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U. S. DEPARTMENT OF AGRICULTURE.
DIVISION OF ENTOMOLOGY.

BIBLIOGRAPHY

OF

THE MORE IMPORTANT CONTRIBUTIONS

TO

AMERICAN ECONOMIC ENTOMOLOGY.

PREPARED, BY AUTHORITY OF THE SECRETARY OF AGRICULTURE,

BY

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PART I.

THE MORE IMPORTANT WRITINGS

OF

BENJAMIN DANN WALSH.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1889.

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INTRODUCTION TO PARTS I, II, AND III.

The object of the present lists is to record the principal entomological writings of B. D. Walsh and C. V. Riley. Few will be likely to criticize the association of the names of Walsh and Riley in a list of this kind, so largely devoted to economic entomology, or to question the desirability of collating their writings in advance of others.

As recognized authorities upon entomology, especially from an economic standpoint, their writings have been extensively quoted sometimes with, but frequently without, credit in the agricultural and horticultural journals of the day. These secondary references, though of a certain value when the original is inaccessible, have, as a rule, been omitted. In citing such as are given I have used my personal judgment. To have given all would have increased the size of the list considerably with but a slight increase in its usefulness.

Occasionally, a publisher to meet some popular demand puts the writings of an author into book form without the knowledge of the latter. Such an occurrence has happened more than once with Dr. Riley's writings. To mention but one: In 1877 Messrs. George Rutledge & Sons, of London, published "The Colorado beetle, with suggestions for its repression and methods of destruction," with Dr. Riley's name upon the title-page as author. This is a partial reprint of Potato Pests entirely unsanctioned and published without knowledge of the author. (See *London Times*, October 17, 1887.) These publishers' reprints are omitted from this list. The "S.-b." after the reference of many of the articles from the agricultural and other journals refers to the series of scrap-books used in divisional work.

A biographical sketch of Dr. Walsh is given in the second volume of the *American Entomologist*, Vol. II, No. 3, pp. 65-68, January, 1870.

The chief facts in Dr. Riley's life may be found in the "Commonwealth of Missouri" (1875) and the *National Farmer*, September 20, 1883.

In the preparation of the list I have freely used all data accumulated by the Division, notably the work of Mr. B. P. Mann and a private list of Dr. Riley's.

Many persons, both within and without the Department, have kindly answered my inquiries.—S. H.

BIBLIOGRAPHY OF THE MORE IMPORTANT CONTRIBUTIONS TO
AMERICAN ECONOMIC ENTOMOLOGY.

THE WRITINGS OF B. D. WALSH (1860-1873).

1. WALSH, B. D. Bark-lice. <Western Rural. S.-b. No. 3, p. 11.
Habits of *Lecanium* compared with *Aspidiotus* [= *Mytilaspis*].
2. WALSH, B. D. Entomological notes. <Prairie Farmer, 17 May, 1860, [v. 21], n. s., v. 5, pp. 308-309, figs. S.-b. No. 1, pp. 42-43.
Notice of *Coccus harrisii* n. sp. [= *Chionaspis furfurus*]; figure of its scales; description and figure of *Capsus oblineatus* [= *Lygus pratensis*] infesting apple, quince, and pear trees; figure of larva case and imago and description of *Phycita nebulo* [= *Acrobasis indiginella*]; figures of imago and of injuries of *Anphicerus bicaudatus*; habits of the same and of *Scolytus* [= *Xyleborus*] *pyri*, *Saperda bivittata* [= *candida*] and *Chrysobothris femorata*; means against the last.
3. WALSH, B. D. "Cutworms." <Prairie Farmer, 9 August, 1860, [v. 22], n. s., v. 6, pp. 82-83, fig. S.-b. No. 1, pp. 84-85.
Account of the larvæ of *Lachnosterna quercina* [= *fusca*] of *Elateridæ* of *Agrotidæ* and of *Pangus* [= *Harpalus*] *caliginosus*; figures of larvæ and imagos of the same or allied species; also of *Heteronychus* [= *Ligyris*] *relictus*, *Lopha* [= *Bembidium*] *4-maculatum* and *Agonoderus pallipes*.
4. WALSH, B. D. [*Ips quadrisignatus*, Say.] <Prairie Farmer, 1860, [v. 22], n. s., v. 6, p. —.
Ips 4-signatus [= *fasciatus*] attacks growing ears of sweet corn.
5. WALSH, B. D.] "Insect Life." <Proc. Agric. Conv.; Ann. meeting Ill. Nat. Hist. Soc.; Comm. Exerc. State Normal Univ. [Bloomington, Ill.], 1860, pp. 11-12.
Report, compiled from Chicago papers of address delivered before the Illinois Natural History Society; comparison between injurious insects and an invading army; necessity of appropriations for carrying on entomological work; economic entomology in Europe; importance of beneficial insects.

6. WALSH, B. D. Insects injurious to vegetation in Illinois. < Trans. Ill. State Agric. Soc., September, 1861, v. 4, pp. 335-378, figs. 1-11. Separate: 1861, 43 pp., 1 pl. Reprint in part: < Trans. Ill. Nat. Hist. Soc., v. 1. *Prairie Farmer*, 6 December, 1861, [v. —], n. s., v. —, pp. 370-371.
- Ravages of injurious insects; enemies of the same; notes on *Cecidomyia destructor*, *Saperda bivittata* [= *caudata*], *Chrysobothris femorata*, *Conotrachelus nenuphar* and *Blissus leucopterus*; natural history, ravages and means against *Leucania unipuncta*; figures its larva, pupa and imago; descriptions and figures primary and secondary parasites of the army-worm; figures *Hippodamia* (= *Megilla*) *maculata*, *Coccinella munda* [= *sanguinea*] and a larval coccinellid.
7. WALSH, B. D. From Benj. D. Walsh. < *Illinois Farmer*, October, 1861.
- Denies statement attributed by C. Thomas (*Illinois Farmer*, September, 1861), that he (Walsh) believed in the hibernation of the pupa of *Leucania unipuncta*.
8. WALSH, B. D. The army-worm question. < *Prairie Farmer*, 5 December, 1861, [v. 24], n. s., v. 8, pp. 370-371. S.-b., No. 4, p. 22.
- Replies to arguments of C. Thomas (*Prairie Farmer*, 1861, v. 8, pp. 306-307), on the hibernation of *Leucania unipuncta*.
9. WALSH, B. D. The army-worm question. Mr. Walsh's reply. < *Field Notes*, 14 December, 1861.
- Controversial answer to the assertion of J. H. Klippart (*Field Notes*, 30 November, 1861), that the larvæ of *Leucania unipuncta* are viviparous.
10. WALSH, B. D. The army-worm and its enemies. < *Prairie Farmer*, 1861, [v. 24], n. s., v. 8, p. 4. Reprint: < Trans. Ill. Nat. Hist. Soc., v. 1. *Prairie Farmer*, 6 December, 1861, [v. 24], n. s., v. 8, pp. 370-371.
- Popular account of some of the parasites of *Leucania unipuncta*.
11. WALSH, B. D. The army-worm. < *Prairie Farmer*, 1861, [v. 24], n. s., v. 8, pp. 257-258. Reprint: < Trans. Ill. State Agric. Soc., 1861, v. 4, pp. 373-375.
- Hibernation of the egg; spring burning as a means against *Leucania unipuncta*: description of *Hockeria* [= *Haltichella*] *perpulchra* n. sp.; notes on other parasites.
12. WALSH, B. D. The army-worm and its insect foes. < *Prairie Farmer*, 1861, [v. 24], n. s., v. 8, pp. 322-323; 337-339; 354-355.
- Habits and description of larva and imago of *Leucania unipuncta*; hibernation of the egg; figures of larva, pupa and imago; also of *Exorista* [= *Nemoræa*] *leucanicæ*, *Pezomachus minimus*, *Microgaster* [= *Apanteles*] *militaris*, *Hockeria* [= *Haltichella*] *perpulchra* and *Glyphe viridascens*.
13. WALSH, B. D. Bug preying on honey-bee. < *Prairie Farmer*, 1861. S.-b., No. 4, p. 7.
- Unknown heteropteron, said to prey on *Apis mellifica*.

14. WALSH, B. D. The pea and its insect foe. <Prairie Farmer, 1861. S.-b., No. 4, p. 12.
Unknown leaf-miner and leaf-eater on pea; directions for rearing insects.
15. WALSH, B. D. The grain weevil. <Journ. Ill. State Agric. Soc., January, 1862, fig. Reprint: <Trans. Ill. State Agric. Soc. v. 5, pp. 484-485.
Sitophilus [= *Calandra*] *remotepunctata* infests wheat.
16. WALSH, B. D. [*Ithycerus noveboracensis*.] <St. Louis Valley Farmer, March, 1862, v. 14, pp. 82-85, fig.
Ithycerus noveboracensis attacks twigs of fruit trees in nurseries.
17. WALSH, B. D. [Army-worm.] <St. Louis Valley Farmer, 1862, v. 14, p. 161.
Correction of mistake of E. S. Washington (St. Louis Valley Farmer, 1862, v. 14, p. 161), who mistook parasitic larvæ for young *Leucania unipuncta*; economy of parasites of army-worm.
18. WALSH, B. D. [*Brachytarsus variegatus*.] <Journ. Ill. State Agric. Soc., March, 1862, pp. 8-12, fig.
Brachytarsus variegatus parasitic (?) on a large orange-colored cecidomyid (?) larva in stems of wheat.
19. WALSH, B. D. A new insect in wheat, *Bruchus*. <Journ. Ill. State Agric. Soc., April, 1862. Reprint: <Trans. Ill. State Agric. Soc., v. 5, pp. 485-490.
20. WALSH, B. D. [Two apple-tree borers.] <Journ. Ill. State Agric. Soc., June, 1862, pp. 21-23.
Treats of *Chrysobothris femorata* and *Saperda bivittata* [= *candida*].
21. WALSH, B. D. [Colorado potato beetle.] <St. Louis Valley Farmer, July, 1862, pp. 209-210. Reprint (?): <Prairie Farmer, 6 June, 1863, v. —, p. 356, fig.
Doryphora 10-lineata infests egg plants, potato and tomato vines, etc., in Kansas and Iowa.
22. WALSH, B. D. Fire-blight. Two new foes of the apple and pear. <Prairie Farmer, 6 September, 1862, [v. 26], n. s., v. 10, pp. 147-149, fig. Separate: pp. 4.
Fire-blight defined; probably caused by attacks of *Chloroneura malefica* [= *Empoasca viridescens*] and *C. maligna* [= *E. obtusa*]; characters, habits, and ravages of the same; synoptic separation of several genera of *Typhlocybini*; two (2) new genera and thirteen (13) new species are described. For a list of the same see the *Systematic Index*. The figures show *C. malefica* and *C. maligna* and the venation of allied forms.
(NOTE.—The descriptive portion with figures is reprinted in Proc. Bost. Soc. Nat. Hist., February, 1864, v. 9, pp. 314-318.)
23. WALSH, B. D. Plant lice, the corn-root louse, a new enemy to the corn. <Journ. Ill. State Agric. Soc., September, 1862, pp. 8-13, fig. Reprint: <Trans. Ill. State Agric. Soc., v. 5, pp. 491-497, fig.
Aphis maidis (?) infests the roots of young Indian corn as well as the stems of the roasting ears.

24. WALSH, B. D. List of the Pseudoneuroptera of Illinois contained in the cabinet of the writer, with descriptions of over forty new species, and notes on their structural affinities. <Proc. Acad. Nat. Sci. Phil., September, 1862, pp. 361-402.
One hundred and nine (109) species are enumerated; two (2) new genera and forty (40) new species are described. For a list of the same see the *Systematic Index*.
25. WALSH, B. D. [*Erythroneura tricincta* Fitch.] <St. Louis Valley Farmer, October, 1862, pp. 305-306, fig.
Erythroneura [= *Typhlocyba*] *tricincta* on grape-vines.
26. WALSH, B. D. Grasshoppers and locusts. <Journ. Ill. State Agric. Soc., November, 1862, pp. 1-3. Reprint: <Trans. Ill. State Agric. Soc., v. 5, pp. 497-499.
Injuries of locusts in the Mississippi Valley; differences between locusts and Cicadas.
27. WALSH, B. D. On the genera of *Aphidæ* found in the United States. <Proc. Ent. Soc. Phil., December, 1862, v. 1, pp. 294-311, figs. 1-8.
Synoptic separation of the genera; list of seventy (70) species found in the United States, with food habitat; *Aphis* [= *Nectarophora*] *rudbeckiæ* Fitch, *A. vilis* ? Scop., *A. maidis* ? Fitch, *Lachnus caryæ* Harris, *Thelaxes* [= *Colopha*] *ulmicola* Fitch are described; one (1) new genus and eleven (11) new species are described; see the *Systematic Index* for a list of the same; the figures show venation and other details. Two (2) new ants, *Formica aphidicola* and *F.* [= *Lasius*] *latipes*, are described.
28. WALSH, B. D. [Observations on *Papilio glaucus* and *P. turnus*.] <Proc. Ent. Soc. Phil., February, 1863, v. 1, pp. 349-352.
Reasons for considering *turnus* and *glaucus* identical; the latter a dimorphic ♀ of the former; distribution of the two forms; citation of similar case among *Pieridæ* and of analogous one among *Dytiscidæ*; description of larva from which a black ♀ was raised.
29. WALSH, B. D. [Katydid eggs.] <Prairie Farmer, 28 February, 1863, [v. 27], n. s., v. 11, p. 132, fig.
Oviposition of katydid eggs on apple-twigs.
30. WALSH, B. D. Fire-blight. <Prairie Farmer, 4 April, 1863, [v. 27], n. s., v. 11, p. 212, fig. S.-b., No. 1, p. 10.
Description and figures of eggs of *Chloroneura malefica* [= *Empoasca viridescens*] and the slits in which they are deposited in apple-twigs; cause of fire-blight; suggestion of remedies.
31. WALSH, B. D. Insects injurious to fruit trees. <Prairie Farmer, 2 May, 1863, [v. 27], n. s., v. 11, p. 276, fig. S.-b., No. 1, p. 9.
Fruit and foliage of pear-trees destroyed by *Capsus oblineatus* [= *Lygus pratensis*]; description and figure of imago; habits, food-plants, and remedies.
32. WALSH, B. D. The ten-striped spearman. <Prairie Farmer, 6 June, 1863, [v. 27], n. s., v. 11, p. 356, fig. S.-b., No. 1, p. 7.
History, ravages, and means against *Doryphora 10-lineata*; figure of imago; mentions other injurious *Phytophaga*.

33. WALSH, B. D. The plum-gouger; a new foe of the plum. < Prairie Farmer, 13 June, 1863, [v. 27], n. s., v. 11, pp. 372-373, figs. 1-3. S.-b., No. 1, p. 6.

Habits, description, and figures of *Anthonomus* ? *prunicida* n. sp. [= *Coccotorus scutellaris*], injurious to plums; comparison with *Conotrachelus nenuphar*; figure of the latter.

34. WALSH, B. D. The plum-gouger. < Prairie Farmer, 11 July, 1863, [v. 28], n. s., v. 12, p. 21, 2 figs. S.-b., No. 1, p. 10.

Distribution and ravages of *Anthonomus prunicida* [= *Coccotorus scutellaris*]; list of insects found on plum-trees; description of *Conotrachelus puncticollis* n. sp. [= *C. geminatus*]; usefulness of *Reduvius raptatorius* [= *Sinea diadema*]; figures *A. prunicida* and *R. raptatorius*.

35. WALSH, B. D. A new fruit foe. < Prairie Farmer, 18 July, 1863, [v. 28], n. s., v. 12, p. 37, fig. S.-b., No. 1., p. 11.

Description and figure of imago of *Epicerus imbricatus*; injuries to fruit trees and gooseberry-bushes; supposed habits of this and allied species; hibernation of the larva of *Conotrachelus*; description of *C. crataegi* n. sp.

36. WALSH, B. D. Leaf-hopper. < Prairie Farmer, 25 July, 1863, [v. 28], n. s., v. 12, p. 53.

Proconia [= *Oncometopia*] *undata* injurious to grape-vines in southern Illinois; its eggs laid in twigs.

37. WALSH, B. D. Locust borers. < Prairie Farmer, 15 August, 1863, [v. 28], n. s., v. 12, p. 101. S.-b., No. 1, p. 12.

Description and habits of *Clytus* [= *Cyllene*] *robinia*; *Clytus* of *Carya* does not attack *Robinia*; *Cossus robinia* mentioned; larvæ and imagos of *Nitidulida* found under decaying bark.

38. WALSH, B. D. Insect friends and insect foes. The twice-stabbed lady-bird. < Prairie Farmer, 1863, [v. 28], n. s., v. 12; 22 August, p. 117, figs. 1, 2; 29 August, p. 133, figs. 3, 4. S.-b., No. 1, pp. 11-12.

Description and figure of imago of *Chilocornis bivulnerus*; figure of larva; destruction of injurious insects by predaceous insects; brief description of and means against *Lytta cinerea* [= *Macrobasis unicolor*], found on potato, English bean, and apple, and *L.* [= *Epicauta*] *vittata*, on potato; figures *Lytta atrata* [= *Epicauta pennsylvanica*], found on aster and potato, and larva-cases of *Solenobia* sp. from under bark of apple-trees; note on allies of *Solenobia*.

39. WALSH, B. D. Observations on certain N. A. Neuroptera, by H. Hagen, M. D., of Königsberg, Prussia; translated from the original French MS., and published by permission of the author, with notes and descriptions of about twenty new N. A. species of Pseudoneuroptera. < Proc. Ent. Soc. Phil., October, 1863, v. 2, pp. 167-272, fig.

Dr. Hagen's comments relate to the species described in No. 24; the author's notes supplement these and describe three (3) new genera and twenty-three (23) new species; for a list of these, see the *Systematic Index*; descriptions of previously described species, with notes on their habits, distribution, etc., are also given; *Batis interlineata* [= *Siphylurus femoratus*] is proposed

39. WALSH, B. D.—Continued.

(p. 190) in case *B.* [= *S.*] *femorata* Walsh is distinct from *B.* [= *S.*] *femorata* Say; in a note (p. 255) *Ophiogomphus mainensis* n. sp. is described from Packard's manuscript; the venation of the *Odonata* and the terminal abdominal characters of *Stalis infunata* are figured.

40. WALSH, B. D. On certain remarkable or exceptional larvæ, coleopterous, lepidopterous, and dipterous, with descriptions of several new genera and species, and of several species injurious to vegetation, which have been already published in agricultural journals. <Proc. Bost. Soc. Nat. Hist., February, 1864, v. 9, pp. 286–318.

Habits of the larva of *Cotalpa lanigera*, *Pelidnota punctata*, *Cratonychus* [= *Melanotus*] *incertus*, and *Xyloryctes satyrus*; comparative characters of the larva and imago of *Halisidota antiphola* n. sp. [= *tessellaris*]; description of larva, pupa, and imago of *Sphingicampa* (n. g.) *distigma* n. sp. [= *bicolor*]; characters and affinities of *Dryocampa* [= *Sphingicampa*] *bicolor*?; description of imagos of *Limacodes scapha* and *L.*? [= *Phobetron*] *hyalinus* n. sp., and of larva of the last and *L.*? [= *Phobetron*] *tetradactylus* n. sp.; description of the larva, pupa, and imago of *Hipparchiscus* n. g. *venustus* n. sp. [= *Aplodes mimosaria*]; habits and description of the larva of an undetermined *Tabanus*, description of the pupa; description of the larva, pupa, and imago of *Midas fulvipes* n. sp., habits of its larva. On pp. 309–318 descriptions of several new species, with brief notes of food-habits, etc., are reprinted from various agricultural journals.

41. WALSH, B. D. On dimorphism in the hymenopterous genus *Cynips*; with an appendix containing hints for a new classification of *Cynipidæ* and a list of *Cynipidæ*, including descriptions of several new species, inhabiting the oak-galls of Illinois. <Proc. Ent. Soc. Phil., March, 1864, v. 2, pp. 443–500, fig.

Detailed observations proving the frequent occurrence of dimorphism in the *Cynipidæ*; *Cynips* [= *Amphibolips*] *aciculata*, a dimorphic form of *C. q. spongifica*; concludes from analogy "that *aciculata* ♀ generates galls which produce by parthenogenesis ♂ *spongifica* exclusively, and that ♀♀ *spongifica* coupling in June with these ♂♂ oviposit in the same month in the young buds of the oak, the eggs lying dormant till the following spring, when some of the eggs produce ♀ *spongifica* in June, and some ♀ *aciculata* in the autumn or early in the following spring, which last in their turn, as before mentioned, generate ♂ *spongifica* to appear in the following June;" interesting details concerning the history of the group are given; relations between the true gall-flies (*Psenides*) and parasitic *Cynipidæ* (*Inquilinæ*); classification and characters of the same; anatomical structure and homologies of the family; the list includes fifteen (15) species inhabiting the various oaks, with descriptions of their galls and of several new species; seven (7) species of *Inquilinæ* are described; for the new species, see the *Systematic Index*; the figures illustrate the anatomy of the abdomen and ovipositor.

42. WALSH, B. D. The four-humped Cureulio. A new foe of the apple. <Valley Farmer. Reprint: <Prairie Farmer, 27 August, 1864, [v. 30], n. s., v. 14, p. 131, 2 figs. S.-b., No. 1, p. 28.

Description and figures of *Anthonomus quadrigibbus*, a foe of the apple; comparison with *Conotrachelus nenniphar* and *Anthonomus prunivida* [= *Coccotortus scutellaris*].

43. WALSH, B. D. On the pupa of the ephemeropterous genus *Batisca* Walsh. <Proc. Ent. Soc. Phil., August, 1864, v. 3, pp. 200-206, fig.

Description and figures of the pupa of *Batisca obesa* Say.

44. WALSH, B. D. On certain entomological speculations of the New England school of naturalists. <Proc. Ent. Soc. Phil., August-September, 1864, v. 3, pp. 207-249.

Discussion of statements, chiefly by Prof. L. Agassiz, upon questions in general entomology. The memoir is divided into sections; in the first, the distribution of insects in North America is discussed in opposition to the views of Agassiz; in the second section the Darwinian theory of the origin of species is discussed and some remarks on the variation of several species are added; in the third and fourth sections the statements of Prof. Agassiz regarding the worm-like larva stage of insects and the resemblances between the pupæ of insects and the Crustacea are discussed and criticised; in the fifth section the author argues that the relative rank of the different orders of insects must be determined from a consideration of all the characters of each order and not from the significance of any one character; the sixth section is a review of Dana's classification of insects on the principle of cephalization; and in the seventh section several erroneous statements and generalizations in the same author's paper on classification are pointed out.

45. WALSH, B. D. On phytophagic varieties and phytophagic species. <Proc. Ent. Soc. Phil., November, 1864, v. 3, pp. 403-430.

Many species feed exclusively upon a single food-plant, while other species feed upon many kinds; correlated with this are certain larval or imaginal differences; when these different forms interbreed they are considered the same species and are termed phytophagic varieties; these when separated with a single kind of food-plant form phytophagic races, and these again by a continuation of their isolation form phytophagic species. Phytophagous forms are most abundant where the imago is wingless. *Diapheromera velii*, *Tingis* [= *Gargaphia*] *tiliæ*, and *T.* [= *G.*] *amorphæ* are described as new; the following are mentioned in the remarks upon species and varieties: *Haltica* [= *Disonycha*] *alternata*, *Chrysomela scalaris*, *Clytus* [= *Cyllene*] *robinia*, *C.* [= *C.*] *pictus*, *Dryocampa* [= *Sphingicampa*] *bicolor*, *Sphingicampa distigma* [= *bicolor*], *Bombyx* [= *Sericaria*] *mori*, *Halisidota tessellaris*, *H. caryæ*, *H. antiphola* [= *tessellaris*], *Cyuiys* [= *Amphibolips*] *q. spongifica*, *C.* [= *Audricus*] *q. punctata*, *C.* [= *A.*] *q. podagra*, and *C.* [= *Amphibolips*] *q. inanis*.

46. WALSH, B. D. On the insects, coleopterous, hymenopterous, and dipterous, inhabiting the galls of certain species of willow. Part 1st—Diptera. <Proc. Ent. Soc. Phil., December, 1864, v. 3, pp. 543-644.

Structural characters, habits, metamorphoses, etc., of *Cecidomyida*; remarks on the unity of habits in genera; synopsis of cecidomyidous galls of *Salix*; descriptions of new species, their galls and inquilines; for a list of the new species, see the *Systematic Index*. See No. 197 for Part 2d.

47. WALSH, B. D. The borer. <Colman's Rural World. Reprint: <Prairie Farmer, 6 May, 1865, v. 15, p. 355.

Notice of soap as a means against borers.

48. WALSH, B. D. The new potato-bug and its natural history. <Pract. Ent., 30 October, 1865, v. 1, pp. 1-4.
Record of the spread eastwards of *Doryphora 10-lineata*; description of the egg; food-plants, enemies, and means against the same; comparative characters of *D. juncta* and *D. 10-lineata*; species of *Meloidæ* injurious to the potato.
49. [WALSH, B. D.] The joint-worm. <Pract. Ent., 27 November, 1865, v. 1, pp. 11, 12.
Reasons for disbelieving that the joint-worm is the larva of one of the *Chalcididæ*.
50. WALSH, B. D. On phytophagic varieties and phytophagic species, with remarks on the unity of coloration in insects. <Proc. Ent. Soc. Phil., November-December, 1865, v. 5, pp. 194-216, fig. See: <Amer. Journ. Sci., September, 1865, ser. 2, v. 40, pp. 282-284. <Ann. and Mag. Nat. Hist., November, 1865, ser. 3, v. 16, pp. 383, 384.
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115. WALSH, B. D. [Spruce-tree saw-flies.] <Pract. Ent., 30 July, 1866, v. 1, p. 102.
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118. WALSH, B. D. [Eggs in sumach.] <Pract. Ent., 30 July, 1866, v. 1, p. 102.
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120. WALSH, B. D. [The army-worm.] <Pract. Ent., 27 August, 1866, v. 1, p. 107.
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121. W[ALSH], B. D. [Fire-cure for potato-beetles.] <Pract. Ent., 27 August, 1866, v. 1, pp. 107-108.
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124. WALSH, B. D. [Grape-vine caterpillars.] <Pract. Ent., 27 August, 1866, v. 1, p. 111.
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128. WALSH, B. D. [Grape-vine insects.] <Pract. Ent., 27 August, 1866, v. 1, p. 112.
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129. WALSH, B. D. [Grape-vine beetles.] <Pract. Ent., 27 August, 1866, v. 1, pp. 112, 113.
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132. WALSH, B. D. [*Datana ministra*.] <Pract. Ent., 27 August, 1866, v. 1, p. 113.
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133. WALSH, B. D. [Grape-vine and fuschia beetles.] <Pract. Ent., 27 August, 1866, v. 1, p. 113.
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135. WALSH, B. D. [*Colaspis flavida*; *Lema trilineata*.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.
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136. WALSH, B. D. [Green worms on gooseberries and currants; *Lema trilineata*.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.
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137. WALSH, B. D. [Galls.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.
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138. WALSH, B. D. [Potato and corn insects.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.
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139. WALSH, B. D. [Cocoons on apple-trees.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.
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140. WALSH, B. D. Imported insects; the gooseberry saw-fly. <Pract. Ent., 29 September, 1866, v. 1, pp. 117-125, fig.
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141. WALSH, B. D. [Borers.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.
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142. WALSH, B. D. [Wheat midge.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.
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143. WALSH, B. D. [Crickets.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.
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144. WALSH, B. D. [Walking-stick.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.
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145. WALSH, B. D. [Apple-tree insects.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.
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146. WALSH, B. D. [Mites on grasshoppers.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.
Answer to inquiry of W. Riddell; *Astoma* [= *Trombidium*] *locustarum* infesting *Caloptenus femur-rubrum*.
147. W[ALSH], B. D. Grasshoppers and locusts. <Pract. Ent., October, 1866, v. 2, pp. 1-5, 22.
Description, migration, and ravages of *Caloptenus spretus*; limits of its range and means of preventing its increase; confusion caused by the use of popular names of insects. On p. 22 a "note," accidentally omitted, gives the comparative length of the wing-covers and antennæ of *Caloptenus spretus* and *C. femur-rubrum*.
148. W[ALSH], B. D. The striped cucumber-bug. <Pract. Ent., October, 1866, v. 2, p. 5.
Diabrotica vittata attacks German asters. See No. 123.
149. W[ALSH], B. D. Fire-blight. <Pract. Ent., October, 1866, v. 2, p. 7.
Extract from Horticulturist, with comments; cause of fire-blight unknown; not produced by *Scolytus* [= *Xyleborus*] *pyri*.
150. W[ALSH], B. D. The Hessian fly. <Pract. Ent., October, 1866, v. 2, p. 7.
Extract from Colman's Rural World, with comments; late sowing as a means against *Cecidomyia destructor*.
151. [WALSH, B. D.] [Injurious caterpillars; plant-lice enemies.] <Pract. Ent., October, 1866, v. 2, pp. 7-8.
Answer to inquiry of T. McGraw; habits, descriptions, and food-plants of larva of *Dryocampa senatoria* and of *Datana ministra*; food-habits of larva allied to *D. ministra*; description and habits of larva of *Scymnus* sp.; *S. hæmorrhous*? bred from gall of *Thelaxes* [= *Colopha*] *ulmicola*.
152. [WALSH, B. D.] [Tomato-worm.] <Pract. Ent., October, 1866, v. 2, p. 8.
Answer to inquiry of A. A. Jackson; description of the larva and pupa of *Protoparce celcus*; food-plants and harmlessness of the larva.

153. [WALSH, B. D.] [Dipterous larva on swallows.] <Pract. Ent., October, 1866, v. 2, p. 8.
 Answer to inquiry of J. B. Fisher; larvæ found on swallows (see No. 114) belong to the *Muscidæ* and not to the *Estridæ*; extract from letter of Osten Sacken on larval habits of *Muscidæ* found with birds.
154. [WALSH, B. D.] [Bark-louse enemy.] <Pract. Ent., October, 1866, v. 2, p. 8.
 Answer to inquiry of E. Daggy; see No. 127; according to Osten Sacken the bark-louse enemy belongs to *Leucopis*; systematic position of the genus.
155. [WALSH, B. D.] [Parasitized tomato-worm.] <Pract. Ent., October, 1866, v. 2, pp. 8-9.
 Answer to inquiry of T. C. Wright; habits of *Microgaster*, parasitic on *Protoparce celeus*; habits of ichneumonized larvæ.
156. [WALSH, B. D.] [Beetles on buttercup and azalea.] <Pract. Ent., October, 1866, v. 2, p. 9.
 Answer to inquiry of C. H. Peck; identification of *Galeruca* [= *Adimonia*] *rufosanguinea*, found on *Ranunculus acris*, and of *Prasocuris varipes* on *Azalea nudiflora*; synoptic table, by J. L. Leconte, of the species of *Prasocuris*.
157. [WALSH, B. D.] [Flying-bug.] <Pract. Ent., October, 1866, v. 2, p. 9.
 Answer to inquiry of E. E. Sheldon; *Aphodius* mistaken for *Cecidomyia destructor*.
158. [WALSH, B. D.] [Parasitic cocoon.] <Pract. Ent., October, 1866, v. 2, p. 9.
 Answer to inquiry of H. W. Howarth; description of cocoons made by *Microgaster* and *Pezomachus*; habits of *Ichneumonidæ*.
159. [WALSH, B. D.] [Oak-bark louse.] <Pract. Ent., October, 1866, v. 2, p. 9.
 Answer to inquiry of T. Meehan; undetermined *Coccus* on red-oak.
160. [WALSH, B. D.] [Grape-galls.] <Pract. Ent., October, 1866, v. 2, p. 9.
 Answer to inquiry of W. H. S.; see No. 128; larva of *Leucopis* sp., an enemy to grape-vine gall-louse; probable identity of the maker of the tendril and leaf-galls; varieties of grape infested by *Phylloxera vastatrix*.
161. [WALSH, B. D.] ["Saddle-back."] <Pract. Ent., October, 1866, v. 2, p. 9.
 Answer to inquiry of T. M. Harvey; food-plants, description, and irritating properties of *Empretia stimulca*.
162. [WALSH, B. D.] [Corn-worm.] <Pract. Ent., October, 1866, v. 2, p. 9.
 Answer to inquiry of J. B. Ellis; method of work of two lepidopterous larvæ.
163. [WALSH, B. D.] [Insects named.] <Pract. Ent., October, 1866, v. 2, p. 10.
 Answer to inquiry of W. C. Fish; comparative characters of *Entilia sinuata* and *E.* [= *Publilia*] *concava*.

