 29, 1.

Hab.—Mexico (*Goding*).

Page 397, between lines 12 and 13 from bottom insert as follows: 1893. *Entilia sinuata*. Rice, Insect Life, v, 243.

Page 399, line 7, after "one" insert *female*.

* *P. munda*, Walk, belongs to *Phanusa* (*Fide Fowler*)

Page 400, between lines 9 and 10 insert as follows: 1851. *Cyphonia rectispina*. Walk. List Hom. B. M. 597, 6; line 19, for *postfasciata* read *postfasciata*.

Page 401, line 4, for *bubalus* read *diceros*.

Page 402, at bottom of page add as follows:

1891. *Ceresa bubalus*. Fletcher, Rep. Ent. and Bot. Can. 191.

1892. *Ceresa bubalus*. Osb. Trans. Ia. Hort. Soc. 119, fig. 30.

1893. *Ceresa bubalus*. Osb. Fruit and Forest Tree Ins. 24, fig. 30.

Page 403, line 21, for the interrogation point substitute a period; between lines 2 and 3 from bottom insert as follows:

1892. *Ceresa taurina*. Osb. Trans. Ia. Hort. Soc. 119.

1893. *Ceresa taurina*. Osb. Fruit and Forest Tree Ins. 24.

Page 409, between lines 4 and 5 from bottom insert as follows: *Stictocephala gillettei*, ♂. Godg. Ent. News, iii, 200.

Page 411, line 2, for *nigripes*, Stål, read *munda*, Walk.; between lines 2 and 3 insert as follows: 1858. *Parmula munda*. Walk. List Hom. B. M. Suppl. 152; line 4, for Mex. (Stål), read Mex. and Guatemala (Walk.).

Page 412, between lines 11 and 12 from bottom insert as follows:

1892. *Thelia cratægi*. Osb. Trans. Ia. Hort. Soc. 119.

1893. *Thelia cratægi*. Osb. Fruit and Forest Tree Ins. 24.

Page 413, line 12 from bottom, and page 414, line 1, for *acuminata* read *acuminatus*.

Page 414, line 11, for *Hyphinae* read *Hyphinoë*.

Page 416, line 3 from bottom, for *Telamona* read *Membracis*.

Page 417, line 1, for 1841 read 1851.

Page 422, between lines 8 and 9 insert as follows: 1892. *Telamona mexicana*? Godg. Ent. News, iii, 108.

Page 424, line 9, for *top* read *tips*.

Page 425, line 6, dele "fig."; line 2 from bottom, for *galata* read *galeata*.

Page 427, line 4 from bottom, for *Membracis* read *Acutalis*.

Page 429, line 15, after "lower" insert *edge*.

Pages 435 and 436. *Note*.—An examination of the types shows that numbers 122 to 126 belong to *Cyrtolobus*.

Page 437. After the numbers 128, 129, and 130, for *A.* read *E.* *

Page 441, line 17 from bottom, for *V.* read *Amastris* †; line 4 from bottom, insert (?) before *V.*

Page 442, between lines 8 and 9 insert as follows: 1851. *Thelia expansa*. Walk. List. Hom. B. M. 563, 26; between lines 14 and 15 from bottom, insert as follows: *Thelia marmorata*. Walk. List. Hom. B. M. 555, 4.

Page 444, line 15 from bottom, after "scar" insert as follows: Apical cell much longer than in *marmorata*, the length exceeding the breadth more than twice, while in *marmorata* the cell is but a little longer than broad; line 14 from bottom, after "fuliginous" and "yellow" substitute semicolons for commas; line 7 from bottom, after "process," add as follows: in not being suddenly depressed a short distance before apex, in not having the median carina flat from this depression, and in being much more depressed anteriorly.

Page 445, line 8. *Note*.—Through the kindness of Rev. W. W. Fowler, of Lincoln, England, I have had the opportunity to examine Stål's type of the genus *Optilete*, and, as surmised, it proves to be a typical *marmorata*, Say. Between lines 16 and 17 from bottom insert as follows: 1851. *Hemiptycha longicornis*. Walk. List Hom. B. M. 569, 7.

Page 449, line 10 from bottom, *Note*.—Walker's *Darnis lineola* belongs to *Phacusa* (*Fide* Fowler).

Page 452, No. 181, for *prunitia*, Butler, read *hastata*, Stål (*Fide* Fowler).

* *Ashmeadea* being preoccupied, the name was changed to *Evashmeadea*.

† A more careful study of the species places it in *Amastris*.