164. [WALSH, B. D.] [Grape insects.] <Pract. Ent., October, 1866, v. 2, p. 10.
Answer to inquiry of J. H. Garman; description and habits of larva of *Proctris* [= *Harrisina*] *americana*; *Proconia* [= *Oncometopia*] *undata* and several species of *Erythronera* [= *Typhlocyba*] as grape enemies.
165. [WALSH, B. D.] [*Datana ministra*.] <Pract. Ent., October, 1866, v. 2, p. 10.
Answer to inquiry of J. B.; increase of injuries caused by *Datana ministra*; distinctive characters of the larvæ of *Geometridæ*.
166. [WALSH, B. D.] [*Iulus marginatus*.] <Pract. Ent., October, 1866, v. 2, p. 10.
Answer to inquiry of T. Wiggins; characters and food of *Iulus* [= *Spirobolus*] *marginatus*.
167. [WALSH, B. D.] [Midge.] <Pract. Ent., October, 1866, v. 2, p. 10.
Answer to inquiry of W. G. Morris; characters and habits of the larva and imago of *Chironomus* sp.
168. [WALSH, B. D.] [Rat-tailed larva.] <Pract. Ent., October, 1866, v. 2, p. 10.
Answer to inquiry of J. A. Lapham; characters and habitats of the larvæ of rat-tailed *Syrphidæ*.
169. [WALSH, B. D.] [Beetle on thistle.] <Pract. Ent., October, 1866, v. 2, p. 10.
Answer to inquiry of W. S. Robertson; characters and food-plants of *Phyllobrotica* [= *Diabrotica*] *longicornis*.
170. [WALSH, B. D.] [Grape-vine *Aphis*.] <Pract. Ent., October, 1866, v. 2, p. 10.
Answer to inquiry of H.; grape-vine injured by *Aphis vitis*.
171. W[ALSH], B. D. The new potato-bug. <Pract. Ent., November, 1866, v. 2, pp. 13-16, fig.
Eastern progress of *Doryphora 10-lineata*; rate of travel; hand-picking the only effective remedy; description of a horse machine for their destruction; pecuniary loss inflicted by the species.
172. W[ALSH], B. D. The canker-worm <Pract. Ent., November, 1866, v. 2, p. 16.
Tarring trees effective against *Paleacrita vernata*.
173. W[ALSH], B. D. The canker-worm again. <Pract. Ent., November, 1866, v. 2, pp. 16-17.
Critical review of article in New England Farmer; value of tarring as a means against *Paleacrita vernata*.
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Remarks on statement of H. Shimer in his paper, "The grape leaf gall-coccus" (Pract. Ent., pp. 17-19); number of eggs to each ♀; tendrils and leaf-galls probably produced by the same insect; old leaves entirely free from bark-lice by the end of summer; characters of the pupa of *Leucopis*; systematic position and food-habits of *Thysanoptera*; criticism of paper by H. Shimer in Prairie Farmer, 3 November, 1861.

175. W[ALSH], B. D. The striped bug. <Pract. Ent., November, 1866, v. 2, p. 20.
Remarks on note by A.; effects of plaster as a means against *Diabrotica vittata*.
176. [WALSH, B. D.] [Currant insects; *Psocus venosus*.] <Pract. Ent., November, 1866, v. 2, p. 20.
Answer to inquiry of I. Hicks; occurrence of *Pristiphora grossulariæ* in the Eastern States; *Ellopiæ* [= *Enfitchia*] *ribcariæ* injurious to currant; date of introduction of "sulphur-cure" on peach-trees; characters and habits of *Psocus venosus*.
177. [WALSH, B. D.] [Worm in apple.] <Pract. Ent., November, 1866, v. 2, pp. 20-21.
Answer to inquiry of C. Ward; description and ravages of larva of *Trypeta pomonella*?
178. [WALSH, B. D.] [Insects attracted to light.] <Pract. Ent., November, 1866, v. 2, p. 21.
Answer to inquiry of Practical Pomologist; conditions favorable for attracting insects to light; kinds most frequently attracted; the proportion of injurious species attracted.
179. [WALSH, B. D.] [Zebra caterpillar.] <Pract. Ent., November, 1866, v. 2, p. 21.
Answer to inquiry of J. H. Parsons; description of the larva of *Mamestra pieta*; times of transformation.
180. [WALSH, B. D.] [Inquiries answered.] <Pract. Ent., November, 1866, v. 2, p. 21.
Answer to inquiry of J. Pettit; identification of several beetles; galls on golden-rod made by *Euryptychia saligneana* and *Trypeta solidaginis*; characters of short-winged form of *Micropus* [= *Blissus*] *leucopterus*; its occurrence in Canada.
181. [WALSH, B. D.] [Worm in corn.] <Pract. Ent., November, 1866, v. 2, pp. 21-22.
Answer to inquiry of J. B. Ellis; description of larva, habits, transformations, and means against an undetermined noctuid.
182. [WALSH, B. D.] [Bag-worms.] <Pract. Ent., November, 1866, v. 2, p. 22.
Answer to inquiry of C. P. Wickersham; characters and synonymy of *Thyridopteryx ephemeraformis*.
183. [WALSH, B. D.] [Ichneumon cocoons.] <Pract. Ent., November, 1866, v. 2, p. 22.
Answer to inquiry of S. A. N.; characters of cocoons of *Microgaster* sp.?
184. WALSH, B. D. Note. <Proc. Ent. Soc. Phil., December, 1866, v. 5, p. 260.
Withdraws assertion attributed to C. R. Osten Sacken.
185. W[ALSH], B. D. The old-fashioned potato-bugs. <Pract. Ent., December, 1866, v. 2, pp. 25-27, figs.
Natural history and means against *Lema trilincata*, *Lytta* [= *Epicauta*] *vittata*, *L. atrata* [= *E. pennsylvanica*], *L. marginata* [= *E. cinerea*], and *L. cinerea* [= *Macrobasis unicolor*]; figures *L. trilincata* and *E. vittata*.

186. W[ALSH], B. D. Klippart's wheat plant. <Pract. Ent., December, 1866, v. 2, pp. 27-29.
Adverse criticism of the entomological portion of the above-named book.
187. W[ALSH], B. D. Trimble's insect enemies of fruit and fruit trees. <Pract. Ent., December, 1866, v. 2, pp. 29-30.
Favorable review of the above-named book.
188. W[ALSH], B. D. Answer to the above, by B. D. W. <Pract. Ent., December, 1866, v. 2, pp. 31-33, figs.
Answers to questions asked in J. S. Houghton's "Insects in the Orchard" (Pract. Ent., pp. 30-31); food-habits and hibernation of *Conotrachelus nenuphar*; comparative characters and figures of *Aspidiotus conchiformis* [= *Mytilaspis pomorum*] and *Coccus harrisii* [= *Chionaspis furfurus*]; natural history of *C. harrisii*; means against and enemies of the two species; figures *Chilocorus bivulnerus* and *Hippodamia* [= *Megilla*] *maculata*; food-habits and synonymy of *Lytta* [= *Pomphopæa*] *sayi*; flowing as a means against root-feeding insects; inefficacy of salt, lime, ashes, etc., against the same; insects attacking evergreens not likely to injure fruit trees; cannibal habits of spiders; habits of bees and wasps.
189. [WALSH, B. D.] [Cicada; gooseberry-worm.] <Pract. Ent., December, 1866, v. 2, p. 33.
Answer to inquiry of M. S. Hill; *Cicada* [= *Tibicen*] *septendecim* compared with an undescribed species; ravages of *Pristiphora grossulariæ*? on gooseberry bushes.
190. [WALSH, B. D.] [*Vespidæ*.] <Pract. Ent., December, 1866, v. 2, pp. 33, 34.
Answer to inquiry of M. Hobart; life-habits of *Vespidæ*.
191. [WALSH, B. D.] [Meal-worms: Timber-borers.] <Pract. Ent., December, 1866, v. 2, p. 34.
Answer to inquiry of M. C. D.; characters, food-habits, and means against *Tenebrio molitor* and *T. obscurus*; characters of *Ptinus brunneus* infesting pine timber; corrosive sublimate as a means against timber insects.
192. [WALSH, B. D.] [Corn-worm.] <Pract. Ent., December, 1866, v. 2, p. 34.
Answer to J. B. Ellis; number of broods of *Heliothis armigera* in the Northern and Southern States.
193. [WALSH, B. D.] [Thousand-legged worms.] <Pract. Ent., December, 1866, v. 2, pp. 34-35, fig.
Answer to inquiry of G. W. Robinson; description and figure of *Iulus multi-striatus* n. sp. [= *Cambala annulata*]; habits and means against the same.
194. [WALSH, B. D.] [Cranberry-galls, etc.] <Pract. Ent., December, 1866, v. 2, p. 35.
Answer to inquiry of W. C. Fish; occurrence of galls made by *Cecidomyia* sp. on leaves of cranberry; identification of several insects.
195. [WALSH, B. D.] Another humbug. <Pract. Ent., December, 1866, v. 2, p. 35.
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196. [WALSH, B. D.] Notices. <Pract. Ent., December, 1866, v. 2, p. 35.
Mention of several agricultural journals.
197. WALSH, B. D. On the insects, coleopterous, hymenopterous, and dipterous, inhabiting the galls of certain species of willow. Part 2d and last. <Proc. Ent. Soc. Phil., December, 1866–January, 1867, v. 6, pp. 223–238.
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198. W[ALSH], B. D. Plant-lice—their friends and enemies. <Pract. Ent., January, 1867, v. 2, pp. 37–44, figs.
Method of work and mode of reproduction of *Aphididæ*; their relations to ants; plant-lice enemies; figures *Aphis mali* and several enemies of plant-lice; means against *Aphididæ*.
199. W[ALSH], B. D. Birds *versus* insects. <Pract. Ent., January, 1867, v. 2, pp. 44–47.
Insectivorous birds not necessarily beneficial; a bird must be shown to eat at least thirty (30) times as many injurious insects as it does beneficial ones before it can be considered useful.
200. [WALSH, B. D.] [Insects named.] <Pract. Ent., January, 1867, v. 2, p. 47.
Answer to inquiry of J. Pettit; identification of many species, mostly beetles; characters and food-habits of *Clerus nigripes* [= *4-guttatus*]; habitat of *Lep-tura capitata* and *Tingis* [= *Corythuca*] *ciliata*.
201. [WALSH, B. D.] [Apple-tree insects.] <Pract. Ent., January, 1867, v. 2, p. 47.
Answer to inquiry of M. Hobart; increasing distribution of *Aspidiotus conchiformis* [= *Mytilaspis pomorum*]; enemies of the same; characters of the eggs of *Aphis mali*.
202. [WALSH, B. D.] [Work in entomology.] <Pract. Ent., January, 1867, v. 2, p. 47.
Answer to G. Scarborough; advice for the study of entomology by beginners.
203. W[ALSH], B. D. The true *Thrips* and the bogus *Thrips*. <Pract. Ent., February, 1867, v. 2, pp. 49–52, figs.
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204. W[ALSH], B. D. Universal remedies. <Pract. Ent., 1867, v. 2, p. 52.
Exposure of proposed universal remedy against fruit-tree insects.
205. W[ALSH], B. D. Poisoning noxious insects. <Pract. Ent., February, 1867, v. 2, pp. 52–53.
Sugaring with poison as a means against *Noctuidæ*.

206. W[ALSH], B. D. Remarks by B. D. W. <Pract. Ent., February, 1867, v. 2, p. 54.
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 Characters of eggs and method of deposition; characters, food-habits, and figures of the imago.
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 Imaginary correspondence between Asa Fitch and John Curtis on the importation of parasitic insects.
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 Answer to inquiry of L. D. Morse; undetermined larva found in osage-orange seed; hominivorous habits of *Lucilia macellaria*.
210. [WALSH, B. D.] [*Attacus cecropia*.] <Pract. Ent., February, 1867, v. 2, p. 55.
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211. [WALSH, B. D.] [Apple-worm.] <Pract. Ent., February, 1867, v. 2, pp. 55-56.
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212. [WALSH, B. D.] [Oak-gall.] <Pract. Ent., February, 1867, v. 2, p. 56.
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213. [WALSH, B. D.] [*Cicada*: Grape-vine *Procris*.] <Pract. Ent., February, 1867, v. 2, p. 56.
 Answer to inquiry of M. S. Hill; variations in the imago of *Cicada* [= *Tibicen*] *septendecim* and in the song of the same; characters of the larva of *Procris* [= *Harrisina*] *americana*.
214. [WALSH, B. D.] [*Nitidulide*.] <Pract. Ent., February, 1867, v. 2, p. 56.
 Answer to inquiry of W. H. S.; food-habits of *Ips fasciatus* and *Nitidula bipustulata*.
215. [WALSH, B. D.] [Turnip enemy.] <Pract. Ent., February, 1867, v. 2, p. 56.
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216. [WALSH, B. D.] [Wheat midge.] <Pract. Ent., February, 1867, v. 2, p. 57.
 Answer to inquiry of C. P. Wickersham; nature of the membrane enveloping the full-grown larva of *Diplosis tritici*,

217. [WALSH, B. D.] [Queries answered.] <Pract. Ent., February, 1867, v. 2, p. 57.
Answer to inquiry of R. Middleton; toads, frogs, and spiders beneficial; effects of the stings of various insects.
218. [WALSH, B. D.] [Scales.] <Pract. Ent., February, 1867, v. 2, p. 57.
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219. [WALSH, B. D.] [Hundred-legged worm.] <Pract. Ent., February, 1867, v. 2, p. 57.
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220. [WALSH, B. D.] [Bark-borers.] <Pract. Ent., February, 1867, v. 2, pp. 57-58.
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221. [WALSH, B. D.] [Aleurodes.] <Pract. Ent., February, 1867, v. 2, p. 58.
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Notice of the late Brackenridge Clemens.
224. W[ALSH], B. D. Wire-worms. <Pract. Ent., March, 1867, v. 2, pp. 61-62, figs.
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Figures of larva and imago of *Anthomyia ceparum* and of *Ortalis* [= *Tritoxa*] *flexa*; comparative characters of imagos; distribution and means against the two species.
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Recommends, in reply to J. Townley's inquiry, sugaring with poisoned molasses as a means against cut-worms.

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228. W[ALSH], B. D. The imported gooseberry saw-fly. <Pract. Ent., March, 1867, v. 2, p. 67.
Reason for re-appearance in June and for the non-appearance of the second brood of *Nematus ventricosus* [= *ribesii*] in New York in 1866.
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230. W[ALSH], B. D. Doctoring fruit trees again. <Pract. Ent., March, 1867, v. 2, pp. 67, 68.
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Criticism of theory that a plug driven into a hole in a tree is death to borers.
234. W[ALSH], B. D. A mass of mistakes. <Pract. Ent., March, 1867, v. 2, p. 70.
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237. W[ALSH], B. D. Fighting the Curculio. <Pract. Ent., March, 1867, v. 2, p. 71.
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242. [WALSH, B. D.] [Caterpillar nest on wild cherry.] <Pract. Ent. March, 1867, v. 2, p. 72.
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BY

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411. [WALSH, B. D., and C. V. RILEY.] Insect enemies of the Colorado potato beetle. <Amer. Ent., October, 1868, v. 1, p. 37.
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412. [WALSH, B. D., and C. V. RILEY.] "Harvest-bugs" in America, misnamed "jiggers." <Amer. Ent., October, 1868, v. 1, p. 38.
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413. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., October, 1868, v. 1, p. 38.
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414. [WALSH, B. D., and C. V. RILEY.] Grapes cut off by the tree cricket. <Amer. Ent., October, 1868, v. 1, p. 38, fig. 30-31.
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415. [WALSH, B. D., and C. V. RILEY.] The Buffalo tree-hopper. <Amer. Ent., October, 1868, v. 1, p. 38.
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416. [WALSH, B. D., and C. V. RILEY.] A scavenger mistaken for a foe. <Amer. Ent., October, 1868, v. 1, p. 38.
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417. [WALSH, B. D., and C. V. RILEY.] Insect foes of the bark-louse. <Amer. Ent., October, 1868, v. 1, p. 39, fig. 32.
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418. [WALSH, B. D., and C. V. RILEY.] Best works on entomology. <Amer. Ent., October, 1868, v. 1, p. 39.
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419. [WALSH, B. D., and C. V. RILEY.] Larvæ in plum-gum. <Amer. Ent., October, 1868, v. 1, p. 39.
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420. [WALSH, B. D., and C. V. RILEY.] Insect foes of the hop vine. <Amer. Ent., October, 1868, v. 1, p. 39.
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421. [WALSH, B. D., and C. V. RILEY.] Insect foe of the apple-tree borer. <Amer. Ent., October, 1868, v. 1, p. 39.
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422. [WALSH, B. D., and C. V. RILEY.] Oak tree caterpillars. <Amer. Ent., October, 1868, v. 1, p. 39.
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423. [WALSH, B. D., and C. V. RILEY.] Bark-lice on apple trees. <Amer. Ent., October, 1868, v. 1, p. 40.
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424. [WALSH, B. D., and C. V. RILEY.] The "saddle-back" caterpillar. <Amer. Ent., October, 1868, v. 1, p. 40.
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425. [WALSH, B. D., and C. V. RILEY.] The regal walnut caterpillar. <Amer. Ent., October, 1868, v. 1, p. 40.
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426. [WALSH, B. D., and C. V. RILEY.] The Hessian fly. <Amer. Ent., October, 1868, v. 1, p. 40.
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427. [WALSH, B. D., and C. V. RILEY.] Red cedar caterpillar. <Amer. Ent., October, 1868, v. 1, p. 40.
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428. [WALSH, B. D., and C. V. RILEY.] Wheat-midge winter killed. <Amer. Ent., October, 1868, v. 1, p. 40.
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429. [WALSH, B. D., and C. V. RILEY.] Grape-vine borer. <Amer. Ent., October, 1868, v. 1, p. 40.
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430. [WALSH, B. D., and C. V. RILEY.] 'Popular names and scientific names. <Amer. Ent., November, 1868, v. 1, p. 49, figs. 49-51.
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431. [WALSH, B. D., and C. V. RILEY.] Entomological ignorance in the North. <Amer. Ent., November, 1868, v. 1, pp. 50-51, figs. 52-54.
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432. [WALSH, B. D., and C. V. RILEY.] Tit for tat. <Amer. Ent., November, 1868, v. 1, p. 52.
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433. [WALSH, B. D., and C. V. RILEY.] Grasshoppers. <Amer. Ent., November, 1868, v. 1, p. 53.
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434. [WALSH, B. D., and C. V. RILEY.] To keep seed peas from bugs. <Amer. Ent., November, 1868, v. 1, p. 53.
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435. [WALSH, B. D., and C. V. RILEY.] Mind how you pack insects. <Amer. Ent., November, 1868, v. 1, p. 54.
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436. [WALSH, B. D., and C. V. RILEY.] The apple growing on a grape vine. <Amer. Ent., November, 1868, v. 1, p. 54.
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437. [WALSH, B. D., and C. V. RILEY.] The late exhibition of useful and destructive insects at Paris. <Amer. Ent., November, 1868, v. 1, p. 55.
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438. [WALSH, B. D., and C. V. RILEY.] Destroying black ants in gardens. <Amer. Ent., November, 1868, v. 1, p. 55.
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439. [WALSH, B. D., and C. V. RILEY.] Entomological quackery. <Amer. Ent., November, 1868, v. 1, p. 56.
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440. [WALSH, B. D., and C. V. RILEY.] The cruel bug-hunters. <Amer. Ent., November, 1868, v. 1, p. 56.
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441. [WALSH, B. D., and C. V. RILEY.] Honey bees eating grapes. <Amer. Ent., November, 1868, v. 1, p. 56.
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442. [WALSH, B. D., and C. V. RILEY.] Twigs amputated by some unknown animal. <Amer. Ent., November, 1868, v. 1, p. 57.
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443. [WALSH, B. D., and C. V. RILEY.] Twigs girdled by some animal. <Amer. Ent., November, 1868, v. 1, p. 57.
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444. [WALSH, B. D., and C. V. RILEY.] Hop-vine caterpillar. <Amer. Ent., November, 1868, v. 1, p. 57.
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445. [WALSH, B. D., and C. V. RILEY.] "Galls" on leaves of soft maple. <Amer. Ent., November, 1868, v. 1, p. 57.
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446. [WALSH, B. D., and C. V. RILEY.] Unsightly galls on the cottonwood. <Amer. Ent., November, 1868, v. 1, p. 57.
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447. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., November, 1868, v. 1, p. 57.
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448. [WALSH, B. D., and C. V. RILEY.] The stick-bug. <Amer. Ent., November, 1868, v. 1, p. 58. Reprint: <Can. Farmer, 15 January, 1870.
Description, vernacular names, and habits of *Spectrum* [= *Diapheromera*] *femorata*.
449. [WALSH, B. D., and C. V. RILEY.] Woolly lice on the beech. <Amer. Ent., November, 1868, v. 1, p. 58.
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450. [WALSH, B. D., and C. V. RILEY.] The sheep-bot or head-maggot. <Amer. Ent., November, 1868, v. 1, p. 58.
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451. [WALSH, B. D., and C. V. RILEY.] Leaf-miners of the locust. <Amer. Ent., November, 1868, v. 1, p. 58.
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452. [WALSH, B. D., and C. V. RILEY.] Leaf-hoppers on celery. <Amer. Ent., November, 1868, v. 1, p. 58.
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453. [WALSH, B. D., and C. V. RILEY.] Parsnip caterpillars.—Scorpions. <Amer. Ent., November, 1868, v. 1, p. 59.
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454. [WALSH, B. D., and C. V. RILEY.] Noxious insects named. <Amer. Ent., November, 1868, v. 1, p. 59.
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455. [WALSH, B. D., and C. V. RILEY.] Cut-worms destroying recently sown wheat. <Amer. Ent., November, 1868, v. 1, p. 59.
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456. [WALSH, B. D., and C. V. RILEY.] The spined soldier bug. <Amer. Ent., November, 1868, v. 1, p. 59.
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457. [WALSH, B. D., and C. V. RILEY.] The preying Mantjs, alias Devil's riding horse, etc. <Amer. Ent., November, 1868, v. 1, p. 59.
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458. [WALSH, B. D., and C. V. RILEY.] The pigeon Tremex. <Amer. Ent., November, 1868, v. 1, p. 59.
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459. [WALSH, B. D., and C. V. RILEY.] Flesh-worms. <Amer. Ent., November, 1868, v. 1, p. 59.
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460. [WALSH, B. D., and C. V. RILEY.] Fall web-worm on hickory. <Amer. Ent., November, 1868, v. 1, p. 59.
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461. [WALSH, B. D., and C. V. RILEY.] Butterflies named. <Amer. Ent., November, 1868, v. 1, p. 60.
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462. [WALSH, B. D., and C. V. RILEY.] Museum pest. <Amer. Ent., November, 1868, v. 1, p. 60.
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463. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., November, 1868, v. 1, p. 60.
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464. [WALSH, B. D., and C. V. RILEY.] Grapes spoiled by something. <Amer. Ent., November, 1868, v. 1, p. 60.
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465. [WALSH, B. D., and C. V. RILEY.] White-pine worms. <Amer. Ent., November, 1868, v. 1, p. 60.
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466. [WALSH, B. D., and C. V. RILEY.] The Tarantula of Texas. <Amer. Ent., November, 1868, v. 1, p. 60.
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467. [WALSH, B. D., and C. V. RILEY.] Insect foes of the apple-tree. <Amer. Ent., November, 1868, v. 1, p. 60.
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468. [WALSH, B. D., and C. V. RILEY.] Grape-leaf folders eaten by spiders. <Amer. Ent., November, 1868, v. 1, p. 60.
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469. [WALSH, B. D., and C. V. RILEY.] Caterpillar of the Troilus butterfly. <Amer. Ent., November, 1868, v. 1, p. 60.
Answer to inquiry of A. S. Fuller; food-habits of larva of *Papilio troilus*.
470. [WALSH, B. D., and C. V. RILEY.] Potato beetles. <Amer. Ent., November, 1868, v. 1, p. 60.
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471. [WALSH, B. D., and C. V. RILEY.] Holes round the roots of young ash trees in the nursery. <Amer. Ent., November, 1868, v. 1, p. 60.
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472. [WALSH, B. D., and C. V. RILEY.] Locust borers. <Amer. Ent., November, 1868, v. 1, p. 60.
Answer to inquiry of U. Bruner; destructiveness of the larva of *Clytus* [= *Cyllene*] *robinie*.

473. [WALSH, B. D., and C. V. RILEY.] The hellgrammite fly. <Amer. Ent., December, 1868, v. 1, pp. 61-62, figs. 56-57.
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474. [WALSH, B. D., and C. V. RILEY.] The periodical Cicada. <Amer. Ent., December, 1868, v. 1, pp. 63-72, figs. 58-64. Extract: <Op. eit., June, 1869, v. 1, p. 202.
Characterization of the 13-year brood of *Cicada* as a new species, *C.* [= *Tibicen*] *tredecim*; dimorphism of the same and of *C.* [= *T.*] *septendecim*; seasons, natural history, transformations, enemies, sting, and injuries of these species; chronological history of their several known broods; figures the several stages of *C.* [= *T.*] *septendecim*, the towers made by the pupa and twigs with eggs.
475. [WALSH, B. D., and C. V. RILEY.] The hateful or Colorado grasshopper, *Caloptenus spretus*, Uhler and Walsh. <Amer. Ent., December, 1868, v. 1, pp. 73-76, fig. 65.
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476. [WALSH, B. D., and C. V. RILEY.] The twig-girdler, *Oncideres cingulatus*, Say. <Amer. Ent., December, 1868, v. 1, pp. 76-77, fig. 66.
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477. [WALSH, B. D., and C. V. RILEY.] An Ichneumon fly mistaken for a wasp. <Amer. Ent., December, 1868, v. 1, p. 77.
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478. [WALSH, B. D., and C. V. RILEY.] A plant growing out of an insect. <Amer. Ent., December, 1868, v. 1, p. 77.
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479. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., December, 1868, v. 1, p. 78.
Notices of The butterflies of North America by W. H. Edwards.—The Canadian Entomologist.—Guide to the study of insects by A. S. Packard, jr.
480. [WALSH, B. D., and C. V. RILEY.] Eggs of the white-marked tussock moth. <Amer. Ent., December, 1868, v. 1, p. 79, fig. 67.
Answer to inquiry of J. M. Hannah; characters of egg and larva of *Orgyia leucostigma*; sexual differences; parasites; figure of the larva.
481. [WALSH, B. D., and C. V. RILEY.] Currant borers. <Amer. Ent., December, 1868, v. 1, p. 79.
Answer to inquiry of B. N. McKinstry; means against *Trochilium* [= *Æge-ria*] *tipuliformis*, *T.* [= *Alcathæ*] *caudatum*, and *Psenocerus supernotatus*.

482. [WALSH, B. D., and C. V. RILEY.] Insect infesting grape seed. <Amer. Ent., December, 1868, v. 1, p. 79, fig. 68.
Answer to inquiry of A. S. Fuller; characters and figure of larva of *Isosoma vitis* infesting grape seed.
483. [WALSH, B. D., and C. V. RILEY.] Museum pests again. <Amer. Ent., December, 1868, v. 1, p. 79.
Answer to inquiry of J. Huggins; means against *Anthreni* in collections of natural history.
484. [WALSH, B. D., and C. V. RILEY.] Grape-vine leaf-hoppers. <Amer. Ent., December, 1868, v. 1, p. 79.
Answer to inquiry of P. C. Holmes; means against grape-vine leaf-hoppers.
485. [WALSH, B. D., and C. V. RILEY.] Apple-tree borer. <Amer. Ent., December, 1868, v. 1, p. 80, fig. 69.
Answer to inquiries of J. T. Zimmerman, C. H. Roberts, and C. R. Babbitt; habits, ravages, and figure of *Bostrichus* [= *Amphicerus*] *bicaudatus*.
486. [WALSH, B. D., and C. V. RILEY.] The murky ground beetle. <Amer. Ent., December, 1868, v. 1, p. 80.
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487. [WALSH, B. D., and C. V. RILEY.] Curculio and bark-lice. <Amer. Ent., December, 1868, v. 1, p. 80.
Answer to inquiry of D. A. Compton; hibernation of *Conotrachelus nenuphar*; soft soap as a means against *Coccidæ*.
488. [WALSH, B. D., and C. V. RILEY.] Insects to be named. <Amer. Ent., December, 1868, v. 1, p. 80.
Answer to inquiry of E. B. Beach; identification of several lepidopterous larvæ; food-habits of *Dryocampa stigma* and *D. pellucida* [= *virginiensis*].
489. [WALSH, B. D., and C. V. RILEY.] Young pecan trees girdled. <Amer. Ent., December, 1868, v. 1, p. 80.
Answer to inquiry of Mann and Redmond; means against *Oncideres cingulata*.
490. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., December, 1868, v. 1, p. 80.
Answer to inquiry of E. T. Dale; identification of several Colcoptera; supposed food-habits of *Tragidion fulvipenne*; character of cocoons of two species of *Microgaster* infesting *Protoparce celeus*.
491. [WALSH, B. D., and C. V. RILEY.] Eggs of true bugs. <Amer. Ent., December, 1868, v. 1, p. 80.
Answer to inquiry of S. C. Thornton; characters of eggs of *Prionidus cristatus*. See Amer. Ent., v. 1, pp. 96 and 187.
492. [WALSH, B. D., and C. V. RILEY.] Museum pest once more. <Amer. Ent., December, 1868, v. 1, p. 80.
Answer to inquiry of G. M. L.; larvæ of *Anthrenus muscorum* injuring whale-bone, woolen goods, etc.
493. [WALSH, B. D., and C. V. RILEY.] The Tarantula of Texas again. <Amer. Ent., December, 1868, v. 1, p. 80.
Answer to inquiry of C. Peabody; distribution of *Mygale hentzii* in Missouri.

494. [WALSH, B. D., and C. V. RILEY.] The Hessian fly on seed wheat. <Amer. Ent., December, 1868, v. 1, p. 80.
Answer to inquiry of U. Scott; broods and times of transformation of *Cecidomyia destructor*.
495. [WALSH, B. D., and C. V. RILEY.] The apple-root plant-louse. *Eriosoma (Pemphigus) pyri*, Fitch. <Amer. Ent., January, 1869, v. 1, pp. 81-84, figs. 70-72.
Habits, ravages, description, enemies, and parasites of, and means against *Eriosoma pyri* [= *Schizoneura lanigera*]; figures injured root, larva, and adult with details of structure; figures adult plant-louse found on cottonwood; description and figure of larva, puparium, and imago of *Pipiza radicum* n. sp.
496. [WALSH, B. D., and C. V. RILEY.] Ants' nests in gardens. <Amer. Ent., January, 1869, v. 1, p. 84.
Means against ants.
497. [WALSH, B. D., and C. V. RILEY.] The parasites of the human animal. <Amer. Ent., January, 1869, v. 1, pp. 84-88, figs. 73-74.
Brief accounts of *Pediculus humanus* [= *vestimenti*], *P. cervicalis* [= *capitis*], *P.* [= *Pthirus*] *pubis*, *Æstrus* [= *Dermatobia*] *hominis*, *Pulex irritans*, *P.* [= *Sarcopsylla*] *penetrans*, *Acanthia lectularia*, *Conorhinus sanguisuga*, and *Acarus* [= *Sarcoptes*] *scabiei*; figures and habits of *Reduvius* [= *Opsicætus*] *personatus* and of *Pirates* [= *Rasahus*] *biguttatus*; figure of *Conorhinus sanguisuga*; classificatory relations of *Pediculina* and *Mallophaga*.
498. [WALSH, B. D., and C. V. RILEY.] The coffee borer. <Amer. Ent., January, 1869, v. 1, p. 88.
Unnamed coffee borer injurious to coffee trees in Madras.
499. [WALSH, B. D., and C. V. RILEY.] Strawberry worms. <Amer. Ent., January, 1869, v. 1, pp. 89-91, figs. 75-76.
Description, natural history, ravages, means against, and figures of larva and imago of *Anchylopera* [= *Phoxopteris*] *fragariae*, n. sp.; figures all stages of *Emphytus* [= *Harpiphornus*] *maculatus*; description of its larva and pupa, its natural history, and means against its ravages.
500. [WALSH, B. D., and C. V. RILEY.] Fungoid growths. <Amer. Ent., January, 1869, v. 1, pp. 91-92.
Mention of instances of the growth of fungi on living plants and animals; letter of S. H. Y. Early on the occurrence of fungoid growths on the larvæ of *Lachnosterna fusca*.
501. [WALSH, B. D., and C. V. RILEY.] Plums for the million. <Amer. Ent., January, 1869, v. 1, pp. 92-93.
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502. [WALSH, B. D., and C. V. RILEY.] The "Colorado grasshopper." <Amer. Ent., January, 1869, v. 1, pp. 95-96.
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503. [WALSH, B. D., and C. V. RILEY.] Universal remedies. <Amer. Ent., January, 1869, v. 1, p. 97.
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504. [WALSH, B. D., and C. V. RILEY.] Complimentary. <Amer. Ent., January, 1869, v. 1, p. 98.
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505. [WALSH, B. D., and C. V. RILEY.] Paper-makers. <Amer. Ent., January, 1869, v. 1, p. 98.
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506. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., January, 1869, v. 1, p. 98.
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507. [WALSH, B. D., and C. V. RILEY.] Look out for the eggs of the apple-tree plant-louse. <Amer. Ent., January, 1869, v. 1, p. 99.
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508. [WALSH, B. D., and C. V. RILEY.] Greenhouse plants [= pests]. <Amer. Ent., January, 1869, v. 1, p. 99.
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509. [WALSH, B. D., and C. V. RILEY.] How to hatch pupæ. <Amer. Ent., January, 1869, v. 1, p. 99.
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510. [WALSH, B. D., and C. V. RILEY.] Drug-store pests. <Amer. Ent., January, 1869, v. 1, p. 99.
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511. [WALSH, B. D., and C. V. RILEY.] Apple-tree worms. <Amer. Ent., January, 1869, v. 1, p. 99.
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512. [WALSH, B. D., and C. V. RILEY.] Crane-fly larvæ. Amer. Ent., January, 1869, v. 1, p. 100.
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513. [WALSH, B. D., and C. V. RILEY.] Punctured grape canes. <Amer. Ent., January, 1869, v. 1, p. 100.
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514. [WALSH, B. D., and C. V. RILEY.] Insects to be named. <Amer. Ent., January, 1869, v. 1, p. 100.
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515. [WALSH, B. D., and C. V. RILEY.] Supposed cause of yellows in peach trees. <Amer. Ent., January, 1869, v. 1, p. 100, fig. 77.
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516. [WALSH, B. D., and C. V. RILEY.] Eggs of katydid. <Amer. Ent., January, 1869, v. 1, p. 100.
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517. [WALSH, B. D., and C. V. RILEY.] Apple-twig borer. <Amer. Ent., January, 1869, v. 1, p. 100.
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518. [WALSH, B. D., and C. V. RILEY.] Galls and their architects. <Amer. Ent., February, 1869, v. 1, pp. 101-110, figs. 78-90.
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519. [WALSH, B. D., and C. V. RILEY.] The bogus Colorado potato-bug, *Doryphora juncta*, Germar. <Amer. Ent., February, 1869, v. 1, p. 110.
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520. [WALSH, B. D., and C. V. RILEY.] Ants and aphides. <Amer. Ent., February, 1869, v. 1, p. 110.
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521. [WALSH, B. D., and C. V. RILEY.] The Tarantula of Texas, *Mygale hentzii*, Girard. <Amer. Ent., February, 1869, v. 1, p. 11, fig. 91.
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522. [WALSH, B. D., and C. V. RILEY.] The melancholy chafer. <Amer. Ent., February, 1869, v. 1, p. 111.
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523. [WALSH, B. D., and C. V. RILEY.] Apple worms (*Carpocapsa pomonella*, Linn.). <Amer. Ent., February, 1869, v. 1, pp. 112-114, fig. 93.
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524. [WALSH, B. D., and C. V. RILEY.] The asparagus beetle (*Crioceris asparagi*, Linn.). <Amer. Ent., February, 1869, v. 1, pp. 114-115, fig. 94.
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525. [WALSH, B. D., and C. V. RILEY.] A popular delusion. <Amer. Ent., February, 1869, v. 1, p. 116.
No insect passes through all the stages of its growth within one day; life history of *Ephemerida*.
526. [WALSH, B. D., and C. V. RILEY.] The squirrel bot. <Amer. Ent., February, 1869, v. 1, p. 117.
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527. [WALSH, B. D., and C. V. RILEY.] [Periodical Cicada.] <Amer. Ent., February, 1869, v. 1, p. 117.
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528. [WALSH, B. D., and C. V. RILEY.] Transformations of insects. <Amer. Ent., February, 1869, v. 1, p. 118.
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529. [WALSH, B. D., and C. V. RILEY.] Do bees injure raspberries? <Amer. Ent., February, 1869, v. 1, p. 118.
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530. [WALSH, B. D., and C. V. RILEY.] Best's fruit-tree invigorator again. <Amer. Ent., February, 1869, v. 1, p. 119.
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531. [WALSH, B. D., and C. V. RILEY.] The insect extinguisher, by Joseph Treat, N. J. <Amer. Ent., February, 1869, v. 1, p. 119.
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532. [WALSH, B. D., and C. V. RILEY.] More good words. <Amer. Ent., February, 1869, v. 1, p. 119.
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533. [WALSH, B. D., and C. V. RILEY.] Lacewing fly. <Amer. Ent., February, 1869, v. 1, p. 119.
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534. [WALSH, B. D., and C. V. RILEY.] Gigantic water-bug. <Amer. Ent., February, 1869, v. 1, p. 119.
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535. [WALSH, B. D., and C. V. RILEY.] The white-marked tussock moth again. <Amer. Ent., February, 1869, v. 1, p. 120.
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536. [WALSH, B. D., and C. V. RILEY.] Grasshopper eggs—will they hatch? <Amer. Ent., February, 1869, v. 1, p. 120.
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537. [WALSH, B. D., and C. V. RILEY.] Injured apple-trees. <Amer. Ent., February, 1869, v. 1, p. 120.
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539. [WALSH, B. D., and C. V. RILEY.] Bag worms. <Amer. Ent., February, 1869, v. 1, p. 120.
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539. [WALSH, B. D., and C. V. RILEY.] Eggs of the apple-tree plant-louse. <Amer. Ent., February, 1869, v. 1, p. 120.
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540. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., February, 1869, v. 1, p. 120.
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541. [WALSH, B. D., and C. V. RILEY.] White grubs. <Amer. Ent., February, 1869, v. 1, p. 120.
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542. [WALSH, B. D., and C. V. RILEY.] The polyphemus moth, *Attacus polyphemus*, Linn. <Amer. Ent., March, 1869, v. 1, pp. 121-122, fig. 95.
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543. [WALSH, B. D., and C. V. RILEY.] Wasps and their habits. <Amer. Ent., March, 1869, v. 1, pp. 122-143, figs. 96-112.
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544. [WALSH, B. D., and C. V. RILEY.] Do toads eat worker bees? <Amer. Ent., March, 1869, v. 1, p. 144.
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545. [WALSH, B. D., and C. V. RILEY.] Best's invigorator once again. <Amer. Ent., March, 1869, v. 1, p. 145.
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546. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., March, 1869, v. 1, p. 146.
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547. [WALSH, B. D., and C. V. RILEY.] Sugar-tree borer. <Amer. Ent., March, 1869, v. 1, p. 146.
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548. [WALSH, B. D., and C. V. RILEY.] Swellings on apple scions. <Amer. Ent., March, 1869, v. 1, p. 146.
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549. [WALSH, B. D., and C. V. RILEY.] Gas-waste *vs.* Curculio. <Amer. Ent., March, 1869, v. 1, p. 147.
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550. [WALSH, B. D., and C. V. RILEY.] Eggs of the apple-tree plant-louse again. <Amer. Ent., March, 1869, v. 1, p. 147.
Answers to inquiries of C. Williams and W. L. French; means against *Aphis mali*.
551. [WALSH, B. D., and C. V. RILEY.] Drug-store pests. <Amer. Ent., March, 1869, v. 1, p. 147.
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552. [WALSH, B. D., and C. V. RILEY.] Small galls and minings on apple-twigs. <Amer. Ent., March, 1869, v. 1, p. 147.
Answer to inquiry of O. O. A. Gardner; characters of undetermined galls and borings in twigs of apple-trees.
553. [WALSH, B. D., and C. V. RILEY.] Stinking bugs. <Amer. Ent., March, 1869, v. 1, p. 147.
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554. [WALSH, B. D., and C. V. RILEY.] Eggs in peach-twigs. <Amer. Ent., March, 1869, v. 1, p. 147.
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555. [WALSH, B. D., and C. V. RILEY.] Flat-headed apple-tree borer. <Amer. Ent., March, 1869, v. 1, p. 147.
Answer to inquiry of B. F. Mudge; means against *Chrysobothris femorata*.
556. [WALSH, B. D., and C. V. RILEY.] A bundle of entomological queries. <Amer. Ent., March, 1869, v. 1, p. 148.
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557. [WALSH, B. D., and C. V. RILEY.] Grape-berry moth. <Amer. Ent., March, 1869, v. 1, p. 148.
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558. [WALSH, B. D., and C. V. RILEY.] Hairy caterpillar. <Amer. Ent., March, 1869, v. 1, p. 148.
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559. [WALSH, B. D., and C. V. RILEY.] Borer in plum-twigs. <Amer. Ent., March, 1869, v. 1, p. 148.
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560. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., March, 1869, v. 1, p. 148.
 Answer to inquiry of W. W. Butterfield; identification of insects sent; comparative characters of *Arhopalus* [= *Cyllene*] *pictus* and *A.* [= *C.*] *robiniae*; variation in *Clytus* [= *Neoclytus*] *caprae*; generic characters of *Arhopalus* and *Clytus*. (See No. 582.)
561. [WALSH, B. D., and C. V. RILEY.] Pear-root borer. <Amer. Ent., March, 1869, v. 1, p. 148.
 Answer to inquiry of P. Earle; larva of *Prionus laticollis* injurious to the pear and grape.
562. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., March, 1869, v. 1, p. 148.
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563. [WALSH, B. D., and C. V. RILEY.] The joint-worm (*Isosoma hordei* Harris). <Amer. Ent., April, 1869, v. 1, pp. 149-158, figs. 113-118.
 Natural history, variation, parasites, ravages, and means against *Isosoma hordei*; unity of habits in insects; generic classification of the joint-worm fly; figures male and female imago; figures ♂ and ♀ imagos of *Semiotellus chalcidiphagus* n. sp., *Eurytoma* sp., and *Decatoma* sp., and of ♀ imago of *Antigaster* [= *Eupelmus*] *mirabilis*.
564. [WALSH, B. D., and C. V. RILEY.] The wavy-striped flea-beetle. (*Haltica* [*Phyllotreta*] *striolata* Illiger). <Amer. Ent., April, 1869, v. 1, pp. 158-159, fig. 119.
 Description, habits, and ravages of *Phyllotreta striolata* [= *vittata*]; figures larva, pupa, and imago of the same; quotes from H. Shimer's "The wavy-striped flea-beetle" (Amer. Nat., December, 1868, v. 2, pp. 514-517).
565. [WALSH, B. D., and C. V. RILEY.] Concerning certain smart bugs. <Amer. Ent., April, 1869, v. 1, p. 160.
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566. [WALSH, B. D., and C. V. RILEY.] Curculio remedies. <Amer. Ent., April, 1869, v. 1, p. 161.
 Comments on essay of L. C. Francis on the plum; coal oil not effective against *Conotrachelus nenuphar*.
567. [WALSH, B. D., and C. V. RILEY.] How great wits jump together. <Amer. Ent., April, 1869, v. 1, p. 161.
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568. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., April, 1869, v. 1, p. 165.
 Notices of Harris's Insects injurious to Vegetation, L'Insectologie agricole, and several other works not entomological.

569. [WALSH, B. D., and C. V. RILEY.] Eggs of the oblong-winged katydid. <Amer. Ent., April, 1869, v. 1, p. 166, fig. 120.
Answer to inquiries of T. A. Thop, J. L. Rice, B. J. Campbell, H. Cheeney, and A. McMoore; eggs of *Phylloptera* [= *Amblycorypha*] *oblongifolia* compared with those of *Platyphyllum* [= *Cyrtophyllum*] *concaum*; figures of the eggs of *A. oblongifolia*.
570. [WALSH, B. D., and C. V. RILEY.] Mossy rose gall. <Amer. Ent., April, 1869, v. 1, p. 166.
Answer to inquiry of F. W. Collins; characters of *Rhodites rosea* and its gall.
571. [WALSH, B. D., and C. V. RILEY.] Caterpillars on lombardy poplars. <Amer. Ent., April, 1869, v. 1, p. 166.
Answer to inquiry of J. F. Gurley; characters of larva, habits, food-plants, and parasites of *Acronycta acericola* [= *americana*].
572. [WALSH, B. D., and C. V. RILEY.] Museum pests. <Amer. Ent., April, 1869, v. 1, p. 166, fig. 121.
Answer to inquiries of F. W. Hoit, jr., G. M. L., and J. Huggins; figures larva, pupa, and imago of *Anthrenus* sp.; *A. varius* compared with *A. museum*.
573. [WALSH, B. D., and C. V. RILEY.] Cockroach eggs. <Amer. Ent., April, 1869, v. 1, p. 166.
Answer to inquiry of H. C. Freeman; character of the egg-cases and adult of *Platamodes unicolor*; occurrence of *Ectobia germanica* in Illinois; ravages of species of *Blattidae*.
574. [WALSH, B. D., and C. V. RILEY.] Apple-tree leaf-crumplers. <Amer. Ent., April, 1869, v. 1, p. 166.
Answer to inquiry of J. F. Jones; result of the work of the larvæ of *Phycita nebulo* [= *Acrobasis indiginella*] on the growth of apple-trees.
575. [WALSH, B. D., and C. V. RILEY.] A most precious bug. <Amer. Ent., April, 1869, v. 1, p. 167.
Answer to inquiry of E. S. Holmes; characters and variety of *Hylecætus lugubris*; destructiveness of *Lymexylon navale*; use of the maxillary palpi in the ♂♂ of *Lymexylidæ*.
576. [WALSH, B. D., and C. V. RILEY.] Blackberry-cane borers. <Amer. Ent., April, 1869, v. 1, p. 167.
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577. [WALSH, B. D., and C. V. RILEY.] Rows of eggs in pear-twigs. <Amer. Ent., April, 1869, v. 1, p. 167.
Answer to inquiry of H. C. Freeman; characters of unknown eggs found in pear-twigs.
578. [WALSH, B. D., and C. V. RILEY.] An orchard giving out. <Amer. Ent., April, 1869, v. 1, p. 168.
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579. [WALSH, B. D., and C. V. RILEY.] Plant-louse eggs on apple and mountain ash. <Amer. Ent., April, 1869, v. 1, p. 168.
Answer to inquiry of W. Stewart; eggs of *Aphis mali* on apple-twigs and probably on those of mountain ash; *Aspidiotus harrisii* [= *Chionaspis furfurus*] infests both trees.

580. [WALSH, B. D., and C. V. RILEY.] Gigantic rhinoceros beetle. <Amer. Ent., April, 1869, v. 1, p. 168.
Answer to inquiry of F. G. Smith; characters of *Dynastes tityrus*.
581. [WALSH, B. D., and C. V. RILEY.] Bee queries. <Amer. Ent., April, 1869, v. 1, p. 168.
Answer to inquiry of W. R. Howard; *Galleria cercana* always injurious; a new swarm composed of both old and new bees.
582. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., April, 1869, v. 1, p. 168.
Answer to inquiry of W. W. Butterfield; characters of *Clytus* [= *Neoclytus*] *caprea*. (See No. 560.)
583. [WALSH, B. D., and C. V. RILEY.] Elm-tree borer. <Amer. Ent., April, 1869, v. 1, p. 168.
Answer to inquiry of W. M. Gregory; *Saperda lateralis* and *Dryobius serfasciatus* attack the elm in the larva state. (See No. 696.)
584. [WALSH, B. D., and C. V. RILEY.] The chineh-bug (*Micropus leucopterus* Say). <Amer. Ent., 1869, v. 1, May, pp. 169-177, fig. 122; June, pp. 194-199, figs. 135-139. Reprint: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 15-37, figs. 1-10.
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585. [WALSH, B. D., and C. V. RILEY.] The grape-berry moth (*Penthina vitivorana*, Paekard). <Amer. Ent., May, 1869, v. 1, pp. 177-179, figs. 123-125.
Natural history, ravages, and means against *Penthina vitivorana* [= *Eudemis botrana*]; figures, larva, pupa, cocoon, imago, and injured grape.
586. [WALSH, B. D., and C. V. RILEY.] Poisonous flour. <Amer. Ent., May, 1869, v. 1, p. 179.
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587. [WALSH, B. D., and C. V. RILEY.] Mounding peach-trees. <Amer. Ent., May, 1869, v. 1, pp. 180-181, fig. 126.
Mounding as a means against *Sannina exilis*; figures ♂ and ♀ of the same.
588. [WALSH, B. D., and C. V. RILEY.] Going it blind. <Amer. Ent., May, 1869, v. 1, pp. 182-183.
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591. [WALSH, B. D., and C. V. RILEY.] Apple tree plant-lice. (*Aphis mali*, Linn.) <Amer. Ent., May, 1869, v. 1, p. 184.
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592. [WALSH, B. D., and C. V. RILEY.] Crack-jaw names. <Amer. Ent., May, 1869, v. 1, p. 184.
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594. [WALSH, B. D., and C. V. RILEY.] White-grub fungus. <Amer. Ent., May, 1869, v. 1, p. 186, fig. 129.
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597. [WALSH, B. D., and C. V. RILEY.] Worms in osage orange seed. <Amer. Ent., May, 1869, v. 1, p. 186.
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598. [WALSH, B. D., and C. V. RILEY.] Insects to be named. <Amer. Ent., May, 1869, v. 1, p. 186.
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600. [WALSH, B. D., and C. V. RILEY.] Eggs of the white-marked tussock moth. <Amer. Ent., May, 1869, v. 1, p. 186.
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601. [WALSH, B. D., and C. V. RILEY.] Owl's pellets. <Amer. Ent., May, 1869, v. 1, p. 187.
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602. [WALSH, B. D., and C. V. RILEY.] Crab-apple borers. <Amer. Ent., May, 1869, v. 1, p. 187.
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603. [WALSH, B. D., and C. V. RILEY.] Mosquitoes. <Amer. Ent., May, 1869, v. 1, p. 187.
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607. [WALSH, B. D., and C. V. RILEY.] Eggs of cut-worm moth. <Amer. Ent., May, 1869, v. 1, p. 188, fig. 131.
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608. [WALSH, B. D., and C. V. RILEY.] Snow fleas. <Amer. Ent., May, 1869, v. 1, p. 188.
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610. [WALSH, B. D., and C. V. RILEY.] Pithy galls on blackberry-twigs. <Amer. Ent., May, 1869, v. 1, p. 188.
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611. [WALSH, B. D., and C. V. RILEY.] Moth eggs. <Amer. Ent., May, 1869, v. 1, p. 188.
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612. [WALSH, B. D., and C. V. RILEY.] Horse-hair snakes. <Amer. Ent., May, 1869, v. 1, p. 188.
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613. [WALSH, B. D., and C. V. RILEY.] Imitative butterflies. <Amer. Ent., June, 1869, v. 1, pp. 189-193, figs. 132-134.
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614. [WALSH, B. D., and C. V. RILEY.] Cabbage-worms upon gilly-flowers. <Amer. Ent., June, 1869, v. 1, p. 199.
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615. [WALSH, B. D., and C. V. RILEY.] "Wasps and their habits." <Amer. Ent., June, 1869, v. 1, p. 200.
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616. [WALSH, B. D., and C. V. RILEY.] The social wasps. <Amer. Ent., June, 1869, v. 1, p. 201.
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617. [WALSH, B. D., and C. V. RILEY.] Mounding peach-trees. <Amer. Ent., June, 1869, v. 1, pp. 201-202.
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619. [WALSH, B. D., and C. V. RILEY.] The periodical Cicada. <Amer. Ent., June, 1869, v. 1, p. 202.
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620. [WALSH, B. D., and C. V. RILEY.] The Curculio scarcer than last year. <Amer. Ent., June, 1869, v. 1, p. 202.
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621. [WALSH, B. D., and C. V. RILEY.] The American Entomological Society. <Amer. Ent., June, 1869, v. 1, p. 203.
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622. [WALSH, B. D., and C. V. RILEY.] Remarkable peculiarity in the insect world. <Amer. Ent., June, 1869, v. 1, p. 204.
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623. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., June, 1869, v. 1, pp. 204-205.
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624. [WALSH, B. D., and C. V. RILEY.] Cannibal mites. <Amer. Ent., June, 1869, v. 1, p. 205.
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625. [WALSH, B. D., and C. V. RILEY.] Gnats. <Amer. Ent., June, 1869, v. 1, p. 205.
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626. [WALSH, B. D., and C. V. RILEY.] Cut-worms severing cabbage plants. <Amer. Ent., June, 1869, v. 1, p. 205.
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628. [WALSH, B. D., and C. V. RILEY.] Tiger beetles. <Amer. Ent., June, 1869, v. 1, p. 205.
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629. [WALSH, B. D., and C. V. RILEY.] Cocoons and chrysalids named. <Amer. Ent., June, 1869, v. 1, p. 206.
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630. [WALSH, B. D., and C. V. RILEY.] White lined morning Sphinx. <Amer. Ent., June, 1869, v. 1, p. 206.
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631. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., June, 1869, v. 1, p. 206.
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633. [WALSH, B. D., and C. V. RILEY.] The apple-twig borer. <Amer. Ent., June, 1869, v. 1, p. 206, fig. 141.
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634. [WALSH, B. D., and C. V. RILEY.] Apple-tree borers on south side of trees. <Amer. Ent., June, 1869, v. 1, p. 206.
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635. [WALSH, B. D., and C. V. RILEY.] Cocoons of the Cecropia moth. <Amer. Ent., June, 1869, v. 1, p. 206.
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636. [WALSH, B. D., and C. V. RILEY.] Flea-beetles. <Amer. Ent., June, 1869, v. 1, p. 206.
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637. [WALSH, B. D., and C. V. RILEY.] Strawberry bugs. <Amer. Ent., June, 1869, v. 1, p. 207.
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638. [WALSH, B. D., and C. V. RILEY.] Eggs on apple-trees. <Amer. Ent., June, 1869, v. 1, p. 207, fig. 142.
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639. [WALSH, B. D., and C. V. RILEY.] Lady-bird larvæ. <Amer. Ent., June, 1869, v. 1, p. 207, fig. 143.
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640. [WALSH, B. D., and C. V. RILEY.] White-grub fungus, again. <Amer. Ent., June, 1869, v. 1, p. 207, fig. 144.
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641. [WALSH, B. D., and C. V. RILEY.] Bag-worms. <Amer. Ent., June, 1869, v. 1, p. 207.
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642. [WALSH, B. D., and C. V. RILEY.] Tent-caterpillar. <Amer. Ent., June, 1869, v. 1, p. 208, fig. 145.
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643. [WALSH, B. D., and C. V. RILEY.] Hawk's pellets. <Amer. Ent., June, 1869, v. 1, p. 208.
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644. [WALSH, B. D., and C. V. RILEY.] Plant lice on berberry. <Amer. Ent., June, 1869, v. 1, p. 208.
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645. [WALSH, B. D., and C. V. RILEY.] Tent-caterpillar of the forest. <Amer. Ent., June, 1869, v. 1, p. 208, fig. 146.
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646. [WALSH, B. D., and C. V. RILEY.] Cotton insects. <Amer. Ent., July, 1869, v. 1, pp. 209-214, fig. 147-151.
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647. [WALSH, B. D., and C. V. RILEY.] The true Army-worm (*Leucania unipuncta* Haworth). <Amer. Ent., July, 1869, v. 1, pp. 214-217, fig. 152-155.
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648. [WALSH, B. D., and C. V. RILEY.] Belated individuals of the periodical Cicada. <Amer. Ent., July, 1869, v. 1, p. 217.
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649. [WALSH, B. D., and C. V. RILEY.] Is the Curculio scarcer than it was last year? <Amer. Ent., July, 1869, v. 1, pp. 217, 218.
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650. [WALSH, B. D., and C. V. RILEY.] To destroy Colorado potato bugs. <Amer. Ent., July, 1869, v. 1, p. 219.
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651. [WALSH, B. D., and C. V. RILEY.] Dr. Hull's Curculio-catcher. <Amer. Ent., June, 1869, v. 1, pp. 220-221, fig. 156.
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652. [WALSH, B. D., and C. V. RILEY.] The New York weevil (*Ithycerus noveboracensis*, Forster). <Amer. Ent., July, 1869, v. 1, pp. 221-222, fig. 157.
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653. [WALSH, B. D., and C. V. RILEY.] Mounding peach-trees again. <Amer. Ent., July, 1869, v. 1, p. 223.
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654. [WALSH, B. D., and C. V. RILEY.] Overcrowded. <Amer. Ent., July, 1869, v. 1, p. 223.
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655. [WALSH, B. D., and C. V. RILEY.] No air-holes needed in sending insects. <Amer. Ent., July, 1869, v. 1, p. 223.
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656. [WALSH, B. D., and C. V. RILEY.] Plum-leaf worms. <Amer. Ent., July, 1869, v. 1, p. 223.
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657. [WALSH, B. D., and C. V. RILEY.] Seed-corn maggot. <Amer. Ent., July, 1869, v. 1, p. 224, figs. 138-139.
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658. [WALSH, B. D., and C. V. RILEY.] Cut-worms. <Amer. Ent., July, 1869, v. 1, p. 224.
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659. [WALSH, B. D., and C. V. RILEY.] New York weevil. <Amer. Ent., July, 1869, v. 1, p. 224.
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660. [WALSH, B. D., and C. V. RILEY.] Insects around peach-trees. <Amer. Ent., July, 1869, v. 1, p. 224.
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661. [WALSH, B. D., and C. V. RILEY.] Large green worm in a peach. <Amer. Ent., July, 1869, v. 1, p. 224.
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662. [WALSH, B. D., and C. V. RILEY.] Ichneumon flies. <Amer. Ent., July, 1869, v. 1, p. 224.
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663. [WALSH, B. D., and C. V. RILEY.] Raspberry worms. <Amer. Ent., July, 1869, v. 1, p. 224.
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664. [WALSH, B. D., and C. V. RILEY.] Hairy grape-leaf folders. <Amer. Ent., July, 1869, v. 1, p. 224.
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665. [WALSH, B. D., and C. V. RILEY.] Row of eggs in maple-twigs. <Amer. Ent., July, 1869, v. 1, p. 224.
Answer to inquiry of J. Bower; characters of eggs of undetermined katydid.
666. [WALSH, B. D., and C. V. RILEY.] Butterfly named. <Amer. Ent., July, 1869, v. 1, p. 224.
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667. [WALSH, B. D., and C. V. RILEY.] Grasshopper's eggs. <Amer. Ent., July, 1869, v. 1, p. 224.
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668. [WALSH, B. D., and C. V. RILEY.] Asilus fly larvæ. <Amer. Ent., July, 1869, v. 1, p. 225, figs. 161-162.
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669. [WALSH, B. D., and C. V. RILEY.] New insect-foe of the black-berry. <Amer. Ent., July, 1869, v. 1, p. 225.
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670. [WALSH, B. D., and C. V. RILEY.] Army-worm. <Amer. Ent., July, 1869, v. 1, p. 225.
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671. [WALSH, B. D., and C. V. RILEY.] Green grape-vine worm. <Amer. Ent., July, 1869, v. 1, p. 225, fig. 163.
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672. [WALSH, B. D., and C. V. RILEY.] Rose slug. <Amer. Ent., July, 1869, v. 1, p. 225.
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673. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., July, 1869, v. 1, p. 225.
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674. [WALSH, B. D., and C. V. RILEY.] Chrysalis of the virgin tiger moth. <Amer. Ent., July, 1869, v. 1, p. 225.
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675. [WALSH, B. D., and C. V. RILEY.] Clover-worms. <Amer. Ent., July, 1869, v. 1, p. 226, fig. 164.
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676. [WALSH, B. D., and C. V. RILEY.] Raspberry brand. <Amer. Ent., July, 1869, v. 1, p. 226.
Answer to inquiry of J. M. Beecher; larva of small guat feeding on raspberry-brand.
677. [WALSH, B. D., and C. V. RILEY.] Rose-worms. <Amer. Ent., July, 1869, v. 1, p. 226.
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678. [WALSH, B. D., and C. V. RILEY.] Plum-tree plant-lice. <Amer. Ent., July, 1869, v. 1, p. 226, figs. 165-167.
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679. [WALSH, B. D., and C. V. RILEY.] Ichneumon-flies. <Amer. Ent., July, 1869, v. 1, p. 226.
Answer to inquiries of S. J. Throp and J. E. Trabue; life-habits of *Microgaster* sp.?
680. [WALSH, B. D., and C. V. RILEY.] A new Curculio humbug. <Amer. Ent., July, 1869, v. 1, p. 226.
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681. [WALSH, B. D., and C. V. RILEY.] Sweet-potato beetles. <Amer. Ent., July, 1869, v. 1, p. 227.
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682. [WALSH, B. D., and C. V. RILEY.] Injured strawberry and grape-vines. <Amer. Ent., July, 1869, v. 1, p. 227.
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683. [WALSH, B. D., and C. V. RILEY.] Plum-tree insects. <Amer. Ent., July, 1869, v. 1, p. 227.
Answer to inquiry of J. F. Waters; characters of *Bibio albipennis*; food-habits of its larva.
684. [WALSH, B. D., and C. V. RILEY.] Apple-tree bugs. <Amer. Ent., July, 1869, v. 1, p. 227.
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685. [WALSH, B. D., and C. V. RILEY.] Hickory-stem gall-louse. <Amer. Ent., July, 1869, v. 1, p. 227.
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686. [WALSH, B. D., and C. V. RILEY.] Grape-vine leaf-hopper. <Amer. Ent., July, 1869, v. 1, p. 227.
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687. [WALSH, B. D., and C. V. RILEY.] Twelve-spotted Diabrotica. <Amer. Ent., July, 1869, v. 1, p. 227, fig. 168.
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688. [WALSH, B. D., and C. V. RILEY.] The caterpillar of the forest. <Amer. Ent., July, 1869, v. 1, p. 227.
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689. [WALSH, B. D., and C. V. RILEY.] Strawberry destroyer. <Amer. Ent., July, 1869, v. 1, p. 227.
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690. [WALSH, B. D., and C. V. RILEY.] Eggs of bugs on strawberry. <Amer. Ent., July, 1869, v. 1, p. 227.
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691. [WALSH, B. D., and C. V. RILEY.] Frog-spittle insects. <Amer. Ent., July, 1869, v. 1, p. 228. Reprint: <Cultivator and Country Gentleman, 29 July, 1869, v. 34, p. 82.
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692. [WALSH, B. D., and C. V. RILEY.] Eggs of ground-beetle. <Amer. Ent., July, 1869, v. 1, p. 228.
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693. [WALSH, B. D., and C. V. RILEY.] New insect-foe of the potato. <Amer. Ent., July, 1869, v. 1, p. 228.
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694. [WALSH, B. D., and C. V. RILEY.] Tomato-stalk borer. <Amer. Ent., July, 1869, v. 1, p. 228.
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695. [WALSH, B. D., and C. V. RILEY.] Breeding cages. <Amer. Ent., July, 1869, v. 1, p. 228.
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696. [WALSH, B. D., and C. V. RILEY.] Elm-tree borer. <Amer. Ent., July, 1869, v. 1, p. 228.
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697. [WALSH, B. D., and C. V. RILEY.] Peach-twig borer. <Amer. Ent., July, 1869, v. 1, p. 228.
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698. [WALSH, B. D., and C. V. RILEY.] Eggs of periodical Cicada in savin-twig. <Amer. Ent., July 1869, v. 1, p. 228.
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699. [WALSH, B. D., and C. V. RILEY.] Elm-tree saw-fly. <Amer. Ent., July, 1869, v. 1, p. 228.
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700. [WALSH, B. D., and C. V. RILEY.] Snout-beetle. <Amer. Ent., July, 1869, v. 1, p. 228.
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701. [WALSH, B. D., and C. V. RILEY.] The close of the first volume. <Amer. Ent., August, 1869, v. 1, p. 229.
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702. [WALSH, B. D., and C. V. RILEY.] The Royal horned caterpillar. (*Ceratocampa (Citheronia) regalis*, Fabr.). <Amer. Ent., August, 1869, v. 1, pp. 230-231, pl. 1.
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703. [WALSH, B. D., and C. V. RILEY.] Comparative scarcity of the Curculio again. <Amer. Ent., August, 1869, v. 1, p. 241.
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704. [WALSH, B. D., and C. V. RILEY.] A possible cause of the bee disease. <Amer. Ent., August, 1869, v. 1, pp. 241-242.
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705. [WALSH, B. D., and C. V. RILEY.] Ash and mountain ash. <Amer. Ent., August, 1869, v. 1, pp. 243-244.
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706. [WALSH, B. D., and C. V. RILEY.] How the Curculio flies by night. <Amer. Ent., August, 1869, v. 1, p. 244.
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707. [WALSH, B. D., and C. V. RILEY.] The periodical Cicada; our first brood established. <Amer. Ent., August, 1869, v. 1, p. 244.
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708. [WALSH, B. D., and C. V. RILEY.] Be on the guard. <Amer. Ent., August, 1869, v. 1, p. 244.
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709. [WALSH, B. D., and C. V. RILEY.] Prophecy fulfilled. <Amer. Ent., August, 1869, v. 1, p. 244.
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710. [WALSH, B. D., and C. V. RILEY.] A poisonous worm. <Amer. Ent., August, 1869, v. 1, p. 245.
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711. [WALSH, B. D., and C. V. RILEY.] Wheat midge, alias milk weevil, alias red weevil. <Amer. Ent., August, 1869, v. 1, p. 245.
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712. [WALSH, B. D., and C. V. RILEY.] Large fish-fly. <Amer. Ent., August, 1869, v. 1, p. 245.
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713. [WALSH, B. D., and C. V. RILEY.] Cottonwood leaf-galls. <Amer. Ent., August, 1869, v. 1, p. 245.
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714. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 245.
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715. [WALSH, B. D., and C. V. RILEY.] Four-lined leaf-bug on currant. <Amer. Ent., August, 1869, v. 1, p. 246.
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716. [WALSH, B. D., and C. V. RILEY.] Bee moth. <Amer. Ent., August, 1869, v. 1, p. 246, fig. 182.
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717. [WALSH, B. D., and C. V. RILEY.] Canker-worm parasites. <Amer. Ent., August, 1869, v. 1, p. 246.
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718. [WALSH, B. D., and C. V. RILEY.] Beetles swarming about the lawn. <Amer. Ent., August, 1869, v. 1, p. 246.
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719. [WALSH, B. D., and C. V. RILEY.] Tiger-beetle larva. <Amer. Ent., August, 1869, v. 1, p. 246.
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720. [WALSH, B. D., and C. V. RILEY.] Large compound gall on grapevine. <Amer. Ent., August, 1869, v. 1, p. 247, fig. 183.
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721. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 247.
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722. [WALSH, B. D., and C. V. RILEY.] Destructive larvæ. <Amer. Ent., August, 1869, v. 1, p. 247.
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723. [WALSH, B. D., and C. V. RILEY.] Eggs of tree-cricket on grapevine. <Amer. Ent., August, 1869, v. 1, p. 247.
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724. [WALSH, B. D., and C. V. RILEY.] Grape-vine leaf-gall. <Amer. Ent., August, 1869, v. 1, p. 248, fig. 184.
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725. [WALSH, B. D., and C. V. RILEY.] Grape-vine insects. <Amer. Ent., August, 1869, v. 1, p. 248.
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726. [WALSH, B. D., and C. V. RILEY.] Museum pests. <Amer. Ent., August, 1869, v. 1, p. 248.
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727. [WALSH, B. D., and C. V. RILEY.] Wheat maggots. <Amer. Ent., August, 1869, v. 1, p. 248.
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728. [WALSH, B. D., and C. V. RILEY.] Parasites on "hateful grasshopper." <Amer. Ent., August, 1869, v. 1, p. 249.
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729. [WALSH, B. D., and C. V. RILEY.] Crippled moths. <Amer. Ent., August, 1869, v. 1, p. 248.
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730. [WALSH, B. D., and C. V. RILEY.] Insects on the oleander. <Amer. Ent., August, 1869, v. 1, p. 249, fig. 185.
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731. [WALSH, B. D., and C. V. RILEY.] Insects found on apple-trees. <Amer. Ent., August, 1869, v. 1, p. 249.
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732. [WALSH, B. D., and C. V. RILEY.] Beetles named. <Amer. Ent., August, 1869, v. 1, p. 249.
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733. [WALSH, B. D., and C. V. RILEY.] Gigantic water-bug. <Amer. Ent., August, 1869, v. 1, p. 249, fig. 186.
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734. [WALSH, B. D., and C. V. RILEY.] Worm eating into green tomatoes. <Amer. Ent., August, 1869, v. 1, p. 249.
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735. [WALSH, B. D., and C. V. RILEY.] Miscellaneous. <Amer. Ent., August, 1869, v. 1, p. 249.
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736. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 250.
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737. [WALSH, B. D., and C. V. RILEY.] Lightning-hoppers. <Amer. Ent., August, 1869, v. 1, p. 250.
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738. [WALSH, B. D., and C. V. RILEY.] Bag-worms. <Amer. Ent., August, 1869, v. 1, p. 250.
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739. [WALSH, B. D., and C. V. RILEY.] Woolly gall on white oak. <Amer. Ent., August, 1869, v. 1, p. 250, fig. 187.
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740. [WALSH, B. D., and C. V. RILEY.] Cabbage pests. <Amer. Ent., August, 1869, v. 1, p. 250.
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741. [WALSH, B. D., and C. V. RILEY.] Bugs gathering on pear shoots. <Amer. Ent., August, 1869, v. 1, p. 250.
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742. [WALSH, B. D., and C. V. RILEY.] Potato-bug. <Amer. Ent., August, 1869, v. 1, p. 250.
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743. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 251.
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744. [WALSH, B. D., and C. V. RILEY.] Apple-tree worms. <Amer. Ent., August, 1869, v. 1, p. 251.
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745. [WALSH, B. D., and C. V. RILEY.] Oak-fig gall. <Amer. Ent., August, 1869, v. 1, p. 251.
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746. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 251.
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747. [WALSH, B. D., and C. V. RILEY.] Small apple-leaf worms. <Amer. Ent., August, 1869, v. 1, p. 251.
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748. [WALSH, B. D., and C. V. RILEY.] Rose-bug on apples. <Amer. Ent., August, 1869, v. 1, p. 251.
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749. [WALSH, B. D., and C. V. RILEY.] Unicorn apple-tree caterpillar. <Amer. Ent., August, 1869, v. 1, p. 251.
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750. [WALSH, B. D., and C. V. RILEY.] Large water beetle. <Amer. Ent., August, 1869, v. 1, p. 251.
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751. [WALSH, B. D., and C. V. RILEY.] Beetles around peach-trees. <Amer. Ent., August, 1869, v. 1, p. 252.
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752. [WALSH, B. D., and C. V. RILEY.] A quick traveler. <Amer. Ent., August, 1869, v. 1, p. 252.
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753. [WALSH, B. D., and C. V. RILEY.] Unknown moth. <Amer. Ent., August, 1869, v. 1, p. 252.
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754. [WALSH, B. D., and C. V. RILEY.] Corn-borer. <Amer. Ent., August, 1869, v. 1, p. 252.
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755. [WALSH, B. D., and C. V. RILEY.] Horns of stag-beetle. <Amer. Ent., August, 1869, v. 1, p. 252.
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756. [WALSH, B. D., and C. V. RILEY.] Imported gooseberry worms. <Amer. Ent., August, 1869, v. 1, p. 252.
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757. [WALSH, B. D., and C. V. RILEY.] Worm on bark of walnut-tree. <Amer. Ent., August, 1869, v. 1, p. 252.
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758. [WALSH, B. D., and C. V. RILEY.] Rotten root. <Amer. Ent., August, 1869, v. 1, p. 252.
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759. [WALSH, B. D., and C. V. RILEY.] Large dragon-fly. <Amer. Ent., August, 1869, v. 1, p. 252.
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760. [WALSH, B. D., and C. V. RILEY.] Stinging larvæ. <Amer. Ent., August, 1869, v. 1, p. 252.
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761. [WALSH, B. D., and C. V. RILEY.] Raspberry worms. <Amer. Ent., August, 1869, v. 1, p. 252.
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762. [WALSH, B. D., and C. V. RILEY.] Leaf-galls and caterpillars on the sugarberry. <Amer. Ent., August, 1869, v. 1, p. 252.
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763. [WALSH, B. D., and C. V. RILEY.] Dark grape-worm. <Amer. Ent., August, 1869, v. 1, p. 252.
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764. [WALSH, B. D., and C. V. RILEY.] Too fond of honey. <Amer. Ent., August, 1869, v. 1, p. 252.
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765. [WALSH, B. D., and C. V. RILEY.] Caterpillar of polyphemus moth. <Amer. Ent., August, 1869, v. 1, p. 252.
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766. [WALSH, B. D., and C. V. RILEY.] Why noxious insects increase upon us. <Amer. Ent., September–October, 1869, v. 2, pp. 1–2.
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767. [WALSH, B. D., and C. V. RILEY.] Tortoise-beetles. <Amer. Ent., September–October, 1869, v. 2, pp. 2–5, figs. 1–3.
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768. [WALSH, B. D., and C. V. RILEY.] Scientific nomenclature. <Amer. Ent., September–October, 1869, v. 2, pp. 5–8.
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769. [WALSH, B. D., and C. V. RILEY.] Killing apple-worms by machinery. <Amer. Ent., September–October, 1869, v. 2, p. 9.
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770. [WALSH, B. D., and C. V. RILEY.] A potter wasp (*Odynerus flavipes?* Fabr.). <Amer. Ent., September–October, 1869, v. 2, p. 10, fig. 4.
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771. [WALSH, B. D., and C. V. RILEY.] Tomato-worms not poisonous. <Amer. Ent., September–October, 1869, v. 2, p. 11.
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772. [WALSH, B. D., and C. V. RILEY.] Gooseberry and currant worms. <Amer. Ent., September–October, 1869, v. 2, pp. 12–22, figs. 5–11.
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773. [WALSH, B. D., and C. V. RILEY.] Striped cucumber beetle. <Amer. Ent., September–October, 1869, v. 2, p. 24, figs. 17–19.
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774. [WALSH, B. D., and C. V. RILEY.] Leafy oak-gall. <Amer. Ent., September–October, 1869, v. 2, p. 25, fig. 20.
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775. [WALSH, B. D., and C. V. RILEY.] Drop of gold. <Amer. Ent., September–October, 1869, v. 2, p. 25.
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776. [WALSH, B. D., and C. V. RILEY.] The luna moth. <Amer. Ent., September–October, 1869, v. 2, p. 25.
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777. [WALSH, B. D., and C. V. RILEY.] Hag-moth larva. <Amer. Ent., September–October, 1869, v. 2, p. 25, fig. 21.
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778. [WALSH, B. D., and C. V. RILEY.] Stinging bug. <Amer. Ent., September-October, 1869, v. 2, p. 25.
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779. [WALSH, B. D., and C. V. RILEY.] Pear-tree worms. <Amer. Ent., September-October, 1869, v. 2, p. 25.
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780. [WALSH, B. D., and C. V. RILEY.] "Dobson." <Amer. Ent., September-October, 1869, v. 2, p. 25.
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781. [WALSH, B. D., and C. V. RILEY.] White-pine weevil. <Amer. Ent., September-October, 1869, v. 2, p. 26, fig. 22.
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782. [WALSH, B. D., and C. V. RILEY.] Unnatural secretion of wax. <Amer. Ent., September-October, 1869, v. 2, p. 26.
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783. [WALSH, B. D., and C. V. RILEY.] Raspberry borer. <Amer. Ent., September-October, 1869, v. 2, p. 26.
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784. [WALSH, B. D., and C. V. RILEY.] Cocoon of horn-bug. <Amer. Ent., September-October, 1869, v. 2, p. 26.
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785. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., September-October, 1869, v. 2, p. 26, fig. 23.
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786. [WALSH, B. D., and C. V. RILEY.] Cecropia moth caterpillar. <Amer. Ent., September-October, 1869, v. 2, p. 26.
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787. [WALSH, B. D., and C. V. RILEY.] How cut-worms originate. <Amer. Ent., September-October, 1869, v. 2, p. 26.
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788. [WALSH, B. D., and C. V. RILEY.] Red-humped caterpillar. <Amer. Ent., September-October, 1869, v. 2, p. 27, figs. 24-26.
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789. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., September–October, 1869, v. 2, p. 27.
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790. [WALSH, B. D., and C. V. RILEY.] Gilt gold-beetle. <Amer. Ent., September–October, 1869, v. 2, p. 27.
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791. [WALSH, B. D., and C. V. RILEY.] The trumpet grape-gall. <Amer. Ent., September–October, 1869, v. 2, p. 28, fig. 27.
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792. [WALSH, B. D., and C. V. RILEY.] Grape-berry moth. <Amer. Ent., September–October, 1869, v. 2, p. 28.
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793. [WALSH, B. D., and C. V. RILEY.] Oak pruner. <Amer. Ent., September–October, 1869, v. 2, p. 28.
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794. [WALSH, B. D., and C. V. RILEY.] Potato-bugs. <Amer. Ent., September–October, 1869, v. 2, p. 28.
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795. [WALSH, B. D., and C. V. RILEY.] Blood-sucking cone-nose. <Amer. Ent., September–October, 1869, v. 2, p. 28.
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796. [WALSH, B. D., and C. V. RILEY.] Woolly slug-like worm on apple. <Amer. Ent., September–October, 1869, v. 2, p. 29.
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797. [WALSH, B. D., and C. V. RILEY.] A water-bug. <Amer. Ent., September–October, 1869, v. 2, p. 29.
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798. [WALSH, B. D., and C. V. RILEY.] Goldenrod galls. <Amer. Ent., September–October, 1869, v. 2, p. 29.
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799. [WALSH, B. D., and C. V. RILEY.] Oak-leaf gall. <Amer. Ent., September-October, 1869, v. 2, p. 29.
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800. [WALSH, B. D., and C. V. RILEY.] Humble bees. <Amer. Ent., September-October, 1869, v. 2, p. 30.
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801. [WALSH, B. D., and C. V. RILEY.] Can land be insured against cut-worms and other insects? <Amer. Ent., September-October, 1869, v. 2, p. 30.
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802. [WALSH, B. D., and C. V. RILEY.] Beetles named. <Amer. Ent., September-October, 1869, v. 2, p. 30.
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803. [WALSH, B. D., and C. V. RILEY.] Royal horned-caterpillar. <Amer. Ent., September-October, 1869, v. 2, p. 30.
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804. [WALSH, B. D., and C. V. RILEY.] Parsnip caterpillar. <Amer. Ent., September-October, 1869, v. 2, p. 30.
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805. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., September-October, 1869, v. 2, p. 31.
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806. [WALSH, B. D., and C. V. RILEY.] Beetle named. <Amer. Ent., September-October, 1869, v. 2, p. 31.
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807. [WALSH, B. D., and C. V. RILEY.] Moth named. <Amer. Ent., September-October, 1869, v. 2, p. 31.
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808. [WALSH, B. D., and C. V. RILEY.] Worm boring into cucumber. <Amer. Ent., September-October, 1869, v. 2, p. 31.
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809. [WALSH, B. D., and C. V. RILEY.] Caterpillar of the io moth. <Amer. Ent., September–October, 1869, v. 2, p. 31.
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810. [WALSH, B. D., and C. V. RILEY.] Apple-tree worms. <Amer. Ent., September–October, 1869, v. 2, p. 32.
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811. [WALSH, B. D., and C. V. RILEY.] Stinging larvæ. <Amer. Ent., September–October, 1869, v. 2, p. 32.
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812. [WALSH, B. D., and C. V. RILEY.] Lappet caterpillar on apple-tree. <Amer. Ent., September–October, 1869, v. 2, p. 32.
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813. [WALSH, B. D., and C. V. RILEY.] Spined spider. <Amer. Ent., September–October, 1869, v. 2, p. 32.
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814. [WALSH, B. D., and C. V. RILEY.] Dangerous looking. <Amer. Ent., September–October, 1869, v. 2, p. 32.
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815. [WALSH, B. D., and C. V. RILEY.] Bag-worms again. <Amer. Ent., September–October, 1869, v. 2, p. 32.
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816. [WALSH, B. D., and C. V. RILEY.] Large water-beetle. <Amer. Ent., September–October, 1869, v. 2, p. 32.
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817. [WALSH, B. D., and C. V. RILEY.] Beetles under dead fish. <Amer. Ent., September–October, 1869, v. 2, p. 32.
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818. [WALSH, B. D., and C. V. RILEY.] Universal remedies. <Amer. Ent., November, 1869, v. 2, pp. 33–35.
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819. [WALSH, B. D., and C. V. RILEY.] Tent-caterpillars and fall-web-worms. <Amer. Ent., November, 1869, v. 2, p. 39.
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820. [WALSH, B. D., and C. V. RILEY.] The boll-worm or corn-worm. 2d article. (*Heliothis armigera*, Hübner.) <Amer. Ent., November, 1869, v. 2, pp. 42-44, fig. 29.
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821. [WALSH, B. D., and C. V. RILEY.] Galls and their architects. 2d article. <Amer. Ent., 1869-1870, v. 2: November, pp. 45-50, figs. 30-32; December-January, pp. 70-74; figs. 45-47; February, pp. 103-106, figs. 68-71.
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822. [WALSH, B. D., and C. V. RILEY.] Toads in gardens. <Amer. Ent., November, 1869, v. 2, p. 50.
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823. [WALSH, B. D., and C. V. RILEY.] Notes on the Tarantala-killer. <Amer. Ent., November, 1869, v. 2, p. 52.
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824. [WALSH, B. D., and C. V. RILEY.] Swarms of lady-birds. <Amer. Ent., November, 1869, v. 2, p. 55.
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825. [WALSH, B. D., and C. V. RILEY.] The squash-bug does not touch the white bush scollop. <Amer. Ent., November, 1869, v. 2, p. 55.
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826. [WALSH, B. D., and C. V. RILEY.] [Scientific names.] <Amer. Ent., November, 1869, v. 2, p. 57.
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827. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., November, 1869, v. 2, pp. 57-58.
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828. [WALSH, B. D., and C. V. RILEY.] Locust borer. <Amer. Ent., November, 1869, v. 2, p. 58.
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829. [WALSH, B. D., and C. V. RILEY.] Saddle-back larva. <Amer. Ent., November, 1869, v. 2, p. 59, fig. 36.
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830. [WALSH, B. D., and C. V. RILEY.] Silk spiders. <Amer. Ent., November, 1869, v. 2, p. 59.
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831. [WALSH, B. D., and C. V. RILEY.] Entomological works. <Amer. Ent., November, 1869, v. 2, p. 59.
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832. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., November, 1869, v. 2, p. 59.
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833. [WALSH, B. D., and C. V. RILEY.] A new bee enemy. <Amer. Ent., November, 1869, v. 2, p. 59.
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834. [WALSH, B. D., and C. V. RILEY.] Thousand-legged worms. <Amer. Ent., November, 1869, v. 2, p. 59.
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835. [WALSH, B. D., and C. V. RILEY.] Cabbage-worms. <Amer. Ent., November, 1869, v. 2, p. 60, figs. 37-38.
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836. [WALSH, B. D., and C. V. RILEY.] The rape butterfly. Amer. Ent., November, 1869, v. 2, p. 60.
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837. [WALSH, B. D., and C. V. RILEY.] Bad packing. <Amer. Ent., November, 1869, v. 2, p. 60.
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838. [WALSH, B. D., and C. V. RILEY.] Granddaddy long-legs. <Amer. Ent., November, 1869, v. 2, p. 60.
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839. [WALSH, B. D., and C. V. RILEY.] Borer in apple-twig. <Amer. Ent., November, 1869, v. 2, p. 60.
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840. [WALSH, B. D., and C. V. RILEY.] Grape-vine leaf-galls. <Amer. Ent., November, 1869, v. 2, p. 61.
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841. [WALSH, B. D., and C. V. RILEY.] Maple-worms. <Amer. Ent., November, 1869, v. 2, p. 61.
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842. [WALSH, B. D., and C. V. RILEY.] Melancholy chafer in apples. <Amer. Ent., November, 1869, v. 2, p. 61, fig. 39.
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843. [WALSH, B. D., and C. V. RILEY.] Worms boring in cucumbers. <Amer. Ent., November, 1869, v. 2, p. 61.
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844. [WALSH, B. D., and C. V. RILEY.] Lilac-borer. <Amer. Ent., November, 1869, v. 2, p. 61.
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845. [WALSH, B. D., and C. V. RILEY.] Burying beetles. <Amer. Ent., November, 1869, v. 2, p. 61.
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846. [WALSH, B. D., and C. V. RILEY.] Wire-worms in potatoes. <Amer. Ent., November, 1869, v. 2, p. 62.
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847. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., November, 1869, v. 2, p. 62.
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848. [WALSH, B. D., and C. V. RILEY.] Girdled pear twigs. <Amer. Ent., November, 1869, v. 2, p. 62.
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849. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., November, 1869, v. 2, p. 62.
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850. [WALSH, B. D., and C. V. RILEY.] Tomato-feeding worm. <Amer. Ent., November, 1869, v. 2, p. 62, fig. 41.
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851. [WALSH, B. D., and C. V. RILEY.] Cocoons of Ichneumon flies.
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852. [WALSH, B. D., and C. V. RILEY.] Gall on spotted touch-me-not.
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853. [WALSH, B. D., and C. V. RILEY.] Unknown larvæ. <Amer. Ent., November, 1869, v. 2, p. 63.
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854. [WALSH, B. D., and C. V. RILEY.] Blood-sucking cone-nose.
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855. [WALSH, B. D., and C. V. RILEY.] Eggs on a grape-cane. <Amer. Ent., November, 1869, v. 2, p. 63.
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856. [WALSH, B. D., and C. V. RILEY.] Gregarious willow-worms.
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857. [WALSH, B. D., and C. V. RILEY.] Caterpillars named. <Amer. Ent., November, 1869, v. 2, p. 63.
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858. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., November, 1869, v. 2, p. 63.
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859. [WALSH, B. D., and C. V. RILEY.] Range of the rear-horse.
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860. [WALSH, B. D., and C. V. RILEY.] Royal horned-caterpillar.
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 Critical review of E. H. C.'s "Remedy for the borer" and of J. Huggins' "Canker-worm;" indefiniteness of the word borer; borers confined to particular trees according to species; relations between *Clytus* [=Cyllene] *pictus* and *C.* [= *C.*] *robiniae*; habits of and means against canker-worms. See No. 954.
942. [RILEY, C. V.] The critic criticised. <Prairie Farmer, 16 March, 1867, [v. 35], n. s., v. 19, p. 169. S.-b. No. 2, p. 58.
 Reply to B. D. Walsh's "The critic criticised;" insists upon the correctness of one criticism made; acknowledges incorrectness of another. See Nos. 222, 937, 939.
943. RILEY, C. V. [*Solenobia*.] <Prairie Farmer, 16 March, 1867, [v. 35], n. s., v. 19, p. 169. S.-b. No. 2, p. 58.
 Answer to inquiry of J. C. Plumb; brief description of the larva of ?*Solenobia*; habits of the genus.
944. RILEY, C. V. Bark-lice. Their history, together with sundry remedies. <Prairie Farmer, 23 March, 1867, [v. 35], n. s., v. 19, p. 184. S.-b. No. 2, pp. 61-62. Extract: <Cultivator and Country Gentleman, 23 May, 1867, v. 29, p. 334. <Pract. Ent., April, 1867, v. 2, pp. 81-82.
 Criticises several patent remedies for ravages of bark-lice, *Coccidæ*; ignorance of entomology amongst intelligent writers; natural history of *Mytilaspis pomicorticis* [=pomorum].
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946. RILEY, C. V. The potato-beetle. <Prairie Farmer, 6 April, 1867, [v. 35], n. s., v. 19, p. 219. S.-b. No. 2, p. 64.
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947. RILEY, C. V. Meadow-worms. <Prairie Farmer, 6 April, 1867, [v. 35], n. s., v. 19, p. 219. S.-b. No. 2, p. 64.
Answer to inquiry of B. S.; habits of *Tipula* in all stages.
948. RILEY, C. V. Clover-worms. <Prairie Farmer, 1867, [v. 35], n. s., v. 19, 20 April, pp. 260-261, 10 figs.; 27 April, p. 279. S.-b. No. 2, pp. 67, 68.
Habits and ravages of *Pyralis olinalis* [= *Asopia costalis*]; figures and detailed descriptions of larva, pupa, cocoon, and imago.
949. RILEY, C. V. The apple-leaf crumpler. <Prairie Farmer, 27 April, 1867, [v. 35], n. s., v. 19, p. 279, 4 figs. S.-b. No. 2, p. 68.
Answer to inquiry of A. H.; description of pupa, figure of larva-case and imago of *Phycita nebulo* [= *Acrobasis indiginella*]; habits and means against the same.
950. RILEY, C. V. Cocoons on the flowering ash. <Prairie Farmer, 27 April, 1867, [v. 35], n. s., v. 19, p. 279. S.-b. No. 2, p. 68.
Answer to inquiry of A. B. Pierce; descriptions of larva, cocoon, and imago of *Attacus promethea*; food-plants of larva; method of emergence from cocoon.
951. RILEY, C. V. Scarred apple-trees. Prairie Farmer, 27 April, 1867, [v. 35], n. s., v. 19, p. 279. S.-b. No. 2, p. 68.
Answer to inquiry of P. M. Williamson; descriptions of the injuries to apple-trees caused by *Tettigonia* sp., *Coccus harrisii* [= *Chionaspis furfurus*], and *Mytilaspis pomicorticis* [= *pomorum*].
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Answer to inquiry of J. Taylor; color and propagation of *Aphis mali*; means against the same.
953. RILEY, C. V. Tree-cricket. Prairie Farmer, 18 May, 1867, [v. 35], n. s., v. 19, p. 332. S.-b. No. 2, p. 73.
Answer to inquiry of A. N. Prentiss; habits of *Æcanthus niveus*.
954. RILEY, C. V. Note. <Prairie Farmer, 18 May, 1867, [v. 35], n. s., v. 19, p. 332. S.-b. No. 2, p. 73.
Correction of No. 941; criticism unfounded.
955. RILEY, C. V. The strawberry-worm, *Emphytus maculatus* Norton. <Prairie Farmer, 25 May, 1867, [v. 35], n. s., v. 19, p. 348, 9 figs. S.-b. No. 2, p. 72.
Descriptions and figures of all stages, geographical distribution, seasons, habits, and oviposition of and means against *Emphytus* [= *Harpiphorus*] *maculatus*.
956. RILEY, C. V. White-pine worm: *Lophyrus abbotii*. <Prairie Farmer, 25 May, 1867, [v. 35], n. s., v. 19, p. 348, 7 figs. S.-b. No. 2, p. 72.
Description of imago of *Lophyrus abbotii*; figures larva, pupa, cocoon, ♀ imago and ♂ and ♀ antennæ; habits and seasons of larvæ.
957. [RILEY, C. V.] Stag-beetle. <Prairie Farmer, 25 May, 1867, [v. 35], n. s., v. 19, p. 348. S.-b. No. 2, p. 72.
Answer to inquiry of S. Barrier; habits of *Lucanus claphus*.

958. [RILEY, C. V.] The Curculio. <Prairie Farmer, 1 June, 1867, [v. 35], n. s., v. 19, p. 368. S.-b. No. 2, p. 73.
Successful results from the use of machines for destroying *Conotrachelus nenuphar*; this insect hibernates in the imago state.
959. RILEY, C. V. Fifteen-spotted lady-bird. <Prairie Farmer, 8 June, 1867, [v. 35], n. s., v. 19, p. 381.
Answer to inquiry of A. B. Knowlton; food, variable coloration of imago, and usefulness of *Mysis* [*Anatis*] *15-punctata*.
960. RILEY, C. V. Cherry Aphis. <Prairie Farmer, 8 June, 1867, [v. 35], n. s., v. 19, p. 381.
Answer to inquiry of G. Lee; habits, ravages of and means against *Myzus cerasi*.
961. RILEY, C. V. Tree-cricket. <Prairie Farmer, 8 June, 1867, [v. 35], n. s., v. 19, p. 381.
Eggs of *Æcanthus nivicus* deposited in raspberry canes cause the death of the wood above them.
962. RILEY, C. V. Apple-tree borer. <Prairie Farmer, 8 June, 1867, [v. 35], n. s., v. 19, p. 381.
Answer to inquiry of A. B. Campbell; commends D. B. Wier's remedy against the apple-tree borer; *Saperda bivittata* [= *candida*] goes through its transformations in two years, though commonly believed to require three years.
963. RILEY, C. V. Insects affecting apple-tree roots. <Prairie Farmer, 15 June, 1867, [v. 35], n. s., v. 19, p. 397. S.-b. No. 2, p. 100.
Letter from O. B. Galusha, with answer; descriptions of young and mature wingless individuals of the root-inhabiting form, *Pemphigus pyri*, of *Schizoneura lanigera*; habits, seasons, and reproduction of this form; its gall-making and means against it; description of larva of *Cecidomyia* species found with the lice; and of larva and imago of *Mycetophila persica* [n. sp. ?]; seasons of the latter; larva of *Saperda calcarata* bores in roots of apple; larva of *Helops micans* feeds on decaying apples; *Julus* [*Spirobolus*] *marginatus* infested with *Gamasus juloides*.
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Extract from J. Townley's "Do cut-worms destroy tree buds?". Buds of fruit trees destroyed by the larvæ of *Agrotididæ*; other ravages and means against the same; descriptions of the larvæ of *Agrotis subgothica* [= *A. herilis* and *A. tricosæ*], *A. telifera* [= *A. ypsilon*], and *Celæna* [= *Hadena*] *renigera*; description of *A. cochranis* n. sp. [= *A. messoria*]; figures larva and imago of *A. cochranis*, *A. telifera*, and *Celæna renigera*; and imago of *A. subgothica*; habits, seasons, and vernacular names of *Agrotididæ*.
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Answer to inquiry of A. R. Whitney; geographical distribution of *Empythus* [= *Harpiphorus*] *maculatus*.
966. RILEY, C. V. Insects stripping the bur-oak. <Prairie Farmer, 13 July, 1867, [v. 36], n. s., v. 20, p. 21. S.-b. No. 2, p. 81.
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967. RILEY, C. V. Borers. <Prairie Farmer, 13 July, 1867, [v. 36], n. s., v. 20, p. 21. S.-b. No. 2, p. 81.
Answer to inquiry of J. Wentworth; means against *Clytus* [= *Cyllene*] *robinia* and *Xylentes* [= *Cossus*] *robinia*.
968. RILEY, C. V. Potato-beetle. <Prairie Farmer, 13 July, 1867, [v. 36], n. s., v. 20, p. 21. S.-b. No. 2, pp. 81-82.
Answer to inquiries of J. L. W. and G. L. Merriwether; *Doryphora 10-lineata* three-brooded; its occurrence at Shipman, Ill.
969. [RILEY, C. V.] Smith's patent Curculio trap. <Prairie Farmer, 13 July, 1867, [v. 36], n. s., v. 20, p. 21. S.-b. No. 2, p. 82.
Communication from N. C. Coffinan, with reply; condemns J. Smith's Curculio trap.
970. RILEY, C. V. [*Aphis ribis*.] <Prairie Farmer, 3 August, 1867, [v. 36], n. s., v. 20, p. 69. S.-b. No. 2, p. 81.
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971. RILEY, C. V. *Mantis carolina*. <Prairie Farmer, 3 August, 1867, [v. 36], n. s., v. 20, p. 69. S.-b. No. 2, p. 81.
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972. RILEY, C. V. Lappet caterpillars on the apple. <Prairie Farmer, 3 August, 1867, [v. 36], n. s., v. 20, p. 69. S.-b. No. 2, p. 81.
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973. RILEY, C. V. Apple-bark lice on pears. <Prairie Farmer, 3 August, 1867, [v. 36], n. s., v. 20, p. 69. S.-b. No. 2, p. 81.
Mytilaspis pomicorticis [= *pomorum*] on the fruit of pear-trees; said to occur on currants, plum, and black oak.
974. RILEY, C. V. Currant-bush borer. <Prairie Farmer, 3 August, 1867, [v. 36], n. s., v. 20, p. 69. S.-b. No. 2, p. 81.
Answer to inquiry of H. B. Kinne; habits, description, and means against *Aegeria tipuliformis*.
975. RILEY, C. V. Apple-leaf crumpler. <Prairie Farmer, 3 August, 1867, [v. 36], n. s., v. 20, p. 69. S.-b. No. 2, p. 81.
Answer to inquiry of H. C. Clock; habits and means against *Phycita nebulo* [= *Acrobasis indiginella*].
976. RILEY, C. V. Tomato-stalk borer. <Prairie Farmer, 3 August, 1867, [v. 36], n. s., v. 20, p. 69. S.-b. No. 2, p. 81.
Answer to inquiry of O. G. Nevins; food-plants of *Gortyna nitela*.
977. RILEY, C. V. A few errors corrected. <Wisc. Farmer, 17 August, 1867. S.-b. No. 2, p. 83.
Habits of *Doryphora 10-lineata* and of *Carpocapsa pomonella*.
978. RILEY, C. V. Curculio. <Prairie Farmer, 7 September, 1867, [v. 36], n. s., v. 20, p. 148. S.-b. No. 2, p. 82.
Answer to inquiry of J. Shearer; means against *Conotrachelus nenuphar*.
979. RILEY, C. V. Hop-vine caterpillars. <Prairie Farmer, 7 September, 1867, [v. 36], n. s., v. 20, p. 148. S.-b. No. 2, p. 82.
Communication from J. H. Graves, with answer; *Mantis* [= *Phasmomantis*] *carolina* breeds as far north as Ogle County, Ill. Description of larva and imago of *Hyppena humuli* [= *scabra*]; means against it.

980. RILEY, C. V. Wheat-worms. <Prairie Farmer, 7 September, 1867, [v. 36], n. s., v. 20, p. 148. S.-b. No. 2, p. 82.
Communication from C. Campbell, with answer; description of larva and imago and habits of *Pyralis* [= *Asopia*] *farinalis*; ravages of *Tenebrio molitor*; means against both species.
981. RILEY, C. V. [Root-borer.] <Prairie Farmer, 7 September, 1867, [v. 36], n. s., v. 20, p. 148. S.-b. No. 2, p. 82.
Communication from S. T. Kelsey, with answer; ravages of an unknown cerambycid larva which destroys the roots of various plants.
982. RILEY, C. V. Bark-lice on the pear. <Prairie Farmer, 7 September, 1867, [v. 36], n. s., v. 20, p. 148. S.-b. No. 2, p. 82.
Letter from T. D. Plumb, with answer; *Mytilaspis pomicorticis* [= *pomorum*] lives on fruit of pear and crab-apple; the scale a secretion; extent of injuries caused by this insect.
983. RILEY, C. V. A nuisance made useful. <Prairie Farmer, 7 September, 1867, [v. 36], n. s., v. 20, p. 148. S.-b. No. 2, p. 82.
Means against *Doryphora 10-lineata* discredited.
984. RILEY, C. V. Strawberry leaf-roller. <Prairie Farmer, 5 October, 1867, [v. 36], n. s., v. 20, p. 212. S.-b. No. 2, p. 100.
Answer to inquiry of N. R. Strong; *Anchylopera* [= *Phoxopteris*] *fragariæ* injures strawberry leaves; larvæ of *Selandria* [= *Monostegia*] *rosæ* also eat leaves of the strawberry.
985. RILEY, C. V. False caterpillars on the pine. <Prairie Farmer, 5 October, 1867, [v. 36], n. s., v. 20, p. 212. S.-b. No. 2, p. 101.
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986. RILEY, C. V. An unknown worm. <Prairie Farmer, 5 October, 1867, [v. 36], n. s., v. 20, p. 212. S.-b. No. 2, p. 101.
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988. [RILEY, C. V.] Editorial excursion to the Rocky Mountains. <Prairie Farmer, 7 December, 1867, [v. 36], n. s., v. 20, pp. 353-354. S.-b. No. 2, pp. 112-113.
List of plants, insects, and mammals observed.
989. RILEY, C. V. Bark-lice. <Prairie Farmer, 21 December, 1867, [v. 36], n. s., v. 20, p. 389. S.-b. No. 2, p. 112.
Answer to inquiries of G. Baekster and J. C. Cobbe; means against *Mytilaspis pomicorticis* [= *pomorum*].
990. RILEY, C. V. Root Aphis. <Prairie Farmer, 21 December, 1867, [v. 36], n. s., v. 20, p. 389. S.-b. No. 2, p. 112.
Answer to inquiry of J. M. Jordan; means against the root and stem forms of *Schizoneura lanigera*.
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Communications from C. W. Murtfeldt asserting the possession of poisonous qualities by the larvæ of *Doryphora 10-lineata*.

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993. RILEY, C. V. Entomology. <Prairie Farmer Annual [No. 1 for 1868], 1867, pp. 53-59, 6 figs. S.-b. No. 2, pp. 125-126; No. 14, pp. 216-219.
Descriptions and figures of larva, pupa, and imago of *Coptocycla* [= *Cassida*] *bivittata*; habits, seasons, and means against it; list of *Cassididae* injurious to sweet-potato. Descriptions of larva, nidus, and imago of *Desmia maculalis*, figures pupa; habits and seasons of and means against it. Figures *Colaspis flavida*; describes its supposed habits. Food-plants of *Heliothis armigera*. Figures larva and imago of *Gortyna nitela*; its food-plants, seasons, and hibernation. Figures larva and imago of *Heliothis phlogophagus*; synonymy, geographical distribution, and means against it; remarks on the balance of nature. Figures larva, pupa, cocoon, and imago of *Asopia costalis*; its synonymy and ravages.
994. RILEY, C. V. Bark-lice. <Prairie Farmer, 15 February, 1868, [v. 37], n. s., v. 21, p. 100. S.-b. No. 2, p. 118.
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995. RILEY, C. V. Potato-beetle. <Prairie Farmer, 22 February, 1868, [v. 37], n. s., v. 21, p. 117. S.-b. No. 2, p. 119; No. 3, p. 58.
Answer to inquiry of F. T. Moore; invention of a machine for killing *Doryphora 10-lineata*; hand-picking and heavy mulching the most available remedies.
996. RILEY, C. V. Apple-tree plant-lice. <Prairie Farmer, 22 February, 1868, [v. 37], n. s., v. 21, p. 117. S.-b. No. 2, p. 119; No. 3, p. 58.
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997. RILEY, C. V. Apple-root blight. <Prairie Farmer, 22 February, 1868, [v. 37], n. s., v. 21, p. 117. S.-b. No. 2, p. 119; No. 3, p. 58.
Answer to inquiry of C. S. J.; *Schizoneura lanigera* not the cause of "rotten root."
998. RILEY, C. V. Apple leaf-crumpler. <Prairie Farmer, 22 February, 1868, [v. 37], n. s., v. 21, p. 117. S.-p. No. 2, p. 119; No. 3, p. 58.
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999. RILEY, C. V. Tree-cricket. <Prairie Farmer, 14 March, 1868, [v. 37], n. s., v. 21, p. 164. S.-b. No. 2, p. 120; No. 3, p. 58.
Letter from J. J. Huggins, with answer; place of oviposition of *Acanthus niveus*; list of plants in which this species oviposits.
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Answer to inquiry of a correspondent; description of egg-masses and of larva of *Orgyia leucostigma*; beneficial influence and means of encouraging parasites.

1001. RILEY, C. V. Hop insects; Hop Aphid. <Prairie Farmer, 21 March, 1868, [v. 37], n. s., v. 21, p. 184. S.-b. No. 3, p. 58.
Brief account of and means against *Hypena humuli* [= *scabra*] and *Phorodon humuli*.
1002. RILEY, C. V. Supposed eggs of the preying Mantis. <Prairie Farmer, 28 March, 1868, [v. 37], n. s., v. 21, p. 201. S.-b. No. 2, p. 121; No. 3, p. 59.
Answer to inquiry of J. H. Graves; cocoons of *Rhogas* sp. attached in a mass to twigs of an apple-tree.
1003. RILEY, C. V. Oak-tree borer. <Prairie Farmer, 28 March, 1868, [v. 37], n. s., v. 21, p. 201. S.-b. No. 2, p. 121; No. 3, p. 59.
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1004. RILEY, C. V. Maple-bark lice. <Prairie Farmer, 28 March, 1868, [v. 37], n. s., v. 21, p. 201. S.-b. No. 2, p. 121; No. 3, p. 59.
Lecanium sp. found on twigs of sugar-maple.
1005. RILEY, C. V. Eggs of the katydid. <Prairie Farmer, 28 March, 1868, [v. 37], n. s., v. 21, p. 201. S.-b. No. 2, p. 121; No. 3, p. 59.
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1006. RILEY, C. V. Eggs of tree-cricket in raspberry canes. <Prairie Farmer, 28 March, 1868, [v. 37], n. s., v. 21, p. 201. S.-b. No. 2, p. 121; No. 3, p. 59.
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1007. RILEY, C. V. Bark-lice. <Prairie Farmer, 28 March, 1868, [v. 37], n. s., v. 21, p. 201. S.-b. No. 2, p. 121; No. 3, p. 59.
Answer to inquiry of C. D. Robinson; means against *Mytilaspis pomicorticis* [= *pomorum*].
1008. RILEY, C. V. Bark-lice again; the native species. <Prairie Farmer, 28 March, 1868, [v. 37], n. s., v. 21, p. 201. S.-b. No. 2, p. 121; No. 3, p. 59.
Letter from N. Coleman, with answer; comparative characters of *Mytilaspis pomicorticis* [= *pomorum*] and *Diaspis harrisii* [= *Chionaspis furfurus*]; food-plants of the latter.
1009. RILEY, C. V. Dahlia-stalk borer. <Prairie Farmer, 28 March, 1868, [v. 37], n. s., v. 21, p. 201. S.-b. No. 2, p. 121; No. 3, p. 59.
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1010. RILEY, C. V. Apple-worm. <Prairie Farmer, 28 March, 1868, [v. 37], n. s., v. 21, p. 201. S.-b. No. 2, p. 121; No. 3, p. 59.
Answer to communication of S. J. C.; *Carpocapsa pomonella* hibernates as a larva within the cocoon.

1011. RILEY, C. V. False caterpillars on the Scotch and Austrian pines. <Prairie Farmer, 2 May, 1868, [v. 37], n. s., 21, p. 285, fig.
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1012. RILEY, C. V. Prevention of bark-lice. <Prairie Farmer, 9 May, 1868, [v. 37], n. s., v. 21, p. 301. S.-b. No. 3, p. 60.
Means against *Mytilaspis pomicorticis* [= *pomorum*] and *Phycita nebulo* [= *Acrobasis indiginella*]; figure of the latter.
1013. RILEY, C. V. Beetles in stomach of meadow-lark. <Prairie Farmer, 9 May, 1868, [v. 37], n. s., v. 21, p. 301. S.-b. No. 3, p. 60.
Fragments of *Nottiglossa* [= *Oncometopia*] *undata* and of *Platynus excavatus* or *P. æruginosus* found in the stomach of *Sturnella magna*.
1014. RILEY, C. V. Beetle on sugar-maple. <Prairie Farmer, 9 May, 1868, [v. 37], n. s., v. 21, p. 301. S.-b. No. 3, p. 60.
Eburia quadrigeminata found under bark of a felled sugar-maple, also on honey-locust.
1015. RILEY, C. V. White worms in wells. <Prairie Farmer, 9 May, 1868, [v. 37], n. s., v. 21, p. 301. S.-b. No. 3, p. 60.
Fish or frogs placed in wells will free them from worms.
1016. RILEY, C. V. Tanzy for borers. <Prairie Farmer, 9 May, 1868, [v. 37], n. s., v. 21, p. 301. S.-b. No. 3, p. 60.
Means against borers in apple- and peach-trees.
1017. RILEY, C. V. Peach-borer. <Prairie Farmer, 9 May, 1868, [v. 37], n. s., v. 21, p. 301. S.-b. No. 3, p. 60.
Refers to articles on means against *Ageria* [= *Sannina*] *exitiosa*.
1018. RILEY, C. V. Black grape-vine caterpillars. <Prairie Farmer, 9 May, 1868, [v. 37], n. s., v. 21, p. 301. S.-b. No. 3, p. 60.
Descriptions of larva and imago of *Thyreus abbotii*; the abundance of parasites prevents serious injury by the larva.
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1057. RILEY, C. V. Entomology. <Prairie Farmer Annual [No. 2 for 1869], 1868, pp. 30-41, 6 figs. S.-b. No. 14, pp. 220-226.

Directions for collecting and preserving insects; descriptions of apparatus and cabinets; means against cabinet pests; descriptions and figures of all stages, except egg, of *Lophyrus abbotii* and *L. lecontei*; habits and food-plants of and means against both species; figures of eggs, pupæ, and imago of *Cicada* [= *Tibicen*] *septendecim* and of twig punctured by imago; dates and localities of occurrence of this species and of *C.* [= *T.*] *tredecim*; *C.* [= *T.*] *cassinii* a form of this insect; figures larva, puparium, and imago of *Cephalomyia* [= *Æstrus*] *onis*; habits and ravages of and means against it; imago viviparous in the nostrils of sheep.

1058. RILEY, C. V. The American Meromyza, *Meromyza americana*, Fitch. Attacking wheat just before it ripens. <Moore's Rural New Yorker, 30 January, 1869, v. 20, p. 71, fig. S.-b. No. 3, p. 83.

Habits and ravages of *Meromyza americana*; figures larva, pupa, and injured stalk of wheat; related European species have similar habits; remedies and natural enemies.

1059. RILEY, C. V. First annual report on the noxious, beneficial, and other insects of the State of Missouri, made to the State Board of Agriculture, pursuant to an appropriation for this purpose from the legislature of the State. <4th Ann. Rept. State Board of Agric. for 1868, March, 1869, pp. 182-187, 98 figs. Separate: <Jefferson City, Mo., March, 1869, pp. 182-187, 2 pl., 98 figs. Notice: <Amer. Ent., April, 1869, v. 1, p. 165.

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1060. RILEY, C. V. Eggs of the Mantis or rear-horse. <Moore's
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 No. 3, p. 52.

Answer to inquiry of T. C. Bartle; description of *Mantis* [= *Phasmomantis*]
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1061. RILEY, C. V. Native bark-lice on apple-trees. <Prairie Farmer,
 17 April, 1869, [v. 39], n. s., v. 23, p. 122, 1 fig. S.-b. No. 3, p.
 57.

Answer to inquiry of T. B. Gardner; life history of and means against *Dias-
 pis harrisii* [= *Chionaspis furfurus*]; figure of the same.

1062. RILEY, C. V. Curculio. <Prairie Farmer, 17 April, 1867, [v. 39],
 n. s., v. 23, p. 122. S.-b. No. 3, p. 57.

Answer to inquiry of James Weed; habits of and means against *Conotrachelus*
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1063. RILEY, C. V. Cherry-tree borers. <Prairie Farmer, 17 April,
 1869, [v. 39], n. s., v. 23, p. 122. S.-b. No. 3, p. 57.

Answer to inquiry of Onargo Horticultural Society; larvæ of *Buprestis*
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1064. RILEY, C. V. White-grub fungus. <Prairie Farmer, 15 May, 1869, [v. 39], n. s., v. 23, p. 154. S.-b. No. 3, p. 76.
Letter from D. W. Tindall, with answer; ravages of *Lachnosterna quercina* [= *fusca*] in Clinton County, Mo., in 1868; *Torrubia* growing on the larvae in 1869.
1065. RILEY, C. V. The canker-worm, *Anisopteryx vernata* Peck. <Moore's Rural New Yorker, 29 May, 1869, v. 20, p. 345, figs. S.-b. No. 3, p. 73.
Description, figures, and natural history of canker-worms; the two species are confounded.
1066. RILEY, C. V. The seed-corn maggot, *Anthomyia zeas*, Riley. Destroying the seed after it is planted. <Moore's Rural New Yorker, June, 1869, fig. S.-b. No. 3, p. 81. Advance print, with changes: <1st Ann. Rept. State Ent. Mo., March, 1869, pp. 154-156, figs. 86-87.
See No. 1059 for synopsis of contents.
1067. RILEY, C. V. Cherry-tree plant-lice. <Moore's Rural New Yorker, 10 July, 1869, v. 20, p. 443. S.-b. No. 3, p. 83.
Answer to inquiry of G. J. Magee; means against *Aphis* [= *Myzus*] *cerasi*.
1068. RILEY, C. V. Gooseberry span-worms. <Moore's Rural New Yorker, 10 July, 1869, v. 20, p. 443. S.-b. No. 3, p. 83.
Letter from A. Yancey, with answer; occurrence of *Eufitchia ribcaria* in Iowa; habits and means against it; habits of and influence of weather on *Blissus leucopterus*; scarcity of *Doryphora 10-lineata* in Iowa.
1069. RILEY, C. V. Apple-leaf crumpler mistaken for Curculio. <Prairie Farmer, 10 July, 1869, [v. 40], n. s., v. 24, p. 218, fig. S.-b. No. 3, p. 80.
Letter from B. T. Taylor; improper use of the word Curculio; figures larva-case and imago of *Phycita nebulo* [= *Acrobasis indiginella*]; means against it; outline figure of *Conotrachelus nenuphar*.
1070. RILEY, C. V. Peach-tree borer. <Prairie Farmer, 10 July, 1869, [v. 40], n. s., v. 24, p. 218. S.-b. No. 3, p. 80.
Answer to inquiry of C. Allen; habits of and means against *Aegeria* [= *Sanina*] *exitiosa*.
1071. RILEY, C. V. To protect plums from Curculio. <Prairie Farmer, 10 July, 1869, [v. 40], n. s., v. 24, p. 218. S.-b. No. 3, p. 80.
Answer to inquiry of H. H. S.; recommends the collection of the imago of *Conotrachelus nenuphar* by jarring.
1072. RILEY, C. V. White-grub; information wanted. <Prairie Farmer, 28 August, 1869, [v. 40], n. s., v. 24, p. 274, 4 figs. S.-b. No. 3, p. 95.
Letter from A. T. V., with answer; habits of and means against *Lachnosterna quercina* [= *fusca*]; figures of larva and imago.
1073. RILEY, C. V. Unknown corn pest. <Prairie Farmer, 28 August, 1869, [v. 40], n. s., v. 24, p. 274. S.-b. No. 3, p. 95.
Letter from E. B. Hickey, with answer; ravages of cut-worms and of an unknown pest on maize; brief description and habits of the latter.

1074. RILEY, C. V. Larva of the grape-vine flea-beetle. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, pp. 100, 103.
Answer to inquiry of D. D. Vosburgh; habits, ravages, and means against *Graptodera* [= *Haltica*] *chalybea*.
1075. RILEY, C. V. Rose bug. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, pp. 100, 103.
Answer to inquiry of a subscriber; description of imago, transformations of, and means against *Macrodactylus subspinosus*.
1076. RILEY, C. V. Large green caterpillar on the apple. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, p. 100.
Answer to inquiry of S. E. A. Palmer; descriptions of larva and imago of *Attacus cecropia*; its habits and seasons.
1077. RILEY, C. V. Conical galls on leaves of wild grape-vine. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, p. 100.
Answer to inquiry of D. McClaine; description of galls of *Cecidomyia vitis-viticola*; characters of the larvæ of *Cecidomyia*.
1078. RILEY, C. V. A strange bug. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, p. 100; No. 4, p. 3.
The insects described in North Carolina's "A strange bug," were probably *Psocus venosus*; habits of the genus *Psocus*.
1079. RILEY, C. V. Currant-worms and black-currants. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, p. 100; No. 4, p. 3.
Critical review of Addi on currant-worms; in North America three species of larvæ feed on the leaves of currants, and two species of borers live within the stem.
1080. RILEY, C. V. Curculio. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, p. 100; No. 4, p. 3.
Commendation of an editorial criticism of Northwest's article on the Curculio.
1081. [RILEY, C. V.] Insects injurious to the grape-vine. [No. 1.] <Amer. Ent., August, 1869, v. 1, pp. 231-234, figs. 169-173. Reprint, with slight changes: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 87-91, figs. 60-63. .
Treats of *Prionus laticollis* and *P. imbricornis*. See No. 1127 for synopsis of contents.
1082. [RILEY, C. V.] Insects infesting the sweet-potato. <Amer. Ent., August, 1869, v. 1, pp. 234-238, figs. 174-181. Reprint, with slight changes: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 56-64, figs. 26-38.
Treats of tortoise-beetles, *Cassidida*. See No. 1127 for synopsis of contents.
1083. RILEY, C. V. The borers. <Western Rural, September, 1869. S.-b. No. 4, p. 2.
Means against *Egeria cucurbitæ* [= *Melittia ceto*].

1084. RILEY, C. V. Supposed bark-lice eggs in Missouri. <Prairie Farmer, 4 September, 1869, [v. 40], n. s., v. 24, p. 282. S.-b. No. 3, p. 95.
Letter from J. Reed, with answer; eggs of a moth mistaken for those of *Mytilaspis pomicorticis* [= *pomorum*]; the latter unknown in Missouri.
1085. RILEY, C. V. New York weevil on apple-trees. <Prairie Farmer, 4 September, 1869, [v. 40], n. s., v. 24, p. 282, 3 figs. S.-b. No. 3, p. 95.
Letter from R. M. Guy, with answer; figures of larva and imago, description of imago, geographical distribution, methods of oviposition, food-plants, and means against *Ithycerus noveboracensis*.
1086. [RILEY, C. V.] Insects injurious to the grape-vine. No. 2. <Amer. Ent., September–October, 1869, v. 2, pp. 22–24, figs. 12–16. Reprint, with slight changes. <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 71–73, figs. 44–48.
Treats of *Cherochampa pampinatrix* [= *Ampelophaga myron*]; see No. 1127 for synopsis of contents.
1087. RILEY, C. V. Larva of the imperial moth. <Prairie Farmer, 9 October, 1869, [v. 40], n. s., v. 24, p. 322. S.-b. No. 3, p. 92.
Letter of C. H. Thayer, with answer; description of larva, pupa, and imago of *Ceratocampa* [= *Eacles*] *imperialis*; food-plants of the same and of *C.* [= *Citheronia*] *regalis*.
1088. RILEY, C. V. Apple snout-beetle or four-humped Curculio. <Prairie Farmer, 9 October, 1869, [v. 40], n. s., v. 24, p. 322. S.-b. No. 3, p. 92.
Letter from R. W. Gandy, with answer; habits and description of *Anthonomus quadrigibbus*; recommends jarring.
1089. RILEY, C. V. That venomous potato-worm! <Moore's Rural New Yorker, 20 November, 1869, v. 20, p. —. S.-b. No. 3, pp. 107; 112.
Critical review of several recent articles upon tomato-worms; structure and harmlessness of larvæ of *Sphingidæ*; geographical distribution of *Sphinx* [= *Protoparce*] *carolina* and *S. quinquemaculata* [= *P. celeus*].
1090. [RILEY, C. V.] The bag-worm, *alias* basket-worm, *alias* drop-worm, *Thyridopteryx ephemeraformis*, Haw. <Amer. Ent., November, 1869, v. 2, pp. 35–38, fig. 24.
Geographical distribution, food-plants, seasons, transformations, parasites, copulation, and oviposition of and means against *Thyridopteryx ephemeraformis*; figures and descriptions of larva, larva-cases, pupa, and imago; description of eggs; abodes constructed by insects.
1091. [RILEY, C. V.] Insects injurious to the grape-vine. No. 3. <Amer. Ent., November, 1869, v. 2, pp. 54–55, figs. 33–35. Reprint, with slight changes. <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 74–76, figs. 49–51.
Treats of *Philampelus achemon*; see No. 1127 for synopsis of contents.
1092. RILEY, C. V. The saddle-back caterpillar. <Moore's Rural New Yorker, 4 December, 1869, v. 20, p. —, fig. S.-b. No. 3, p. 103.
Letters from A. W. Baker and G. T. Cost, with answer; figures and characterization of the larva of *Empretia stimulea*; food-plants, urticating properties, and transformations; description of the imago.

1093. RILEY, C. V. The seventeen-year Cicada. <Prairie Farmer, ——— 1869. S.-b. No. 3, p. 55.
Answer to communication of W. J. B., concerning *Cicada* [= *Tibicen*] *septendecim*.
1094. RILEY, C. V. Death of a hen. <Rural New Yorker, ——— 1869, fig. S.-b. No. 3, p. 75.
Occurrence of *Goniocotes hologaster* in great numbers on a hen; means against the same; figure of it.
1095. RILEY, C. V. Cut-worm eggs. <Prairie Farmer, ——— 1869. S.-b. No. 3, p. 81.
Habits and place of oviposition of *Agrotis incrimis* [= *saucia*]; description of its eggs and larvæ.
1096. RILEY, C. V. Potato bugs. <Prairie Farmer, ——— 1869. S.-b. No. 3, p. 81.
Means against *Doryphora 10-lineata*.
1097. RILEY, C. V. That glow-worm. <Cultivator and Country Gentleman, 6 January, 1870, v. 35, p. 5, fig. S.-b. No. 4, p. 23.
Reprint: <Amer. Ent., October, 1880, v. 3, n. s., v. 1, p. 254, fig.
Figures larva and imago of *Photuris pennsylvanica*; *Photinus pyralis* also luminous in larval and adult stages; comparison with *Lampyrus noctiluca*.
1098. [RILEY, C. V.] In memoriam. <Amer. Ent., December, 1869–January, 1870, v. 2, pp. 65–68.
Biographical and obituary notice of B. D. Walsh.
1099. [RILEY, C. V.] The harlequin cabbage-bug, *Strachia histrionica*, Hahn. <Amer. Ent., December, 1869–January, 1870, v. 2, pp. 79–80, fig. 56.
Enumeration of the enemies of the cabbage in the United States; methods of their injury; importation and spread of some species; figures of the imago; description of eggs, habits, geographical distribution, seasons, and odors of *Strachia* [= *Murgantia*] *histrionica*; extract from G. Lincecum's "Texan cabbage-bug."
1100. [RILEY, C. V.] An entomologist caught napping. <Amer. Ent., December, 1869–January, 1870, v. 2, p. 84.
Criticism of the view that trees, grasses, or any other particular forms of vegetation are the natural coverings of the earth; this criticism applied especially to John Curtis.
1101. [RILEY, C. V.] Poisonous qualities of the Colorado potato-bug. <Amer. Ent., December, 1869–January, 1870, v. 2, pp. 85–86.
Extract from "Winona Republican," with remarks upon the poisonous nature of the blood of *Doryphora 10-lineata*.
1102. [RILEY, C. V.] Insects injurious to the grape-vine. No. 4. <Amer. Ent., December, 1869–January, 1870, v. 2, pp. 89–90, figs. 58–59. Reprint, with slight changes: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 76–78, figs. 52–53.
Treats of *Philampelus satellitia* [= *pandorus*]; see No. 1127 for synopsis of contents.

1103. [RILEY, C. V.] Toads vs. bugs. <Amer. Ent., December, 1869-January, 1870, v. 2, p. 91.
Translation of extracts from Fogt's "Noxious and beneficial animals;" existence of a commerce in toads between France and England; usefulness, tameness, and gratitude of toads.
1104. [RILEY, C. V.] The tomato-worm again. <Amer. Ent., December, 1869-January, 1870, v. 2, pp. 91-92.
Reprint, with comments, of article entitled "The tomato-worm," from Syracuse Standard; absurd nature of newspaper accounts of insects.
1105. [RILEY, C. V.] Mr. Walsh's successor. <Amer. Ent., December, 1869-January, 1870, v. 2, pp. 92-93.
Condition in which B. D. Walsh left the office of State Entomologist of Illinois at his death; plans of his intended second report; provisions for the preparation of the same and the filling of the office.
1106. [RILEY, C. V.] To our subscribers. <Amer. Ent., December, 1869-January, 1870, v. 2, p. 93.
Proposed change in the character of the American Entomologist.
1107. [RILEY, C. V.] The Walsh entomological collection. <Amer. Ent., December, 1869-January, 1870, v. 2, pp. 93-94.
Statement of the conditions under which the Walsh collection of insects is to be sold; expression of preferences in regard to its disposition; extent and method of preservation of the collection.
1108. [RILEY, C. V.] A State entomologist for Minnesota. <Amer. Ent., December, 1869-January, 1870, v. 2, p. 94.
Commendation of resolutions passed by the Minnesota State Horticultural Society recommending the appointment of a state entomologist; promotion of entomological studies by appropriations from the several States.
1109. RILEY, C. V. [Field for the entomologist in the South.] <Amer. Ent., v. 2, December, 1869-January, 1870, p. 94; February, 1870, p. 121.
Extent and novelty of entomological work in the southern United States; J. P. Stelle at work in this field.
1110. [RILEY, C. V.] On our table. <Amer. Ent., December, 1869-January, 1870, v. 2, pp. 95, 96.
Notices of J. T. C. Ratzeburg's works on "Forest trees" and "Weeds of Germany and Switzerland."
1111. [RILEY, C. V.] Information wanted. <Amer. Ent., December, 1869-January, 1870, v. 2, p. 96.
Answer to inquiry of M. A. Kendall; habits of *Xylocopa carolina* [= *virginica*], *Rhyssa* [= *Thalassa*] *lunator*, and *Spectrum* [= *Diapheromera*] *femorata*.
1112. [RILEY, C. V.] The Cecropia moth, *Attacus cecropia*, Linn. <Amer. Ent., February, 1870, v. 2, pp. 97-102, fig. 59 [bis]-67.
Descriptions and figures of larva, cocoon and imago of *Attacus cecropia*; figure of pupa; descriptions of egg and of young larva at its several stages; nomenclature, food-plants, and parasites; its value as a silk-worm; figures and descriptions of *Ophion macrurum*, *Exorista cecropia* n. sp., and *Chalcis* [= *Spilochalcis*] *maria* n. sp.; figure of larva of *Ophion macrurum* and of cocoons of *Cryptus nivicus*; habits of these parasites; *Exorista cecropia* considered a variety of *E. militaris* [= *Nemorca leucania*].

1113. RILEY, C. V. Report of the committee on entomology. Read . . . before the Missouri State Horticultural Society. < Amer. Ent., February, 1870, v. 2, pp. 106-109. Reprint: < 2d Ann. Rept. State Ent. Mo., March, 1870, pp. 5-8, 13-15.
See No. 1127 for synopsis of contents.
1114. [RILEY, C. V.] Silk-worm eggs. < Amer. Ent., February, 1870, v. 2, p. 109.
Seventy-eight packages of silk-worm eggs, valued at \$800 per package and weighing two tons, shipped from Yokohama to France via California and the Pacific Railroad.
1115. RILEY, C. V. Imported insects and native American insects. < Amer. Ent., February, 1870, v. 2, pp. 110-112, fig. 72-75. Reprint: < 2d Ann. Rept. State Ent. Mo., March, 1870, pp. 8-12.
See No. 1127 for synopsis of contents.
1116. [RILEY, C. V.] The trumpet grape-gall, *Vitis viticola* O. S. < Amer. Ent., February, 1870, v. 2, pp. 113-114, fig. 76.
Figure of the gall of *Cecidomyia vitis-viticola*. *C. v.-lituns* a synonym; occurrence of similar gall in England on *Tilia* probably caused by mites.
1117. [RILEY, C. V.] The goat-weed butterfly, *Paphia glycerium* Doubleday. < Amer. Ent., February, 1870, v. 2, pp. 121-123, figs. 81-83. Reprint, with slight changes. < 2d Ann. Rept. State Ent. Mo., March, 1870, pp. 124-128, figs. 94-96.
See No. 1127 for synopsis of contents.
1118. [RILEY, C. V.] Insects injurious to the grape-vine. No. 5. < Amer. Ent., February, 1870, v. 2, pp. 123-124, fig. 84. Reprint, with slight changes. < 2d Ann. Rept. State Ent. Mo., March, 1870, pp. 78-79, fig. 54.
Treats of *Thyreus abbotii*; see No. 1127 for synopsis of contents.
1119. [RILEY, C. V.] Scorpion in Kansas. < Amer. Ent., February, 1870, v. 2, p. 126.
Answer to inquiry of K. Kelsey; occurrence of *Buthus carolinianus* in Texas, Missouri, and Kansas.
1120. [RILEY, C. V.] The grain Bruchus of Europe just imported. < Amer. Ent., February, 1870, v. 2, pp. 126-127, fig. 85.
Answer to inquiry of A. S. Fuller; notice of the recent importation into New York of the European *Bruchus granarius*; danger of and remedy for such importation; habits and ravages of and means against the beetle in Europe as described in J. Curtis's, "Farm Insects;" figure of the imago and of infested beans; figures of larva, pupa, and imago of *B. pisi* and of infested pea.
1121. [RILEY, C. V.] Locust borer. < Amer. Ent., February, 1870, v. 2, pp. 127-128, figs. 86-89.
Answer to inquiry of J. M. Shaffer; habits, food-plants, seasons, and ravages of and means against *Xyleutes* [= *Cossus*] *robinia*; figures larva, pupa, and male and female imagos.

1122. [RILEY, C. V.] Eggs of snowy tree-cricket on raspberry canes. <Amer. Ent., February, 1870, v. 2, p. 128.
Answer to inquiry of J. B. Root; oviposition of and means against *Ecanthus niveus*.
1123. [RILEY, C. V.] Spotted rove-beetle. <Amer. Ent., February, 1870, v. 2, p. 128.
Answer to inquiry of J. Huggins; habits of *Staphylinus maculosus* and of rove-beetles in general.
1124. [RILEY, C. V.] Raspberry gouty gall. <Amer. Ent., February, 1870, v. 2, p. 128, fig. 90.
Answer to inquiry of C. Carpenter; ravages of and means against *Agrilus ruficollis*; description and figure of larva.
1125. [RILEY, C. V.] Parasitic cocoons. <Amer. Ent., February, 1870, v. 2, p. 128, fig. 91.
Answer to inquiry of G. C. Brackett; figures cocoons and conjectures as to the habits of [*Microplitis ceratonia* var. *actuosus*].
1126. [RILEY, C. V.] The pigeon Tremex in apple. <Amer. Ent., February, 1870, v. 2, p. 128.
Answer to inquiry of J. Huggins; habits and food-plants of *Tremex columba*; description of imago; *Rhyssa* [= *Thalassa*] *lunator* destroys the larva.
1127. RILEY, C. V. Second annual report on the noxious, beneficial, and other insects of the State of Missouri, made to the State Board of Agriculture, pursuant to an appropriation for this purpose from the legislature of the State. <5th Ann. Rept. State Board of Agric. for 1869, March, 1870, pp. 136 + 6, 99 figs. Separate: <Jefferson City, Mo., March, 1870, pp. 136+6, 99 figs.

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1128. [RILEY, C. V.] Mr. Walsh's portrait. <Amer. Ent., March, 1870, v. 2, p. 129.

Remarks accompanying the portrait of B. D. Walsh; resolutions passed on the death of Walsh by the London branch of the Entomological Society of Ontario; by the American Entomological Society, the Illinois State Horticultural Society, and by the Kansas State Horticultural Society.

1129. RILEY, C. V. The plum Curculio, *Conotrachelus nenuphar* Herbst. <Amer. Ent., March, 1870, v. 2, pp. 130-137, fig. 92.

Paper read before the Illinois State Horticultural Society at its 14th annual meeting; summary of established facts and discussion of mooted points in the life-history of *Conotrachelus nenuphar*; seasons, habits, transformations, food-plants, enemies of and means against the same; descriptions and figures of larva and imago; figure of pupa; hibernation and the effects of climate on the prolongation of the life of insects.

1130. RILEY, C. V. Insects injurious to the grape-vine. No. 6. <Amer. Ent., March, 1870, v. 2, pp. 150-153, figs. 100-102. Reprint, with slight changes: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 80-82, fig. 55.

Treats of *Alypia octomaculata*; see No. 1127 for synopsis of contents.

1131. [RILEY, C. V.] Pithy blackberry gall. <Amer. Ent., March, 1870, v. 2, pp. 159-160, fig. 103.
Answer to inquiry of C. W. ["S. C."] Spaulding; descriptions and figures of larva and gall of *Diastrophus nebulosus*; figure of pupa; seasons, food-plant, guest-fly [*Periclistus sylvestris*], and parasite [*Eurytoma diastrophii*] and means against this species; the genus *Diastrophus* confined to *Rosa*-*cæ*, *Cynips* to *Cupulifera* and *Antistrophus* to *Compositæ*.
1132. [RILEY, C. V.] Clover-worms. <Amer. Ent., March, 1870, v. 2, p. 160.
Answer to inquiry of G. Pauls; geographical distribution, food-habits, vernacular names and synonymy of and means against *Asopia costalis*.
1133. [RILEY, C. V.] Seed-ticks under bark of apple-trees. <Amer. Ent., March, 1870, v. 2, p. 160.
Answer to inquiry of O. B. Galusha; character of insects as regards the number of legs; occurrence of *Lxodes unipunctata* under outer bark of apple-trees at Morris, Ill.
1134. [RILEY, C. V.] Parasitic cocoons. <Amer. Ent., March, 1870, v. 2, p. 160.
Answer to inquiry of S. W. Beckworth; occurrence of a mass of cocoons of [*Microplitis ceratomiæ* var. *actuosus*] under red-oak at South Pass, Ill.
1135. [RILEY, C. V.] Is any knowledge useless? <Amer. Ent. and Bot., April, 1870, v. 2, pp. 164-166.
Reprint of article from Manufacturer and Builder, November, 1869; minute investigations in science may be of great practical importance; cases in which a knowledge of life-history of *Galeruca californiensis* [= *xanthomelæna*], *Conotrachelus nenuphar*, and *Lymexylon navale* was or might have been of great value.
1136. [RILEY, C. V.] Tomato fruit-worm. <Amer. Ent. and Bot., April, 1870, v. 2, p. 172.
Notice of statement by J. J. Weir that *Heliothis armigera* was bred from larvæ which fed on the fruit of tomato in England; food-plants of this insect.
1137. RILEY, C. V. Insects injurious to the grape-vine. No. 7. <Amer. Ent. and Bot., April, 1870, v. 2, pp. 173-174, figs. 107-108.
Reprinted, with slight changes, from <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 85-87, figs. 58-59.
Treats of *Proceris* [= *Harrisina*] *americana*; see No. 1127 for synopsis of contents.
1138. [RILEY, C. V.] The death web of young trout. <Amer. Ent. and Bot., April, 1870, v. 2, p. 174.
Reprint, with review, of Seth Green's "An enemy to young trout;" young trout and young white-fish killed by the web of an unknown aquatic larva, probably one of the caddis-flies; habits of the larvæ of *Phryganeidæ*. See No. 1160.
1139. [RILEY, C. V.] "Scab" in apple v. apple-tree plant-lice. <Amer. Ent. and Bot., April, 1870, v. 2, p. 178.
Notes the freedom of apple-trees in 1870 from the eggs of *Aphis mali*, and the opportunity to test the question of the connection of these insects with the "scab."

1140. [RILEY, C. V.] Insects named. <Amer. Ent. and Bot., April, 1870, v. 2, p. 179.
 Answer to inquiry of M. Hobart; identification of several insects; food-plants of *Grapta comma*, *Geometra* [= *Zerene*] *catenaria*, *Serica vespertina*, and *Tetraopes 5-maculatus*; geographical distribution of *Grapta comma*; description of larva of *Epantheria scribonia*.
1141. [RILEY, C. V.] Supposed trout enemy. <Amer. Ent. and Bot., April, 1870, v. 2, pp. 179-180.
 Answer to inquiry of F. Mather; identification of several insects; habits and occurrence of *Capnia minima*; occurrence of *Piophilha casei* and *Ptinus brunneus* at Honeoye Falls, N. Y.
1142. [RILEY, C. V.] Food for trout. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.
 Answer to inquiry of Seth Green and Collins; with knowledge of the character of the worms which forms a desirable food for young trout, it may be possible to suggest some method of propagating the worms artificially.
1143. [RILEY, C. V.] Hair-snakes. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.
 Answer to inquiry of E. W. M.; parasitic habits, abodes and prolificacy, and classificatory relations of *Gordius varius* and *G. aquaticus*.
1144. [RILEY, C. V.] Egg-sack of some unknown spider. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.
 Answer to inquiry of A. Engelmann; figure of egg-sack of *Epeira* sp.?
1145. [RILEY, C. V.] Do worker bees sting the drones to death? <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.
 Answer to inquiry of M. W. V.; there is no good reason to doubt that worker bees sting the drones to death when the mission of the latter is ended.
1146. [RILEY, C. V.] Red spider. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.
 Answer to inquiry of R. H. Warder; *Trombidium* [= *Tetranychus*] *telarius* imported from Europe; size, color, and abodes of and means against the same.
1147. [RILEY, C. V.] Insect named. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.
 Answer to inquiry of M. Barrett; food-habits of *Psocus venosus* and other *Psocidæ*.
1148. [RILEY, C. V.] To destroy plant-lice. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.
 Answer to inquiry of B. F. Lazear; means against *Aphididæ* on house plants.
1149. [RILEY, C. V.] Raspberry root-gall. <Amer. Ent. and Bot., April, 1870, v. 2, p. 181, fig. 110.
 Answer to inquiry of K. Parsons; description and figure of gall of *Rhodites radicum* occurring on roots of *Rosacæ*; genera of parasites raised from it; interest of the question of the manner and extent of parasitization of this gall.
1150. [RILEY, C. V.] Spined slug-worm. <Amer. Ent. and Bot., April, 1870, v. 2, p. 181.
 Answer to inquiry of L. G. Saffer and A. R. Bodley; brief description of the larva of *Limacodes* sp.

1151. [RILEY, C. V.] Apple-tree insects. <Amer. Ent. and Bot., April, 1870, v. 2, p. 181.
Answer to inquiry of L. Camfield; identification of specimens and directions for the destruction of *Orygia leucostigma* and *Phycita nebulo* [= *Acrobasis indigiuella*].
1152. [RILEY, C. V.] Native apple-tree bark-lice. <Amer. Ent. and Bot., April, 1870, v. 2, p. 181, fig. 111.
Answer to inquiry of A. C. Hammond; food-plants of and means against *Diaspis harrisii* [= *Chionaspis furfurus*]; figure of infested twig of apple; the presence of enemies and parasites prevent this species becoming a formidable pest.
1153. [RILEY, C. V.] The hedge-hog caterpillar. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182, fig. 112.
Answer to inquiry of H. Burt; descriptions and figures of larva and imago of *Arctia* [= *Pyrhærefia*] *isabella*; figure of pupa and cocoon; habits and hibernation; its larva and that of *Epantheria scribonia* called "fever-worm," and ignorantly supposed to cause malarial fevers; food-habits of *Horinus* [= *Merinus*] *lavis*.
1154. [RILEY, C. V.] Chick-weed Geometer. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182.
Answer to inquiry of J. Huggins; identification of specimens; reference to account of *Hamatopsis grataria*; *Cermatia forceps* common in houses in the latitude of St. Louis, Mo.; the sulphur remedy for cauker-worms absurd.
1155. [RILEY, C. V.] Bean-weevil. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182.
Answer to inquiry of G. W. Copley; specimens identified; occurrence and ravages of *Bruchus obsoletus* in Illinois.
1156. [RILEY, C. V.] Bag-worm at South Pass, Ill. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182.
Answer to inquiry of G. H. Baker; occurrence of *Thyridopteryx ephemereformis* at South Pass, Ill.; importance of its destruction.
1157. [RILEY, C. V.] Eggs of oblong-winged katy-did. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182.
Answer to inquiry of E. D. Ladd; differences between the eggs of *Phylloptera* [= *Amblycorypha*] *oblongifolia* and those of *Platyphyllum* [= *Cyrtophyllus*] *concauus*; the former occur on currant and various trees.
1158. [RILEY, C. V.] Insects injurious to the grape-vine. No. 8. <Amer. Ent. and Bot., May, 1870, v. 2, pp. 208-209, fig. 127.
Reprint, with slight changes: <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 61-63, fig. 24.
Treats of *Desmia maculalis*; see No. 1301 for synopsis of contents.
1159. [RILEY, C. V.] The periodical Cicada alias the 17-year and 13-year locust. <Amer. Ent. and Bot., May, 1870, p. 211.
Quotes, from the 1st Ann. Rept. State Ent. Mo., the localities in which *Cicada* [= *Tibicen*] *septendecim* and *C.* [= *T.*] *tredecim* will appear in 1870, with request for reports of the occurrence of these insects.
1160. [RILEY, C. V.] The death-web of young trout. <Amer. Ent. and Bot., May, 1870, v. 2, p. 211.
Supplementary to No. 1138; the larvæ mentioned belong to the genus *Simulium*.

1161. [RILEY, C. V.] Worms under mulch hay. <Amer. Ent. and Bot., May, 1870, v. 2, p. 212.
Answer to inquiry of J. F. Flagg; description, season, habits, and ravages of and means against the larvæ of *Tipula* sp.
1162. [RILEY, C. V.] A new pear-tree insect. <Amer. Ent. and Bot., May, 1870, v. 2, p. 212, fig. 129.
Answer to inquiry of E. J. Ayres; food-habits and ravages of and means against *Platycerus quercus*; figure of imago.
1163. [RILEY, C. V.] Apple-twigg borer. <Amer. Ent. and Bot., May, 1870, v. 2, p. 212.
Answer to inquiry of J. B. Myers; *Bostrichus* [= *Amphicerus*] *bicaudatus* bores into the axil of limbs of pear-trees.
1164. [RILEY, C. V.] Cocoons of polyphemus moth. <Amer. Ent. and Bot., May, 1870, v. 2, p. 212.
Answer to inquiry of H. J. Dunlap; cocoon of *Attacus* [= *Telea*] *polyphemus* found on Morello cherry-tree.
1165. [RILEY, C. V.] Galls on supposed dock. <Amer. Ent. and Bot., May, 1870, v. 2, p. 212.
Answer to inquiry of S. V. Summers; *Gelechia gallæ-solidaginis* forms galls on stems of *Solidago*; *Gastrophysa* [= *Gastroidea*] *cyanæa* breeds on *Rumex*.
1166. [RILEY, C. V.] Mossy rose-gall. <Amer. Ent. and Bot., May, 1870, v. 2, p. 213, fig. 130.
Answer to inquiry of W. M. Locke; description of gall, larva, and imago of *Rhodites roseæ*; figure of the gall; description of a parasitic larva.
1167. [RILEY, C. V.] Punctures on the rose-twigg. <Amer. Ent. and Bot., May, 1870, v. 2, p. 213, fig. 131.
Answer to inquiry of G. W. Copley; punctures in rose-stem; eggs, probably of a cricket, imbedded in pith of the same; description of the egg and figure of injured stem.
1168. [RILEY, C. V.] Snout-beetle. <Amer. Ent. and Bot., May, 1870, v. 2, p. 213.
Answer to inquiry of Mary Treat; *Hylobius confusus* a timber borer and usually in pine.
1169. [RILEY, C. V.] The oyster-shell bark-louse in Missouri. <Amer. Ent. and Bot., May, 1870, v. 2, pp. 213-214, fig. 132.
Answer to inquiry of B. P. Hanan; occurrence of *Aspidiotus conchiformis* [= *Mytilaspis pomorum*] in Missouri; importance of the thorough extirpation of the insect; figure of a piece of bark infested by the same.
1170. [RILEY, C. V.] The pod-like willow-gall. <Amer. Ent. and Bot., May, 1870, v. 2, p. 214, fig. 133.
Answer to inquiry of J. R. Muhleman; description and figure of the gall of *Cecidomyia salicis-siliqua*; figure of larva; food-plants, synonymy, and description of the pupa of the same.
1171. [RILEY, C. V.] Bee-nest. <Amer. Ent. and Bot., 1870, v. 2; May, p. 214, fig. 134; September, p. 307.
Answer to inquiry of J. R. Muhleman; description and figure of larva of *Prosopis affinis* in hot, low currant-stem; probability that *Ceratina dupla* breeds twice a year.

1172. [RILEY, C. V.] Beetles named. <Amer. Ent. and Bot., May, 1870, v. 2, p. 214.
Answer to inquiry of S. V. Summers; specimens identified; difference between *Canthon lavis* and *C. chalcites*.
1173. [RILEY, C. V.] Great discovery: Curculio extermination possible! <Amer. Ent. and Bot., June, 1870, v. 2, pp. 225-227. Notice: <Cultivator and Country Gentleman, 9 June, 1870, v. 35, p. 361.
Reprint of articles by J. E. Chamberlain and Mrs. H. Wier on the destruction of the Curculio; letter from W. B. Ransom; criticism of the same; means against *Conotrachelus nenuphar*; distinctions between *C. nenuphar* and *Anthonomus quadrigibbus*.
1174. [RILEY, C. V.] The death-web of young trout. <Amer. Ent. and Bot., June, 1870, v. 2, pp. 227-228, figs. 143-144.
Value and progress of fish-culture; habits of *Simulium piscicidium*, with the observations of Seth Green and Sara J. McBride; figures larva and pupa of *S. piscicidium* and the imago of *S. molestum*.
1175. [RILEY, C. V.] Insects injurious to the grape-vine. No. 9. <Amer. Ent. and Bot., June, 1870, v. 2, pp. 234-235, fig. 148. Reprint, with slight changes: <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 65-68, fig. 27.
Treats of *Pterophorus* [= *Oxyptilus*] *periscelidactylus*; see No. 1301 for synopsis of contents.
1176. [RILEY, C. V.] The apple Curculio. <Amer. Ent. and Bot., June, 1870, v. 2, p. 243, fig. 152.
Figures of the imago of *Anthonomus quadrigibbus*.
1177. [RILEY, C. V.] The new Curculio remedy. <Amer. Ent. and Bot., June, 1870, v. 2, p. 243.
Results of experiments in the use of Ransom chip-trap for *Conotrachelus nenuphar*.
1178. [RILEY, C. V.] Tarantula of Texas. <Amer. Ent. and Bot., June, 1870, v. 2, p. 244.
Answer to inquiry of L. J. Stroop; the figure of *Mygale hentzii* given in volume one is somewhat incorrect.
1179. [RILEY, C. V.] Ailanthus silk-worm naturalized. <Amer. Ent. and Bot., June, 1870, v. 2, p. 244.
Answer to inquiry of A. S. Fuller; introduction and naturalization of *Attacus cyntia*.
1180. [RILEY, C. V.] Cypress-gall. <Amer. Ent. and Bot., June, 1870, v. 2, p. 244, fig. 153.
Answer to inquiry of J. P. Stelle; description and figures of gall and description of gall and imago of *Cecidomyia cupressi-auanassa* n. sp. on cypress; figures breast-bone of the larva.
1181. [RILEY, C. V.] Tent-caterpillar of the forest. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.
Answer to the inquiries of A. M. Brown and J. H. Evans; habits, food-plants, and ravages of *Clisiocampa sylvatica* [= *disstria*] and *C. americana*.

1182. [RILEY, C. V.] Worm-boring into peach. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.
Answer to inquiries of W. C. Flagg, A. C. Hammond, and M. M. Hooton; food-plants and description of larva of *Xylina cinerea* [= *Lithophane autumnata*].
1183. [RILEY, C. V.] Insects named. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.
Answer to inquiry of A. Engelman; descriptions of *Smilia auriculata* and *Membracis ampelopsidis*; both species common on grape-vines.
1184. [RILEY, C. V.] Liee on "snow-balls. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.
Answer to inquiry of Mrs. C. L. Seymour; means against *Aphididae*.
1185. [RILEY, C. V.] Twig-borer. <Amer. Ent. and Bot., June, 1870, v. 2 p. 245, fig. 154.
Answer to inquiries of S. H. Kriedelbaugh and G. F. Merriam; figures of male and female *Bostrichus* [= *Anphicerus*] *bicaudatus*, which bore into the axils of grape-buds.
1186. [RILEY, C. V.] Bee enemy. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.
Answer to inquiry of F. Brewer; *Staphylinus maculosus*, found eating a bee, is rather a scavenger than an insect of prey.
1187. [RILEY, C. V.] Knots on apple-tree roots caused by root-lice. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of B. N. McKinstry; ravages of and means against *Schizoneura lanigera* on roots of young apple-trees.
1188. [RILEY, C. V.] Beetles named. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of W. W. Daniells; *Ithycerus noveboracensis* injures apple-leaves.
1189. [RILEY, C. V.] Bag-worm. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of M. M. Hooton; occurrence of young larva of *Thyridopteryx ephemeraformis* on peach-trees; manner in which they carry their cases.
1190. [RILEY, C. V.] The larder-beetle. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of S. H. Kriedelbaugh; food-habits and description of the larva and imago of *Dermestes lardarius*.
1191. [RILEY, C. V.] Water-bug. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of W. H. Harrington; habits and description of *Ranatra fusca*.
1192. [RILEY, C. V.] Gregarious worms on horse-chestnut. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of W. R. Howard; oviposition, food-plant, and parasite of *Tortrix* [= *Cacoccia*] *rileyana*.
1193. [RILEY, C. V.] Pupa of the disippus butterfly. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246, fig. 155.
Answer to inquiry of T. Montgomery; figure and colors of pupa of *Limnitis disippus*; food-plants and hibernations of larva.

1194. [RILEY, C. V.] Prickly-rose gall. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of J. Cochrane and J. P. Stelle; brief description of the gall of *Rhodites bicolor* on wild rose.
1195. [RILEY, C. V.] Insects feeding on sap of black-walnut. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of M. Barrett; food-habits of *Psocus venosus*.
1196. [RILEY, C. V.] Locust-borer. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of "Arbor;" means against *Arhopalus* [= *Cyllene*] *robinio*.
1197. [RILEY, C. V.] To exterminate cockroaches. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.
Answer to inquiry of R. F. Weitbree; means against cockroaches.
1198. [RILEY, C. V.] The white-lined morning Sphinx. (*Deilephila lineata*, Fabr.) <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 257-258, figs. 162-164. Reprint, with additions and slight changes: <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 140-142, figs. 60-62.
Treats of *Deilephila lineata*; see No. 1301 for synopsis of contents.
1199. [RILEY, C. V.] Descriptive entomology. <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 258-261. Abstract: <Cultivator and Country Gentleman, 6 April, 1871, v. 36, p. 218.
Critical review of a remark by J. A. Lintner; calculation of the cost, labor, and extent of a work containing the description and figure of every existing species of insect.
1200. [RILEY, C. V.] The tent-caterpillar of the forest. (*Clisiocampa sylvatica*, Harr.) <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 261-266, figs. 165-168. Reprint, with additions and slight changes: <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 121-129, figs. 52-54.
Treats of *Clisiocampa sylvatica* [= *disstria*]; see No. 1301 for synopsis of contents.
1201. [RILEY, C. V.] The Ransom Curculio remedy. <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 268-271.
Discussion of the efficacy of the Ransom chip-trap against *Conotrachelus nenuphar*; extracts from and criticism of articles by E. S. Hull, W. B. Ransom, and others on this subject.
1202. [RILEY, C. V.] Insects injurious to the grape-vine. No. 10. <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 272-273, fig. 170. Reprint, with additions and slight changes. <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 68-69, fig. 28.
Treats of *Spilosoma virginica*; see No. 1301 for synopsis of contents.
1203. [RILEY, C. V.] The Walsh entomological cabinet. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.
Remarks on the purchase and disposal of the entomological collection of B. D. Walsh.

1204. [RILEY, C. V.] The currant-worm! <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.
Comments upon the confusing way in which some horticultural publications treat of the currant-worm, without discrimination of species.
1205. [RILEY, C. V.] Water larva. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.
Answer to inquiry of F. Mather; habits of the larvæ of *Ephemérida*.
1206. [RILEY, C. V.] Large black potato-beetles. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.
Answer to inquiry of R. S. Elliott; *Epicauta corvina*? injuring potato-vines in Kansas.
1207. [RILEY, C. V.] Destroying cherry plant-lice. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.
Answer to inquiry of G. C. Brackett; means against *Myzus cerasi*.
1208. [RILEY, C. V.] Caterpillars on grape-vines. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.
Answer to inquiry of G. A. Watson; larvæ of *Alypia octomaculata* and *Acronycta oblongata* found on grape-vines; food-plants of the latter species.
1209. [RILEY, C. V.] Ash-gray blister-beetle. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.
Answer to inquiry of P. H. Foster; *Lytta cinerea* [= *Macrobasis unicolor*] feeding on the three-thorned Acacia.
1210. [RILEY, C. V.] Specimens lost. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.
Answer to inquiry of C. H. Roberts; food-habits and description of larva of *Gortyna nitela* and of an undetermined moth on peach-trees.
1211. [RILEY, C. V.] White willow worm. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.
Answer to inquiry of S. H. K.; food-plants and description of larva of and means against *Nematus ventralis*.
1212. [RILEY, C. V.] Bark-lice on grape-vine and raspberry saw-fly. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.
Answer to inquiry of S. Thompson; *Lecanium* [= *Pulvinaria*] *vitis* common on grape-vines in Europe and North America; its oviposition and occurrence in Illinois; description and means against the larva of *Selandria* [= *Monophadnus*] *rubi*.
1213. [RILEY, C. V.] Apple-tree borer; variations in the two-striped Saperda. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.
Answer to inquiry of D. B. Wier; colorational variations in *Saperda bivittata* [= *eandida*]; abundance and ravages of *Capsus oblineatus* [= *Lygus pratensis*].
1214. [RILEY, C. V.] The plum Curculio breeds in apple. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.
Answer inquiry of E. Leming; *Conotrachelus nenuphar* breeds in the fruit of apple.

1215. [RILEY, C. V.] Cecropia worm. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.
Answer to inquiry of J. F. Thompson; occurrence and ravages of the larva of *Attacus cecropia* on apple-trees.
1216. [RILEY, C. V.] Gigantic rhinoceros beetle. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.
Answer to inquiry of L. G. Saffer; variations in coloration of *Dynastes tityus*.
1217. [RILEY, C. V.] Roman-nosed pupa. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.
Answer to inquiry of E. D. Van Winkle; food-habits of *Limenitis ursula* and *L. disippus*; the pupæ of the two species are alike.
1218. [RILEY, C. V.] The onward march of the Colorado potato-beetle. A word to our Canadian neighbors. <Amer. Ent. and Bot., September, 1870, v. 2, pp. 289-291, fig. 181.
Remarks on the spread of *Doryphora decemlineata* into Ontario, and means of checking it; efficacy and proper use of Paris green; other remedies; *Lebia grandis* a natural enemy of the larvæ.
1219. [RILEY, C. V.] The tarnished plant-bug. (*Capsus oblineatus*, Say). <Amer. Ent. and Bot., September, 1870, v. 2, pp. 291-293, fig. 182. Reprinted, with additions and slight changes, from <2d Ann. Rept. State Ent. Mo., Mareh, 1870, pp. 113-115, fig. 83.
Treats of *Capsus oblineatus* [= *Lygus pratensis*]; see No. 1127 for synopsis of contents.
1220. [RILEY, C. V.] Osage orange for the mulberry silk-worm. <Amer. Ent. and Bot., September, 1870, v. 2, p. 293.
Reprint and critical review of S. Cornaby's article on the above; important articles should not be published anonymously.
1221. [RILEY, C. V.] Insects injurious to the grape-vine. No. 11. <Amer. Ent. and Bot., September, 1870, v. 2, p. 295, fig. 185.
Reprint with slight changes. <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 77-79, fig. 34.
Treats of *Pelidnota punctata*; see No. 1301 for synopsis of contents.
1222. [RILEY, C. V.] The slug on pear and cherry trees. <Amer. Ent. and Bot., September, 1870, v. 2, p. 296.
Reprint and critical review of "Addi" on the above; ravages of and means against *Selandria* [= *Eriocampa*] *cerasi*.
1223. [RILEY, C. V.] Appendix to joint-worm article published in vol. 1, No. 8 <Amer. Ent. and Bot., September, 1870, v. 2, pp. 296-297.
Introduction to and explanation of the preparation and publication of Walsh's *Eurytomides*. See No. 384.
1224. [RILEY, C. V.] Entomology indeed run mad! <Amer. Ent. and Bot., September, 1870, v. 2, p. 305.
Critical review of Mark Miller's article on the currant-worm; *Nematus ventricosus* [= *ribesii*] confounded with *Eufitchia ribearia*.
1225. [RILEY, C. V.] Red spider. <Amer. Ent. and Bot., September, 1870, v. 2, p. 305.
Ravages and transformations of *Tetranychus telarius*.

1226. [RILEY, C. V.] Insects named. <Amer. Ent. and Bot., September, 1870, v. 2, p. 306.
Answer to inquiry of J. K. Kidd; food-habits of *Silpha peltata* [= *americana*] and allied forms, of *Calosoma scrutator* and of *Laphria* [= *Dasyllis*] *thoracica*; mimicry between *Laphria* and *Bombus* and its use.
1227. [RILEY, C. V.] Caterpillar of white-marked tussock moth. <Amer. Ent. and Bot., September, 1870, v. 2, p. 306, fig. 186.
Answer to inquiry of G. C. Brackett; figure of larva and description of imago of *Orgyia leucostigma*; posture of male in repose; habits of female; *Saperda bivittata* [= *candida*] usually perishes if it has not changed to a pupa before the death of the tree; *Chrysobothris femorata* lives for weeks on dead wood.
1228. [RILEY, C. V.] Does the apple Curculio go underground to transform? <Amer. Ent. and Bot., September, 1870, v. 2, p. 306.
Answer to inquiry of W. Muir; *Anthonomus quadrigibbus* transforms within the fruit; it does not attack stone fruit.
1229. [RILEY, C. V.] Walnut caterpillars. <Amer. Ent. and Bot., September, 1870, v. 2, p. 306.
Answer to inquiry of G. M. Levette; seasons, habits, and food-plant of and means against *Datana ministra*; description of larva.
1230. [RILEY, C. V.] Striped blister-beetle. <Amer. Ent. and Bot., September, 1870, v. 2, p. 306, fig. 187.
Answer to inquiry of A. Galt; means against *Epicauta vittata* and other *Meloidæ* on potato vines; figure of *Epicauta vittata*.
1231. [RILEY, C. V.] Grape-vine Fidia. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307, fig. 188.
Answer to inquiry of J. Hetzel; habits, ravages, and food-plants of and means against *Fidia viticida*; figure of this species.
1232. [RILEY, C. V.] Some interesting insects. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307.
Answer to inquiry of A. S. Fuller; ravages of *Bruchus obsoletus* in Lima beans; of *Butalis cerealella* in flint corn in stems and of *Lobesia* [= *Eudemis*] *botrana* in blossoms of blackberry; description of the larva case of *Phycita nebulo* [= *Aerobasis indiginella*] and of galls of *Cecidomyia tubicola* on *Carya*.
1233. [RILEY, C. V.] The green hag-moth. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307.
Answer to inquiry of S. B. Shaw; food-plants, and synonymy of *Callochloa viridis* [= *Parasa chloris*]; description of larva and imago; the larva described by Reakirt does not belong to this species.
1234. [RILEY, C. V.] The antiopa butterfly. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307.
Answer to inquiry of A. S. Moss; description of larva and imago of *Vanessa antiopa*; the larva feeds on willow; vernacular name and comparative abundance.
1235. [RILEY, C. V.] Rose-gall and pupa of archippus butterfly. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307, fig. 189.
Answer to inquiry of L. B. Custer; figure of pupa of *Danaïd archippus*; descriptions of three undetermined galls on rose-leaf formed by *Rhodites* sp.?

1236. [RILEY, C. V.] White grubs in strawberry beds. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307.
Answer to inquiry of J. B. Miller; food-habits of larva and description of imago of *Cylocephala immaculata*.
1237. [RILEY, C. V.] Larva of the thoas swallow-tail. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.
Answer to inquiry of E. H. Sprague; food-plant and description of larva of *Papilio thoas* [= *eresphontes*]; the larva rare in Missouri.
1238. [RILEY, C. V.] Larva of clubbed tortoise-beetle. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.
Answer to inquiry of A. R. Bodley; *Cassida*, *Coptocyclus* and *Deloyala* feed on *Convolvulaceae* with the exception of *Deloyala* [= *Coptocyclus*] *clarata* which feeds on *Solanacea*.
1239. [RILEY, C. V.] The banded *Ips* in calyx of pear. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.
Answer to inquiry of G. C. Brackett; food-habits and description of *Ips fasciatus*.
1240. [RILEY, C. V.] The larder-beetle. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308, fig. 191.
Answer to inquiry of F. S. Sleeper; figures of larva and imago and of magnified hair of larva of *Dermestes lardarius*; ravages in collections of preserved animals.
1241. [RILEY, C. V.] Moth named. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.
Answer to inquiry of E. M. Hale; description of *Ctenucha latrecillana* [= *virginica*]; its abundance in 1870 in the vicinity of St. Louis, Mo.
1242. [RILEY, C. V.] The little Cicada. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.
Answer to inquiry of G. O. Hardeman; occurrence of *Cicada* [= *Melampsalta*] *parvula* in Missouri.
1243. [RILEY, C. V.] The brown mantispian. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.
Answer to inquiry of G. C. Brackett; *Mantispa brunnea* common, predaceous, and beneficial.
1244. [RILEY, C. V.] Small reddish snout-beetle on apple. <Amer. Ent. and Bot., September, 1870, v. 2, p. 30.
Answer to inquiry of J. Weed; food-habits and description of *Anthonomus cratagi*.
1245. [RILEY, C. V.] Prickly rose-gall. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309, fig. 192.
Answer to inquiry of "Subscriber;" description and figure of galls and description of *Rhodites bicolor*.
1246. [RILEY, C. V.] Questions answered. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.
Answer to inquiries of K. Parsons; formation and use of portable cases by *Tineina*; habits and character of the young of *Mytilaspis pomicorticis* [= *pomorum*]; food-habits of ants.

1247. [RILEY, C. V.] Hog-caterpillar of the vine infested with parasites. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.
Answer to inquiry of J. M. Wilson; occurrence of larva of *Darapsa* [= *Ampelophaga*] *myron* parasitized by *Apanteles congregatus*.
1248. [RILEY, C. V.] Larva of Abbot Sphinx. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.
Answer to inquiry of S. E. Todd; occurrence of larva of *Thyreus abbotii* on grape-vine; means against the same.
1249. [RILEY, C. V.] Cecropia worm. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.
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1250. [RILEY, C. V.] Flat-headed borer in soft maples. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.
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1304. RILEY, C. V. Canker-worms; not army-worms. <Moore's Rural New Yorker, 24 June, 1871, v. 23, p. 393.

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1306. RILEY, C. V. Friendly notes. <Ca. Ent., September, 1871, v. 3, pp. 117–119.

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1309a. [RILEY, C. V.] (*Lxodes bovis*.) <Rept. Comm. of Agric. on the diseases of cattle. Washington, 1871, p. 118, fig.

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1310. RILEY, C. V. The acorn moth. *Holcocera glandulella*, n. sp. <Ca. Ent., January, 1872, v. 4, pp. 18, 19.

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* Extract in <Sci. Amer., 25 May, 1872, v. 25, p. 351.

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1312. RILEY, C. V. Thomas Wier's apple-worm trap. <Amer. Agric., April, 1872, v. 31, pp. 142-143, 1 fig.
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1317. RILEY, C. V. A new insect. <Western Planter, 29 June, 1872. S.-b. No. 5, p. 49.
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1328. RILEY, C. V. Entomological correction. <Cultivator and Country Gentleman, 6 March, 1873, v. 38, p. 149.
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1329. RILEY, C. V. Fifth annual report on the noxious, beneficial, and other insects of the State of Missouri, made to the State Board of Agriculture, pursuant to an appropriation for this purpose from the legislature of the State. <8th Ann. Rept. State Board of Agric. for 1872, 18 April, 1873, pp. 160+8, 75 figs. Separate: <Jefferson City, Mo., 18 April, 1873, pp. 160+8, 75 figs. Review by A. S. Packard, jr.: <Amer. Nat., August, 1873, v. 7, pp. 471-477, figs. 115-130. Reply to Packard and rejoinder by Packard: <Amer. Nat., March, 1874, v. 8, pp. 181-188.

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NOTE.—Pages 1-44 were also printed as a separate, with title-page cover. <Jefferson City, Mo., 1873. S.-b. No. 19, pp. 150-173.

1330. RILEY, C. V. New York without a State entomologist. <Moore's Rural New Yorker, 5 May, 1873. S.-b. No. 8, p. 103.

Needs of a State entomologist for New York; *Salix humilis* infested with larva of *Plectrodera scalator*.

1331. RILEY, C. V. Tent-caterpillar of the forest. <N. Y. Tribune, 23 May, 1873. S.-b. No. 8, pp. 64-65.

Answer to inquiry of S. T. Gilbert; means against eggs of *Clisiocampa sylvatica* [= *disstria*].

1332. RILEY, C. V. Apple-tree borer. <N. Y. Tribune, 23 May, 1873, S.-b. No. 8, p. 64.

Answer to inquiry of J. Durbin; means against *Saperda bivittata* [= *candida*].

1333. RILEY, C. V. Punctured grape-canec. <N. Y. Tribune, 23 May, 1873. S.-b. No. 8, p. 64.

Answer to inquiry of E. Snyder; food-habits and means against *Æcanthus nivicus*.

1334. RILEY, C. V. The codling-moth. Weir's trap. <Amer. Agric., May, 1873, v. 32, p. 184, figs.

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1335. RILEY, C. V. Influence of extreme cold on the Curculio. <Gardener's Mo. and Hort., May, 1873, v. 15, pp. 137-139.

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1336. RILEY, C. V. On a new genus in the lepidopterous family *Tineidae*, with remarks on the fertilization of *Yucca*. <Trans. Acad. Sci. St. Louis, June, 1873, v. 3, pp. 55-64, 2 figs. Reprinted, with omissions and slight changes, from <5th Ann. Rept. State Ent. Mo., 18 April, 1873, pp. 150-160, figs. 74-75. Review by P. C. Zeller: <Verh. k.-k. zool.-bot. Ges. Wien, 1876, Jahrg. 1875, Bd. 25, pp. 340-342. Reply to Zeller: <Trans. Acad. Sci. St. Louis, January-March, 1876, v. 3, pp. 325-326.
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1337. RILEY, C. V. Supplementary notes on *Pronuba yuccasella*. <Trans. Acad. Sci. St. Louis, June, 1873, v. 3, pp. 178-180, fig. 3. Extract: <6th Ann. Rept. State Ent. Mo., April, 1874, pp. 131-135, fig. 3.
- Descriptions and figures of male and female pupa of *Pronuba yuccasella*; hibernation, imagination, seasons, and distribution of the same; species of *Yucca* pollinated by it.
1338. RILEY, C. V. [To destroy the cotton-worm.] <Ill. Jour. of Agric., June, 1873. Reprint: <Colman's Rural World, 1873; <Rural Alabamian, July, 1873, v. 2, pp. 289-293; <Mobile Register, 1873; <Farmer's Advocate, 1873. Extract: <6th Ann. Rept. State Ent. Mo., 1874, pp. 17-18.
- Ravages of *Aletia argillacea* [= *xylina*] in the cotton fields of Southern United States; inefficiency of measures hitherto employed against them; recommends the use of Paris green; directions for its use; natural history, description of egg, larva, and imago of the *Aletia*; hibernation of the imago.
1339. RILEY, C. V. [Imported plants and insects.] <Trans. Acad. Sci. St. Louis, July, 1873, v. 3, pp. 42-43 Proc.
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1341. RILEY, C. V. [Silk-worms fed with osage orange.] <Trans. Acad. Sci. St. Louis, July, 1873, v. 3, p. 47 Proc.
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1342. RILEY, C. V. [On the cause of deterioration in some of our native grape-vines.] <Trans. Acad. Sci. St. Louis, July, 1873, v. 3, pp. 51-52 Proc.
- Verbal communication; abstract from 4th Ann. Rept. State Ent. Mo.; failure of grape-vines attributed largely to the ravages of *Phylloxera vastatrix*.
1343. RILEY, C. V. [Insects affecting the ailanthus.] <Trans. Acad. Sci. St. Louis, July, 1873, v. 3, pp. 53-54 Proc.
- Mentions *Ceta compta* [= *punctella*] and *Attacus cynthia*.

1344. RILEY, C. V. [Posthumous papers by B. D. Walsh.] <Trans. Acad. Sci. St. Louis, July, 1873, v. 3, p. 77 Proc. Verbal communication; disposition of sundry entomological manuscripts left by B. D. Walsh.
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Description of eggs, larvæ, and imagos of *Samia* [= *Attacus*] *cynthia*; history, food-plants, acclimation, and artificial rearing of the same, and of *Samia* [= *Attacus*] *ricini*; differences between the eggs, larvæ, and cocoons of the two species; availability of these and other species for silk-culture; superiority of *Sericaria mori* for this purpose; occurrence of parthenogenesis and of retardation of development in *Bombycidae*.
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1726. [RILEY, C. V.] [The food-habits of thrushes.] <Amer. Ent., January, 1880 [v. 3], n. s., v. 1, pp. 2-3.

Notice of S. A. Forbes' "The food-habits of thrushes;" incompleteness of our knowledge of the food-habits of birds and of *Carabidae*; author's opinion favorable to the birds.

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Phylloxera vastatrix as destructive to *Vitis vinifera* in California as in Europe; the winged female supposed not to have appeared yet in California; speculations upon this modification of habit, if true.

* Translation: <Acker- und Gartenbau-Zeitung, 1 August, 1880, v. 11, p. 119, 2 figs. S.-b. No. 23, p. —. Extract: <Prairie Farmer, 22 November, 1879, v. 50, p. 370. S.-b. No. 23, pp. 168-169. <Amer. Rural Farmer, 18 December, 1879. S.-b. No. 45, pp. 23-24.

† Translation: <Acker- und Gartenbau-Zeitung, 1 September, 1880, v. 11, p. 135, fig. S.-b. No. 23, p. 182.

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Answer to communication from E. A. Smith; hams injured by larvæ of *Piophilus casci*; means against these and other insects injuring hams.
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Answer to communication from S. A. Forbes; description of eggs and method of oviposition of *Tipula trivittata?*
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Answer to letter from P. H. M.; larva of *Cryptorhopalum* sp. supposed to have injured grains of wheat, was probably feeding on the remains of true grain insects; food-habits of larvæ of *Dermestidæ*.
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Method of obtaining eggs of *Sericaria mori* and information on silk culture.
1754. [RILEY, C. V.] [Hickory *Scolytus*.] <Amer. Ent., March, 1880 [v. 3], n. s., v. 1, p. 58.
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Request for information on the habits of the imago and the food-plants of the larva of *Aletia argillacea* [= *xylina*] during March and April.
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Notice of several articles on the capture of *Noctuidæ* and *Sphingidæ* by the flowers of *Physianthus albus*; capture of *Sphingidæ* by the flowers of *Nerium oleander* and *Oenothera grandiflora*, and of *Syrphus* sp. by the flowers of *Bidens chrysanthemoides*.
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Date and manner of first appearance of larvæ of *Aletia argillacea* [= *xylina*]; number of annual generations and the existence of parasites upon it; his-

1769. RILEY, C. V.—Continued.

tory and refutation of the annual immigration theory; division of the cotton belt into regions wherein, respectively, *A. argillacea* [= *xylina*] is permanent and temporary; food-habits and enemies of the same.

1770. [RILEY, C. V.] The migrations of butterflies. <Amer. Ent., April, 1880 [v. 3], n. s., v. 1, pp. 100-102, figs. 34-35.

Migratory flights of Lepidoptera supposed to be due to excessive multiplication of individuals and to a true migratory instinct; directions, times, and extent of migrations of *Danaus archippus*; explanation of the migratory instinct; distribution of *D. archippus* and *Pyrausis cardui*; figures the former and its manner of clustering.

1771. [RILEY, C. V.] Gouty gall on blackberry and raspberry canes. <Amer. Ent., April, 1880 [v. 3], n. s., v. 1, p. 107.

Answer to letters of P. S., T. A. C., and J. W.; seasons, ravages of and means against *Agrilus ruficollis*.

1772. [RILEY, C. V.] Sowing cotton seeds in hot-beds and transplanting as a means of preventing injury from the cotton-worm. <Amer. Ent., April, 1883 [v. 3], n. s., v. 1, p. 107.

Impracticability of W. J. W.'s suggestion as indicated in title.

1773. [RILEY, C. V.] Not the cotton-moth. <Amer. Ent., April, 1880 [v. 3], n. s., v. 1, p. 107.

Answer to inquiry of D. B. Woodbury; food-plants of *Tolyte vellela*.

1774. [RILEY, C. V.] Moths caught in Alabama: Muscle-shaped bark-louse on apple-trees South <Amer. Ent., April, 1880 [v. 3], n. s., v. 1, pp. 107-108.

Mentions several insects received from J. F. Bailey, of Marion, Ala.; larva of *Papilio philenor* feeds on *Aristolochia*; *Bombus virginicus* ♀ robs hives of *Apis mellifica*; *Mytilaspis pomicorticis* [= *pomorum*] not before received from so far south; means against the same.

1775. [RILEY, C. V.] Chrysalides supposed to be those of *Aletia*. <Amer. Ent., April, 1880 [v. 3], n. s., v. 1, p. 108.

Answer to letter of W. J. Jones; pupæ of *Agrotis inermis* [= *sauacia*] and *Prodenia lineatella* from cotton field.

1776. [RILEY, C. V.] Apple-twig borer. <Amer. Ent., April, 1880 [v. 3], n. s., v. 1, p. 108.

Answer to inquiry of T. V. M.; occurrence and habits of *Amphicerus bicaudatus*.

1777. [RILEY, C. V.] Clover-weevil. <Amer. Ent., April, 1880 [v. 3], n. s., v. 1, p. 108.

Answer to inquiry of W. W. F.; several "weevils" infest clover-seeds; *Hy-lesinus trifolii* infests the roots and lower part of the stem.

1778. [RILEY, C. V.] Effects of cold applied to the chrysalides of butterflies. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, pp. 110-111.

Notice of the experiments of W. H. Edwards; effects of hibernation in the chrysalis and imago states.

1779. [RILEY, C. V.] Moth issuing from a larva. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, p. 114.

Notice of J. J. Weir on the issuance of *Orygia* sp. from the larva without passing through the pupal stage.

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Description of eggs, larvæ, and imago, history and means against *Selandria* [= *Monostegia*] *rosa*; figures, egg, larvæ, imago, with details of structure, and injured leaf.
1781. [RILEY, C. V.] Dr. Asa Fitch. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, pp. 121-123.
Biographical sketch of Asa Fitch, with notice of his collection of insects and his writings.
1782. [RILEY, C. V.] Flea-beetle on young tobacco plants. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, p. 123.
Leaves of *Nicotiana tabacum* eaten by *Epitrix hirtipennis* [= *Crepidodera parvula*] and probably by *E.* [= *C.*] *cucumeris*; leaves of *Solanum* eaten by the first named and by *E.* [= *C.*] *brevis*; distribution of these and other species of *Epitrix* [= *Crepidodera*].
1783. [RILEY, C. V.] The proboscis of the common house-fly. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, p. 125.
Review of paper by G. Macloskie.
1784. [RILEY, C. V.] Notes on South American Lepidoptera. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, pp. 125-126.
Report of meeting of the Entomological Society of London; length of proboscis of and presence of scent organ in *Sphingidæ*; perception of colors in *Rhopalocera*; secondary sexual character in *Callidryas* and other genera; according to R. Meldola the proboscis of *Macrosila cluentius* is 23.5^{cm} (9¼ inches) long.
1785. [RILEY, C. V.] Floating apiaries. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, pp. 126-127.
Notice of an unsuccessful attempt to increase the product of an apiary by floating it southward late in the season and back to the north in the spring, on the Mississippi River.
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1788. [RILEY, C. V.] Raspberries destroyed by weevils. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, p. 127.
Ravages of *Otiorhynchus picipes* in England; warning against its introduction into the United States.
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Letter of R. A. Edes, with remarks on specimens sent.

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Answer to inquiry of D. S. Sheldon; habitat of larva of *Microdon globosus*.
1790. [RILEY, C. V.] Chrysalides dug up in cotton field, mistaken for those of the cotton-worm. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, p. 129.
Answer to letter of R. Worrel.
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Answer to letter of S. A. Conrad; description of all stages of *Aleurodes* sp. from leaves of *Oxalis* sp.
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Answer to inquiry of S. A. Forbes; two coleopterous larvæ from the stomach of *Micropterus salmoides*; one a dytiscid, the other perhaps a daseyllid.
1793. [RILEY, C. V.] Insects from stomach of rock-bass. <Amer. Ent., May, 1880 [v. 3], n. s., v. 1, p. 130.
Answer to letter of S. A. Forbes; coleopterous larva from the stomach of common sun-fish (*Lepiopomus pallidus*) and rock-bass (*Roccus lineatus*).
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Answer to letter of D. Th.; ravages of *Ligyris rugiceps* upon sugar-cane, maize, and grasses; recommends use of lamp and kerosene pan, and figures one form of such apparatus.
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Answer to letter of W. S. Barnard; quotes from 3d Ann. Rept. State Ent. Mo., pp. 24-26; habits of *Sigalphus curculionis*; habits, varieties, and figures of all stages of the same; food-habits of *Semasia* [= *Grapholitha*] *prunivora* on which the *Sigalphus* is parasitic.
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Answer to inquiry of J. M.; *Macrobasis albida* common in the Southwest and valuable as a vesicant; *Diplotaxis* not known to be a vesicant.
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Answer to letter of W. S. Barnard; occurrence of *Callosamia* [= *Attacus*] *promethea* and *Orgyia antiqua* at Ithaca, N. Y.; description of abnormal cocoon of the latter found on sugar-maple.
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Answer to inquiry of J. S. Barnwell; list of insects from Darien, Ga.; most of them have no relation to orange trees; notes on *Aphis* sp., *Chilocorus bivulnerus*, *Syrphus* sp., *Neoclytus erythrocephalus*, *Drasterius amabilis*, *Platynus punctiformis*, *Forficula* sp., *Gryllotalpa borealis*, and *Pæocus venosus*.

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 Description and figures of *Torrubia ravenelii* and of its fructification; forms in which it occurs on larvæ of *Lachnosterna quercina* [= *fusca*]; list of some articles upon it; its synonymy and distribution; list of related species and their distribution; occurrence of related species on other insects.
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 Criticism of a discussion before the London Entomological Society; the winged imagos of *Lampyridæ* can intermit their light; the larvæ and wingless imagos can suppress their light.
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Conclusions drawn by Jousset de Bellesme; probability that the phosphorescent substance is a gaseous product; nature of phosphorescence.
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Broods of *Cicada* [= *Tibicen*] *septendecim* and *C.* [= *T.*] *tredecim* which appear in 1880.
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Application of sulphide of carbon with infusorial earth or guano.
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1849. RILEY, C. V.—Continued.

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Answer to letter of T. V. Munson; twigs of apple-trees bored by larvæ of *Oberca* sp. ?

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Answer to letter of S. A. Forbes; larvæ of *Anax junius* and *Palingenia* [= *Hexagenia*] *bilineata* named; the latter common in the stomach of fishes.

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Answer to letter of S. A. Forbes; character of larva of *Gyrinus*; a mass of terrestrial insects including *Typhlocyba vitis*? a muscid, a Eurytomid, *Jassus* sp., *Triphleps insidiosus*, and other species from the stomach of Ohio shad.

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Differences between *Pronuba yuccasella* and *Prodoxus decipiens* in the form, sculpture, and color of the terminal joint, and of the ovipositor.

1855. [RILEY, C. V.] The grape-vine flea-beetle, *Graptodera chalybea* Illig. <Amer. Ent., August, 1880 [v. 3], n. s., v. 1, pp. 183-184, fig. 86.

Habits, seasons, ravages of, and means against *Graptodera* [= *Haltica*] *chalybea*; figures, injured leaf, and larvæ, cocoon, and imago of the same.

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Record of experiments by W. A. Henry upon the effect of Pyrethrum powder on *Halticidæ*, *Meloidæ*, *Pieris rapæ*, *Corceus* [= *Anasa*] *tristis*, and *Blattidæ*; and of the fumes of burning pyrethrum on various insects.
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Final transformations of individuals from a single batch of eggs of *Epicauta vittata* occurring at the first, second, and third year after hatching.
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Experiments by W. S. Barnard upon the effect of alcoholic extracts of the flowers and stems of the ox-eye daisy on insects; "no evidence that they will prove of any practical value."
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Directions for sowing the seeds and cultivating the plants of pyrethrum.
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Meeting of the U. S. Entomological Commission; plan of work to be done in 1880-1881; partial list of persons engaged in the work.
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Commendation of the above work and of the supplementary list of *Elateridæ* by E. Candèze; need of co-operation for the completion of the whole catalogue.
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Larvæ of *Plusia brassicæ* devour those of *Pieris rapæ* and *Pionea rimosalis* in default of more natural food.
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Answer to letter of G. T.; ravages, distribution, and figures of *Epicærus imbricatus*; description of eggs, ravages, food-plants, and means against *Graptodera* [= *Haltica*] *carinata*.
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Answer to letter of Mrs. J. B. Harrison; distribution and distinctive characters of *Acrosoma stellatum*.

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Answer to letter of S. A. Forbes; larva of *Meracantha contracta* and of *Callimorpha* sp. from stomach of blue-bird; habits and characters of the same.
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Answer to letter of B. F. Cooke; larva of *Thecla (paas?)* feeding on leaves and bolls of cotton-plant; a species of *Microgaster* parasitic in the larva.
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Answer to letter of S. F. Clarke; occurrence in Maryland and Missouri of a luminous larva (*Melanactes* sp. ?) [= *Phengodes* sp.]; figures of the larva, of its head and leg enlarged and of its probable parent; occurrence in the more northern States of a similar larva, probably that of *Asaphes memnonius*.
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Answer to letter of J. Monaghan; ravages of larva of *Meromyza americana*.
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Answer to letter of L. T. Derousse; *Leucania unipuncta* frequently leaves clover-plants untouched while eating the grasses growing with the clover, but under some circumstances destroys young clover-plants.
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Answer to letter of S. A. Forbes; *Lampronota* sp. eaten in quantity by blue-birds.
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Call for experiments to ascertain the minimum quantity of poisons which can be used effectually against *Aletia argillacea* [= *xylina*]; effect of poisons on the several stages of this insect; food-plants, parasites, and enemies of the same; effect of yeast ferment upon it.
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Abstract of paper by Jousset de Bellesme; direction of flight not determined by the motion of the wings, but principally by the displacement of the center of gravity, resulting from the changes of position of other parts of the body.
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Notice of the continuation of the appropriations by Congress for field-work and experiments in the entomological division of the U. S. Department of Agriculture.
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Notice of a congress to be held in Spain to consider all topics connected with the ravages of *Phylloxera vastatrix*.

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Obituary notice.
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Translation, by Dr. A. S. Packard, jr., of Saussure's abstract from Yersin's *Recherches sur les fonctions du système nerveux dans les animaux articulés*, [73].

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1994. RILEY, C. V.—Continued.

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Directions for raising *Pyrethrum cinerariæfolium* from seed; climate not favorable to the growth of *P. roseum*; preparation of these plants for the destruction of insects.

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Summary of facts concerning the egg-laying development, habits, food-plants, destructive powers, migration, flight, and enemies of and means against *Caloptenus spretus*; figures of the eggs of the insect in all stages, of the manner of oviposition, and of pans for the destruction of the locusts; prospects of future injury.

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- Number of annual generations of *Leucania unipuncta*; stages at which hibernation takes place; occasional immigration of moths into uninfested districts; preferred breeding-places; connection of wet and dry seasons with the abundance of these insects.
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- Food-animals and food-habits of *Systoechus oreas* and *Triodites mus*; parallelism in the life-history of *Bombyliidæ* and *Meloidæ*; connection of the abundance of insects of these families in the western United States with the prevalence of *Aerididæ* there; retardation of development in the early stages of these parasites explained as a beneficial characteristic.
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Occurrence and ravages of *Leucania unipuncta* in Illinois and Indiana in 1881; these larvæ either from eggs of hibernated moths or of a second brood; other insects mistaken for this in other States; periods of the *Leucania* and influence of the seasons upon it.
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Brief sketch of the natural history of *Cicada* [= *Tibicen*] *septendecim* and *C.* [= *T.*] *tredecim*, with figures of all stages and of punctured twigs; the reputed stinging by these insects probably done by *Stizus grandis* [= *Sphæcius speciosus*]; figure of the *Stizus*; recommends the substitution of the name "periodical Cicada" in place of the name "locust."
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Abstract and critical review of paper by M. Saint-André; attempted explanation of the immunity of grape-vines in sandy soil from the ravages of *Phylloxera vastatrix*.
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Exposition of J. Lichtenstein's theory that most *Aphididae*, especially gall-making *Pemphigini*, live upon two different plants in passing through their cycle of development; cites instances in which the host-plants are of different families.
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Summary of the existing laws regulating the traffic in plants, with a view of preventing the introduction of *Phylloxera vastatrix* into different countries.
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Statement that nearly one-fourth of the area of vineyards in France is destroyed by *Phylloxera vastatrix* and as much more attacked; submersion the only sure remedy, and the use of American resisting stocks the only available preventive.
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London purple more than twice as efficacious and less expensive than Paris green as an insecticide; it needs to be well ground; composition of London purple.
2022. [RILEY, C. V.] Entomologist for the Pacific coast. <Amer. Nat., October [23 September], 1881, v. 15, pp. 821-822.
Notice of attempts made to have a State entomologist appointed in California.
2023. [RILEY, C. V.] *Dilar* in North America. <Amer. Nat., October [23 September], 1881, v. 15, p. 822.
Notice of paper by R. McLaughlan.
2024. [RILEY, C. V.] Locusts in Nevada. <Amer. Nat., October [23 September], 1881, v. 15, p. 822.
Statement from Reno [Nev.] Journal that the countless locusts which hatched in western Nevada in the spring of 1881 flew toward the Sierra Nevada without doing any injury.
2025. [RILEY, C. V.] Odor in butterflies. <Amer. Nat., October [23 September], 1881, v. 15, p. 822.
Notice of paper by Miss M. E. Murtfeldt.
2026. RILEY, C. V. General index and supplement to the nine reports on the insects of Missouri. <Bull. No. 6, U. S. Ent. Commission [24 March], 1881, 178 pp.
Order of matter: (1) Introduction. (2) Table of contents. (3) Corrections. (4) Notes and additions. (5) Descriptions of new species and varieties. (6) List of descriptions of adolescent states. (7) List of descriptions, mostly amplified, of species not new. (8) List of illustrations by reports. (9) Classified list of illustrations. (10) General index. (11) Index to food-plants.
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Notice of the meeting at Cincinnati, Ohio, August, 1881, with abstracts and notices of papers read.
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Occurrence and habits of *Phytonomus punctatus* in New York; description of the egg and larva of the same; food-plants of the European species of *Phytonomus*.

2029. RILEY, C. V. *Crambus vulgivagellus*. <Amer. Nat., November [28 October], 1881, v. 15, pp. 914-915.
Excessive abundance of this species in the eastern United States in 1881; description of the egg; method of oviposition.
2030. RILEY, C. V. Larval habits of *Sphenophori* that attack corn. <Amer. Nat., November [28 October], 1881, v. 15, pp. 915-916.
Several species of *Sphenophorus* injurious to maize-plants in different parts of the United States; habits and ravages of *S. robustus*.
2031. [RILEY, C. V.] Effect of drought on the Hessian fly. <Amer. Nat., November [28 October], 1881, v. 15, p. 916. See: <N. E. Farmer, 10 December, 1881. S.-b. No. 45, p. 39. <Farmer's Review, 15 December, 1881. S.-b. No. 45, p. 99.
Hot and dry weather dries up and kills *Cecidomyia destructor* and its parasites.
2032. [RILEY, C. V.] *Simulium* from Lake Superior. <Amer. Nat., November [28 October], 1881, v. 15, p. 916. .
Notice of paper by H. A. Hagen; larvæ and pupæ from Lake Superior similar to those of *S. pictipes*, but the imagos from the same locality are different.
2033. [RILEY, C. V.] Coleopterous cave fauna of Kentucky. <Amer. Nat., November [28 October], 1881, v. 15, pp. 916, 917.
Notice of H. G. Hubbard's investigations; *Adelops* contains but one species, which seems to be equally common in all caves in the State; *Ancphtalmus* contains several species, and more may be expected to be found.
2034. [RILEY, C. V.] Hemipterological studies. <Amer. Nat., November [28 October], 1881, v. 15, p. 917.
Notice of paper of V. Signoret.
2035. [RILEY, C. V.] Entomology in Buffalo, N. Y. <Amer. Nat., November [28 October], 1881, v. 15, p. 917.
Notice of Vol. 4, No. 1, of the Bulletin of the Buffalo Society of Natural Science; list of entomological papers therein.
2036. [RILEY, C. V.] *Lampyridæ*. <Amer. Nat., November [28 October], 1881, v. 15, p. 917.
Notice of paper by J. L. Leconte.
2037. [RILEY, C. V.] Severe cold and hibernating apple-worms. <Amer. Nat., November [28 October], 1881, v. 15, p. 917.
According to A. J. Cook larvæ of *Carpocapsa pomonella* were killed in their cocoons where exposed to the severe cold of the winter of 1880-1881.
2038. RILEY, C. V. [Address delivered 4 November, 1881, at the cotton convention held in Atlanta, Ga., 2-4 November, 1881.] <[U. S. Department of Agriculture.] Address of Hon. George B. Loring... and other proceedings of the cotton convention, Washington, 1881, pp. 19-35. Reprint: <Atlanta Constitution, 5 November, 1881. S.-b. No. 24, p. 34.
Beneficial and injurious influence of insects; methods of counteracting the same; ravages and natural history of and search for means against *Aletia argillacea* [= *xylina*]; improved methods and contrivances for the application of poisons to plants.

2039. RILEY, C. V. The chinch bug. <Amer. Agric., November, 1881, v. 40, p. 476, figs. 1-3. S.-b. No. 42, pp. 21-23.
Ravages, food-plants, and natural history of *Blissus leucopterus*; descriptions and figures of its several stages and of dimorphic form of the imago; effect of wet weather upon it.
2040. [RILEY, C. V.] Retarded development in insects. <Amer. Nat., [3] December, 1881, v. 15, pp. 1007-1008. Reprint: <Proc. Amer. Assoc. Adv. Sci. for 1881, [13 October], 1882, v. 30, pp. 270, 271. Notice: <Gardener's Chronicle, 27 May, 1882, v. 17, pp. 708-709. S.-b. No. 42, p. 31.
Eggs of *Caloptenus spretus* retained their vitality four and one-half years under abnormal environment and then hatched on exposure to normal conditions; speculations on the cause of the phenomena of retardation of development.
2041. [RILEY, C. V.] Preparation of Diptera. <Amer. Nat., [3] December, 1881, v. 15, p. 1008.
Notice of paper of J. Mik.
2042. [RILEY, C. V.] Another herbivorous ground-beetle. <Amer. Nat., [3] December, 1881, v. 15, p. 1011.
Anisodactylus confusus injuring strawberry-plants in California.
2043. [RILEY, C. V.] A disastrous sheep parasite. <Amer. Nat., [3] December, 1881, v. 15, p. 1011.
A parasite (*Trichodectes ovis?*) doing great injury to sheep in Illinois.
2044. [RILEY, C. V.] Locusts in the West. <Amer. Nat., [3] December, 1881, v. 15, p. 1013.
Caloptenus spretus scarce in Colorado and Kansas; *Camnula pellucida* abundant on the Pacific coast; destructiveness of locusts in many parts of South America and of *Pachytylus migratorius* in Turkey; means adopted against the latter.
2045. [RILEY, C. V.] Structure of the claw in *Psocina*. <Amer. Nat., [3] December, 1881, v. 15, pp. 1013-1014.
Notice of paper of H. A. Hagen.
2046. [RILEY, C. V.] Insect collection for sale. <Amer. Nat., [3] December, 1881, v. 15, p. 1014.
Notice of the collection of Coleoptera left by C. Trabant.
2047. RILEY, C. V. Peach-tree bark-borer. Important note from Prof. C. V. Riley. <Rural New Yorker, 24 December, 1881, v. 40, p. 866. S.-b. No. 42, p. 13.
Habits and ravages of *Phloxotribus liminaris*; means against bark-borers.
2048. RILEY, C. V. The chinch-bug. <Amer. Agric., December, 1881, v. 40, p. 515, figs. 1-4. S.-b. No. 42, pp. 23-26.
Figures *Anthocoris* [= *Triphleps*] *insidiosus* and *Harpactor* [= *Milyas*] *cinetus* as enemies of *Blissus leucopterus* and *Nysius destructor* [= *angustatus*] and *Piesma cinerea* as likely to be confounded with it; mentions other enemies of the chinch-bug; means against it; importance of irrigation.
2049. RILEY, C. V. On the oviposition of *Prodoxus decipiens*. <Amer. Nat., January, 1882 [30 December, 1881], v. 16, pp. 62-63. Reprint: <Proc. Amer. Assoc. Adv. Sci. for 1881 [13 October],

2049. RILEY, C. V.—Continued.
1882, v. 30, p. 272. Separate: <[Salem, Mass., February, 1882], p. 3.
Time and manner of oviposition of *Prodoxus decipiens* in stem of *Yucca filamentosa*.
2050. [RILEY, C. V.] Clover insects. <Amer. Nat., January, 1882 [30 December, 1881], v. 16, p. 63.
Notice of paper of J. A. Lintner.
2051. RILEY, C. V. Horn's classification of the *Carabidæ*. <Amer. Nat., January, 1882 [30 December, 1881], v. 16, pp. 63-64.
Notice of paper of G. H. Horn.
2052. [RILEY, C. V.] The butterfly-trees of Monterey again. <Amer. Nat., January, 1882 [30 December, 1881], v. 16, p. 64.
Swarming and migrating habits of *Danaïd archippus*; hibernation of the same.
2053. [RILEY, C. V.] Interest felt in economic entomology in California. <Amer. Nat., January, 1882 [30 December, 1881], v. 16, p. 65.
Notice of a call issued by the Board of State Horticultural Commissioners of California for a State convention to consider horticultural subjects, including means against insects.
2054. [RILEY, C. V.] Obituary. <Amer. Nat., January, 1882 [30 December, 1881], v. 16, p. 65.
Biographical notice of J. D. Putnam; announcement of the death of G. V. Mniszech.
2055. RILEY, C. V. New insects injurious to agriculture. <Amer. Nat., February [25 January], 1882, v. 16, pp. 151-152. Reprint: <Proc. Amer. Assoc. Adv. Sci. for 1881, [13 October], 1882, v. 30, pp. 272-273.
The occurrence of previously unnoticed noxious insects due to, 1, the introduction of species from abroad; 2, previously existing unnoticed species; and 3, the acquisition of new habits by previously known innocuous species; in the last case the acquisition of new habits may be accompanied by the acquisition of new descriptive character, thus constituting a new species; new species thus become developed within brief periods of time.
2056. [RILEY, C. V.] New entomological periodicals. <Amer. Nat., February [25 January], 1882, v. 16, pp. 152-153.
Notice of several prospective periodicals.
2057. [RILEY, C. V.] Locust probabilities for 1882. <Amer. Nat., February [25 January], 1882, v. 16, p. 153.
Favorable prospects of immunity from ravages of *Caloptenus spretus* in 1882.
2058. [RILEY, C. V.] Entomological notes. <Amer. Nat., February [25 January], 1882, v. 16, p. 153.
Notice of J. J. Weir's paper on the "Lepidoptera of the Outer Hebrides," etc.
2059. [RILEY, C. V.] Bibliography of gall literature. <Amer. Nat., March [24 February], 1882, v. 16, pp. 246-247.
Notice of the record of F. Thomas,

2060. RILEY, C. V. A new depredator infesting wheat-stalks. <Amer. Nat., March [24 February], 1882, v. 16, pp. 247-248, fig. 1.
Isosoma allynii French is a species of *Eupelmus* probably parasitic on some of the wheat-stalk feeders and on some species of *Chlorops*; habits and figures of larva and description of female imago of *Isosoma tritici* [p. 247]; comparisons between *I. tritici* and *I. hordei*; alleged habits of *I. lineare* of Europe; relative conspicuousness of the "humeral spot" in European, American, and Australian species of *Isosoma*. See No. 2063.
2061. RILEY, C. V. Further notes on the imported clover-leaf weevil (*Phytonomus punctatus*). <Amer. Nat., March [24 February], 1882, v. 16, pp. 248, 249.
 Identity of *Phytonomus opimus* Lec. with *P. punctatus* Fab.; instances in which injurious insects have been overlooked for a long time; probability that plant-feeding Coleoptera imported from Europe will not spread far from the Atlantic coast; some species, injurious in Europe, are thus far innocuous in America; hibernation of and means against *P. punctatus*.
2062. [RILEY, C. V.] Silk-worm eggs; prices and where obtained. <Amer. Nat., March [24 February], 1882, v. 16, pp. 249-250.
 Sources from which eggs of *Sericaria mori* can be obtained in the United States for purposes of silk-culture; prices at which eggs are sold by Crozier & Co.
2063. RILEY, C. V. The wheat *Isosoma*. A new depredator infesting wheat-stalks. <Rural New Yorker, 4 March, 1882. S.-b. No. 42, pp. 55-56. See: <Sci. Amer. Suppl., 17 June, 1882. S.-b. No. 37, p. 57.
 Description of female imago of *Isosoma tritici*; habits, ravages, and distribution of and means against the same; comparison with related species; a probable parasite of it, described as *Isosoma allynii* by G. H. French, belongs to the genus *Eupelmus*. See No. 2060.
2064. RILEY, C. V. Possible food-plants for the cotton-worm. <Amer. Nat., April [22 March, 1882], v. 16, pp. 327-329. Reprint: <Rept. [U. S.] Com. Agric. for 1881 and 1882, 1882 [January, 1883], pp. 164-166. Separate: <pp. 164-166.
 Food-plants of *Aletia xyliana*. See No. 2119 for synopsis of contents.
2065. [RILEY, C. V.] Mode of feeding on the larva of *Dytiscus*. <Amer. Nat., April [22 March], 1882, v. 16, p. 330.
 Notice of paper of E. Burgess; structure of the mouth of the larva of *Dytiscus*; manner in which this larva feeds.
2066. [RILEY, C. V.] Entomological notes. <Amer. Nat., April [22 March], 1882, v. 16, p. 330.
 Brief notices of several articles recently published with items of news.
2067. [RILEY, C. V.] Riley's researches. Orange insects and the cotton-worm; how the orange insect operates and the cure for its ravages; the hibernation of the cotton-worm; settlement of a mooted question. <Florida Daily Times, 29 March, 1882. S.-b. No. 42, pp. 28-29.
 Report of interview with C. V. Riley; discovery by W. H. Ashmead that "orange rust" is caused by a mite; habits of and means against the same;

2067. RILEY, C. V.—Continued.

successful application by H. G. Hubbard of an emulsion of kerosene and milk as a means against this mite and against scale-insects; proof of the hibernation of *Aletia argillacea* [= *xylina*] in the extreme south of the United States; means against the *Aletia*.

2068. RILEY, C. V. Prof. C. V. Riley and the Yucca moth. <Gardener's Mo. and Hortie., March, 1882, v. 24, p. 92. S.-b. No. 23, pp. 198-199.

Critical review and reply to editorial of T. Mehan.

2069. RILEY, C. V. The *Noctuidæ* in the Missouri entomological reports. <Papilio, March, 1882, v. 2, pp. 41-44. Separate: <N. Y., 1882, 4 pp.

Critical review of paper of A. R. Grote; discussion of the synonymy of the *Noctuidæ* in the Missouri entomological reports.

2070. RILEY, C. V. Silk-culture in the United States. <Sci. Amer., 1 April, 1882 [v. 60], n. s., v. 46, p. 193. S.-b. No. 42, pp. 93-96.

Statement of the dangers to be avoided and the obstacles to be overcome for the successful establishment of silk-culture in the United States.

2071. RILEY, C. V. Little known facts about well known animals. A lecture delivered in the National Museum, Washington, D. C., April 8, 1882. <Washington, April, 1882, 32 pp., figs. See: <National Farmer, 13 July, 1882. S.-b. No. 42, p. 15. <Prairie Farmer, 22 July, 1882. S.-b. No. 46, p. 99.

The entomological subjects include brief and popular illustrated accounts of the life-histories and transformations of the house-fly (*Musca domestica*) and mosquito (*Culex pipiens*); the development of *Trombidium* from *Astoma*; parasitism; truth of the theory of evolution; reasons for the prevalent ignorance of natural history; interest and value of a knowledge of natural history.

2072. RILEY, C. V. Lichtenstein's theory as to dimorphic asexual females. <Amer. Nat., May [24 April], 1882, v. 16, p. 409.

Criticism of J. Lichtenstein's theory that winged female *Aphididæ* and asexual female *Cynipidæ* are larvæ, and their eggs pupæ; errors in the comparison of these forms with the hypermetamorphic stages of *Meloidæ*.

2073. [RILEY, C. V.] Naphthaline cones for the protection of insect collections. <Amer. Nat., May [24 April], 1882, v. 16, pp. 409-410.

Use of and objections to the use of naphthaline cones; formula of a preferable protective mixture.

2074. [RILEY, C. V.] Injurious insects in California. <Amer. Nat., May [24 April], 1882, v. 16, p. 410.

Notice of treatise of Matthew Cooke.

2075. [RILEY, C. V.] *Sarcophaga lineata* destructive to locusts in the Dardanelles. <Amer. Nat., May [24 April], 1882, v. 16, pp. 410-411.

Notice of communications, by F. Calvert, regarding the parasitic habits of *Sarcophaga lineata*, which preys upon *Ædipoda cruciata*; egg-pods of the same locust destroyed by larvæ of *Callostoma fascipennis*.

2076. [RILEY, C. V.] Parasitic Diptera. <Amer. Nat., May [24 April], 1882, v. 16, p. 411.
Dilophus parasitic in larvæ of *Chatoptria hypericana*; the *Bibionidæ* have hitherto been known only as vegetable feeders in the larval state.
2077. RILEY, C. V. The cotton-worm. <Times-Democrat [New Orleans], 7 May 1882, v. —, p. 4. S.-b. No. 42, pp. 29–31; 112–113; No. 63, pp. 47–48. Reprint: <Rept. [U. S.] Com. Agric. for 1881 and 1882, 1882 [January, 1883], pp. 157–159. Separate: <pp. 97–99.
 See No. 2119 for synopsis of contents.
2078. RILEY, C. V. The house-fly. <Prairie Farmer, 13 May, 1882. S.-b. No. 39, p. 122. See: <Colman's Rural World, 15 June, 1882. S.-b. No. 68, p. 194. <Times-Democrat [New Orleans], 24 June, 1882. S.-b. No. 42, p. 31. <N. E. Farmer, 5 August, 1882.
 Wide distribution of *Musca domestica*; identity of *M. harpyia* with the species; description of eggs; habits, transformations, and hibernation.
2079. RILEY, C. V. Habits of *Cybocephalus*. <Amer. Nat., June [20 May], 1882, v. 16, p. 514.
Cybocephalus nigrifulus feeds on scales of *Chionaspis pinifolii* on *Pinus elliottii* in South Carolina, and *C. californicus* on a scale on apple-trees in California.
2080. [RILEY, C. V.] One effect of the Mississippi floods. <Amer. Nat., June [20 May], 1882, v. 16, pp. 514, 515.
 Probability that *Ligyrrus rugiceps* will have been drowned out of the region submerged for months by the Mississippi River; liability of the importation of new foes with new seed-plants.
2081. [RILEY, C. V.] *Doryphora decemlineata* in England. <Amer. Nat., June [20 May], 1882, v. 16, p. 515.
 A living specimen carried from North America to London, England, in a barrel of potatoes.
2082. [RILEY, C. V.] Dr. Dimmock's inaugural dissertation. <Amer. Nat., June [20 May], 1882, v. 16, p. 515.
 Review of G. Dimmock's paper on "The anatomy of the mouth-parts and of the sucking apparatus of some Diptera."
2083. [RILEY, C. V.] The triangulin of *Meloidæ*. <Amer. Nat., June [20 May], 1882, v. 16, p. 515.
 The triangulin of *Meloe proscarabæus* was described by J. L. Frisch in 1727.
2084. [RILEY, C. V.] Fossil tineids. <Amer. Nat., June [20 May], 1882, v. 16, p. 515.
 Notice of paper of V. T. Chambers; occurrence of the supposed burrow of a tineid larva in a fossil leaf of *Acer* sp.
2085. [RILEY, C. V.] Classification of North American Coleoptera. <Amer. Nat., June [20 May], 1882, v. 16, pp. 515–516.
 Notice of the approaching completion of the classification of the Coleoptera of North America by J. L. Leconte and G. H. Horn.

2086. RILEY, C. V. Hibernation of the army-worm. <Amer. Nat., June [20 May], 1882, v. 16, p. 516.
Confirmation of views in regard to the hibernation of the larvæ of *Leucania unipuncta*; places of oviposition; prospects of extensive injury by these insects in the more northern States in 1882.
2087. RILEY, C. V. Chinch-bug and army-worm prospects. <Rural New Yorker, 27 May, 1882. S.-b. No. 61, p. 27.
Blissus leucopterus abundant in dry weather; *Leucania unipuncta* in wet weather; the latter hibernates principally as a larva; its eggs secreted in old grass and stubble; means against *L. unipuncta*.
2088. RILEY, C. V. Successful management of the insects most destructive to the orange. <Sci. Amer., 27 May, 1882 [v. 60], n. s., v. 46, pp. 335-336, 5 figs.
Treats of *Coccidæ* injurious to the orange; means against the same; use of kerosene emulsion; figures stages of *Mytilaspis pomicorticis* [= *pomorum*], *M. gloveri*, and *M. citricola*.
2089. RILEY, C. V. The utilization of ants in horticulture. <Nature, 8 June, 1882, v. 26, p. 126. Reprint: <Gardener's Chronicle, 17 June, 1882, v. 17, p. 805. S.-b. No. 42, p. 32.
Abstract of paper of C. J. Macgowan; capture and sale of two species of ants which build nests in trees; colonization of these ants in orange orchards to destroy injurious insects.
2090. RILEY, C. V. The army-worm vs. the clover hay-worm. Remedies for the army-worm. <Rural New Yorker, 10 June, 1882. S.-b. No. 47, pp. 158-159; No. 61, pp. 32-33. Reprint: <Nat. Farmer, 22 June, 1882. S.-b. No. 37, p. 123. <Lancaster Farmer, July, 1882. S.-b. No. 46, p. 104. <Home and Farm, 1 July, 1882. S.-b. No. 37, p. 122.
Abundance of *Leucania unipuncta* and *Asopia costalis* in Alabama and Tennessee; confusion of the army-worm with the clover hay-worm; prevalence of enemies of and means against the former.
2091. RILEY, C. V. Repelling insects by malodorants. <Amer. Nat., July [22 June], 1882, v. 16, p. 596.
Critical review of paper of J. A. Lintner; odorous substances repel insects more by their toxic properties than by their odor; failure of attempts by the use of strongly smelling substances to prevent oviposition; sight, touch, and taste generally more important in insect economy than smell.
2092. [RILEY, C. V.] Habits of *Bittacus apterus*. <Amer. Nat., July [22 June], 1882, v. 16, pp. 596-597.
Notice of paper of C. R. Osten Sacken; locomotion and food-habits of *Bittacus apterus* in California.
2093. RILEY, C. V. Habits of *Coscinoptera dominicana*. <Amer. Nat., July [22 June], 1882, v. 16, p. 598.
Discovery by F. H. King that *Coscinoptera dominicana* is inquilineous in ants' nests in its earlier stages; similar habits of related species.
2094. [RILEY, C. V.] Sun-spots and insect life. <Amer. Nat., July [22 June], 1882, v. 16, pp. 598-599.
Review of paper of A. H. Swinton; dependence of certain insect phenomena on the periods of sun-spots, through the determination by the latter of meteorological conditions.

2095. RILEY, C. V. The silk-worm. No. 1-3. <National Farmer, 13, 20, 27 July, 1882. S.-b. No. 35, p. 15; No. 48, pp. 32, 49.
Nature of the silk-worm; stages, enemies, diseases, races; wintering and hatching of eggs; feeding and rearing of larvæ; the cocoons; spinning and gathering, choking chrysalids; egg-laying, reproduction, reeling, food-plants.
2096. RILEY, C. V. Change of habit; two new enemies of the egg-plant. <Amer. Nat., August [28 July], 1882, v. 16, pp. 678-679.
Sudden acquisition by *Doryphora juncta* and by *Cassida texana* of the habits of feeding on *Solanum melongena*, these species having been found previously on *S. carolinense* and *S. elaeagnifolium* respectively; occurrence of *C. texana* on *S. carolinense*; distribution of the two insects.
2097. RILEY, C. V. Notes on *Microgasters*. <Amer. Nat., August [28 July], 1882, v. 16, pp. 679-680.
Critical review of paper of A. S. Packard; synonymical notes on Packard's species.
2098. [RILEY, C. V.] Are honey-bees carnivorous? <Amer. Nat., August [28 July], 1882, v. 16, p. 681.
Observations of Fritz Müller on the carnivorous habits of Brazilian *Apidæ*.
2099. [RILEY, C. V.] The "overflow bugs" in California. <Amer. Nat., August [28 July], 1882, v. 16, pp. 681-682.
Extract from letter of Mrs. A. E. Bush, with introductory remarks; occurrence of *Platynus maculicollis* in such abundance as to become a nuisance.
2100. [RILEY, C. V.] Insects and drouth. <Amer. Nat., September [24 August], 1882, v. 16, p. 745.
Occurrence of excessive drouth in the spring and early summer of 1880 in New England; statement by S. Lockwood of the exceptional abundance of several insects in New Jersey in that year.
2101. RILEY, C. V. Probable sound organs in sphingid pupæ. <Amer. Nat., September [24 August], 1882, v. 16, pp. 745-746.
Occurrence of a peculiar structure on the abdominal joints of the pupæ of certain *Sphingidæ*; genera in which this structure is observed; probable connection of this structure with the function of producing sound as observed in *Sphinx atropos*.
2102. RILEY, C. V. Is *Cyrtoneura* a parasite or a scavenger? <Amer. Nat., September [24 August], 1882, v. 16, pp. 746-747.
Cyrtoneura stabulaus bred from pupæ of *Aletia argillacea* [= *xylina*] usual food of this species; doubt whether the species is a parasite or is only a scavenger in decayed pupæ; *Phora aletia* merely a scavenger; great liability of pupæ of *Aletia* to decay.
2103. [RILEY, C. V.] Habits of *Polycaon confertus* Lec. <Amer. Nat., September [24 August], 1882, v. 16, p. 747.
Polycaon confertus bores in twigs of apple- and pear-trees and grape-vines; the larvæ probably live in the dead and dry wood of forest-trees.
2104. RILEY, C. V. *Dinoderus pusillus* as a museum pest. <Amer. Nat., September [24 August], 1882, v. 16, p. 747.
Dinoderus pusillus feeds on cork and paper lying in an insect box; they occur usually in drugs and other stored and dry vegetal products.

2105. RILEY, C. V. Myrmecophilous Coleoptera. <Amer. Nat., September [24 August], 1882, v. 16, pp. 747-748.
Larvæ and imagos of *Euphoria hirtipes* live in hills of *Formica rufa*; pupæ of *Hymenorus rufipes* in nests of *Formica fusca* and of *H. obscurus* in nests of another species of ant; known myrmecophilous habits of *Cetonia*, *Cremastochilus*, *Euparia castanea* (in nests of *Solenopsis xyloni* [= *geminata*]), *Tenebrionida*, and *Anthicus*.
2106. [RILEY, C. V.] Discontinuance of publication. <Amer. Nat., September [24 August], 1882, v. 16, p. 748.
Annoncement of the discontinuance of publication of "Revue Coléoptérologique;" critical review of the same.
2107. RILEY, C. V. Buffalo tree-hopper injurious to potatoes. <Amer. Nat., October [28 September], 1882, v. 15, p. 823.
Habits, food-plants, and ravages of *Ceresa bubalus*.
2108. [RILEY, C. V.] Moths attracted by falling water. <Amer. Nat., October [28 September], 1882, v. 16, p. 826.
Notice of paper of J. S. Gardner; gleaming water-falls in Iceland as attractive to moths as artificial light would be.
2109. [RILEY, C. V.] A new museum pest. <Amer. Nat., October [28 September], 1882, v. 16, p. 826. Reprint: <Psyche, September-October, 1882 [1 March, 1884], v. 3, p. 408.
Perimegatoma variegatum as a pest in collections of insects.
2110. [RILEY, C. V.] Fleas feeding on lepidopterous larvæ. <Amer. Nat., October [28 September], 1882, v. 16, p. 826.
Notice of paper of C. J. Boden; abundance of fleas (*Pulex* sp.) where few or no warm-blooded animals occur may be explained by the feeding of the fleas on insects.
2111. [RILEY, C. V.] [*Gasteracantha cancer*.] <Gonzales [Tex.] Inquirer, 30 September, 1882. S.-b. No. 42, p. 15.
Habits of *Gasteracantha cancer*; the male unknown.
2112. RILEY, C. V. *Cicada septendecim*. <Gardener's Mo. and Hortic., September, 1882, v. 24, pp. 274-275. S.-b. No. 38, p. 42; No. 39, p. 6; No. 42, pp. 2-4.
Orthography of the names *C.* [= *Tibicen*] *septendecim* and *C.* [= *T.*] *tredecim*; natural relations of the same; indistinguishability of the species of certain genera; dimorphic forms more numerous than usually recognized; *Massospora cicadina* parasitic on *Cicada*.
2113. RILEY, C. V. Remarkable felting caused by a beetle. <Rural New-Yorker, 14 October, 1882, v. 41, pp. 699-700. S.-b. No. 42, p. 16. Reprint, with changes: <Amer. Nat. [2] December, 1882, v. 16, pp. 1018-1019.
Description of the felting of the interior of a pillow-ticking with fragments of feathers formed by the ravages of *Attagenus megaloma* within a feather pillow.
2114. RILEY, C. V. The buckeye-leaf stem-borer. <Amer. Nat., November [28 October], 1882, v. 16, pp. 913-914. See: <Sci. Amer. Suppl., 16 December, 1882. S.-b. No. 47, p. 145.
Sericoris instrutana †Claypole = *S.* [= *Steganoptycha*] *claypoleana* n. sp.; habits and food-plants of this species and of *Proteoteras asculana*; distinctions between these two species.

2115. [RILEY, C. V.] Efficacy of chalcid egg-parasites. <Amer. Nat., November [28 October], 1882, v. 16, pp. 914-915. See: <Prairie Farmer, 2 December, 1882. S.-b. No. 60, p. 123.
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2147. RILEY, C. V. Entomological notes. <Rural New Yorker, 27 February, 1883. S.-b. No. 42, p. 58. See: <Amer. Nat., April [15 March], 1883, v. 17, pp. 419-420.
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2150. RILEY, C. V. Dipterous enemies of the *Phylloxera vastatrix*. <Oa. Ent., February [9 March], 1883, v. 15, p. 39.
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2151. [RILEY, C. V.] The food relations of the *Carabidæ* and *Coccinellidæ*. <Amer. Nat., April [15 March], 1883, v. 17, pp. 417-419.
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2152. [RILEY, C. V.] Relations of the *Carabidæ* and *Coccinellidæ* to birds. <Amer. Nat., April [15 March], 1883, v. 17, p. 419.
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2153. [RILEY, C. V.] Viviparity in a moth. <Amer. Nat., April [15 March], 1883, v. 17, p. 420.
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2154. [RILEY, C. V.] Damage to silver-plate by insects. <Amer. Nat., April [15 March], 1883, v. 17, p. 420.
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2155. RILEY, C. V. Possible food-plants of the cotton-worm. <Amer. Nat., April [15 March], 1883, v. 17, pp. 421-422.
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2156. [RILEY, C. V.] *Agrotis messoria* Harr. vs. *Agrotis scandens* Riley. <Amer. Nat., April [15 March], 1883, v. 17, p. 422, 2 figs.
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2157. [RILEY, C. V.] An internal mite in fowls. <Amer. Nat., April [15 March], 1883, v. 17, pp. 422-423.
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2158. [RILEY, C. V.] Prevalence of the screw-worm in Central America. <Amer. Nat., April [15 March], 1883, v. 17, p. 423.
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2159. [RILEY, C. V.] Dried leaves as food for lepidopterous larvæ. <Amer. Nat., April [15 March], 1883, v. 17, pp. 423-424.
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2160. [RILEY, C. V.] Lepidopterological notes. <Amer. Nat., April [15 March], 1883, v. 17, p. 424.
Duplication of descriptions of the early stages of Lepidoptera to be avoided; notice of Mrs. C. H. Fernald's list of *Noctuidæ* taken in Orono, Me.

2161. [RILEY, C. V.] Obituary. <Amer. Nat., April [15 March], 1883, v. 17, p. 424.
Obituary notices of G. W. Belfrage and F. W. Macklin.
2162. RILEY, C. V. Mosquitoes *vs.* malaria. <Sci. Amer., 14 April, 1883, v. 48, pp. 224-225. S.-b. No. 42, pp. 63-64; No. 67, p. 8.
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Figures of larva, pupa, and imago of *Carpocapsa saltitans*, with figures and description of seeds inhabited by the larva of this moth, and description of the plant bearing these seeds; vernacular names of plant and insect; movements imparted to the seeds by the insects and by *Cynips g.-saltatorius* to the galls of the same.
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2167. RILEY, C. V. Number of molts and length of larval life as influenced by food. <Amer. Nat., May [18 April], 1883, v. 17, pp. 547-548.
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2170. RILEY, C. V. The capitalizing of specific names. <Papilio, March [April], 1883, v. 3, p. 62.
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2178. [RILEY, C. V.] Synopsis of the N. A. *Heliothinae*. <Amer. Nat., June [17 May], 1883, v. 17, pp. 662-663.
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- 2179 [RILEY, C. V.] Death of Professor Zeller. <Amer. Nat., June [17 May], 1883, v. 17, p. 663.
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2186. RILEY, C. V. *Nemestrinidae*. <Science, 8 June, 1883, v. 1, p. 513.
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2187. RILEY, C. V. The corn-root *Diabrotica*. <Rural New-Yorker, 9 June, 1883. S.-b. No. 54, p. 42.
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2188. RILEY, C. V. Elm-leaf beetle. <Sci. Amer., 16 June, 1883, v. 48. S.-b. No. 42a, p. 265.
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2189. RILEY, C. V. A unique and beautiful noctuid. <Amer. Nat., July [20 June], 1883, v. 17, pp. 788-790, fig.
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2193. RILEY, C. V. The grape Phylloxera in France. <Science, 22 June, 1883, v. 1, pp. 576-578.
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2196. RILEY, C. V. Silk culture in the United States. <Rural New-Yorker, 14 July, 1883, v. 42, p. —. S.-b. No. 42a, p. 534.
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2197. RILEY, C. V. Economic entomology of Iowa. <Sci. Amer., 14 July, 1883, v. 49, p. —. S.-b. No. 53, p. 147.
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2199. RILEY, C. V. Report by C. V. Riley. <Proc. U. S. Nat. Mus., 27 July, 1883, v. 6, pp. 104-105. Reprint: <Sci. Amer. Suppl., 13 October, 1883, v. 16, p. 6486.
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2200. RILEY, C. V. Emulsions of petroleum and their value as insecticides. <Proc. Amer. Assoc. Adv. Sci. for 1882, 1883, v. 31, pp. 469-470. Separate: <Salem, Mass., July, 1883, pp. 469-470. Reprint: <Kansas City Rev. of Science and Industry, November, 1883, v. 7, pp. 447-448. S.-b. No. 42, p. 124. Extract: <Sci. Amer., 19 November, 1883, v. 49, p. 294. S.-b. No. 51, p. 153.
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2201. [RILEY, C. V.] The old, old question of species. <Amer. Nat., September [15 August], 1883, v. 17, p. 975.
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2203. [RILEY, C. V.] Salt-water insects used as food. <Amer. Nat., September [15 August], 1883, v. 17, pp. 976-977.
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2204. [RILEY, C. V.] Food-plants of *Samia cynthia*. <Amer. Nat., September [15 August], 1883, v. 17, p. 977.
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2205. [RILEY, C. V.] Bitten by an aphid? <Amer. Nat., September [15 August], 1883, v. 17, p. 977.
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2206. RILEY, C. V. *Steganoptycha claypoleana*. <Amer. Nat., September [15 August], 1883, v. 17, p. 978. Reprint: <Papilio, September-December, 1883, v. 3, p. 191.
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2208. RILEY, C. V. Hackberry psyllid galls. <Ca. Ent., August [5 September], 1883, v. 15, pp. 157-159, figs. 6, 7.
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2209. RILEY, C. V. Some recent discoveries in reference to Phylloxera. <Science, 7 September, 1883, v. 2, p. 336. S.-b. No. 42, pp. 68, 69. Reprint: <Proc. Amer. Assoc. Adv. Sci. for 1883, 1884, v. 32, p. 320. Separate: <Salem, Mass., July, 1884, p. 320. <Amer. Nat., December [28 November], 1883, v. 17, p. 1288. Summary of the cycle of development of the genus *Phylloxera*; character of the gall of *P. spinosa* and location of the impregnated egg of the species.
2210. RILEY, C. V. The *Psyllidæ* of the United States. <Science, 7 September, 1883, v. 2, p. 337. S.-b. No. 42, pp. 67-68. Reprint: <Proc. Amer. Assoc. Adv. Sci. for 1883, 1884, v. 32, p. 319. Separate: <Salem, Mass., July, 1884, p. 319. Characteristics and economic importance of *Psyllidæ*; status of the present knowledge of this family in the United States; list of new genera and species; food-plants of the same; characteristics of the eggs and young of *Psyllidæ*.
2211. RILEY, C. V. Improved method of spraying trees for protection against insects. <Science, 14 September, 1883, v. 2, p. 378. S.-b. No. 42, p. 68. Reprint: <Proc. Amer. Assoc. Adv. Sci. for 1883, 1884, v. 32, pp. 466-467. Separate: <Salem, Mass., July, 1884, pp. 466, 467. Description of apparatus, especially of "cyclone nozzle" and adjustable hose; mention of insecticidal substances. NOTE.—Nos. 2209-2211 were issued as a separate, Salem, 1884.
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2213. RILEY, C. V. Notes on *Pædisca scudderiana*. <Amer. Nat., October [17 September], 1883, v. 17, pp. 1069-1070. Habits and variation of *Pædisca scudderiana*; difference between the gall of this insect and that of *Gelechia gallæsolidaginis*.
2214. RILEY, C. V. A myrmecophilous lepidopteron. <Amer. Nat., October [17 September], 1883, v. 17, p. 1070. Larva of *Helia americana* found in nests of *Formica rufa*; this species the only one of the Lepidoptera known to develop in ants' nests.
2215. [RILEY, C. V.] Enemies of the egg-plant. <Amer. Nat., October [17 September], 1883, v. 17, p. 1070. Extract from a letter of A. Omler, proving that the occurrence of *Cassida texana* and *Doryphora juncta* on *Solanum melongena* is not accidental or temporary.
2216. [RILEY, C. V.] The periodical Cicada in southeastern Massachusetts. <Amer. Nat., October [17 September], 1883, v. 17, p. 1071. Note to paper of C. E. Bessey; Cicada [= *Tibicen*] *septendecim* at Martha's Vineyard, Mass., in June, 1883, the precursor to *septendecim* Brood XXI which will appear in North Carolina and Virginia as well as Martha's Vineyard in 1884; accelerated specimens of the same brood received from Loudoun County, Va., recently.

2217. RILEY, C. V. Habits of *Murmidius*. <Amer. Nat., October [17 September], 1883, v. 17, p. 1071.
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2218. [RILEY, C. V.] Obituary. <Amer. Nat., October [17 September], 1883, v. 17, p. 1072.
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2219. [RILEY, C. V.] Entomological notes. <Amer. Nat., October [17 September], 1883, v. 17, pp. 1072-1073. -
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2220. [RILEY, C. V.] Economic notes. <Amer. Nat., October [17 September], 1883, v. 17, pp. 1073-1074.
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2221. RILEY, C. V. A parasite of the cabbage-worm. <Rural New-Yorker, 6 October, 1883, v. 42. S.-b. No. 42, p. 58.
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2222. RILEY, C. V. The handmaid moth. <Rural New Yorker, 13 October, 1883, v. 42. S.-b. No. 42, p. 77.
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2223. RILEY, C. V. Remarks on *Arzama obliquata*. <Amer. Nat., November [19 October], 1883, v. 17, p. 1169.
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2224. [RILEY, C. V.] Rare monstrosities. <Amer. Nat., November [19 October], 1883, v. 17, p. 1175.
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2225. [RILEY, C. V.] The nervous system of insects. <Amer. Nat., November [19 October], 1883, v. 17, pp. 1175-1176.
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2226. [RILEY, C. V.] *Hymenorus rufipes* as a myrmecophilous species. <Amer. Nat., November [19 October], 1883, v. 17, p. 1176.
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2227. [RILEY, C. V.] Recent publications. <Amer. Nat., November [19 October], 1883, v. 17, p. 1177.
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2267. [RILEY, C. V., *et al.*] Third report of the United States Entomological Commission, relating to the Rocky Mountain locust, the Western cricket, the army-worm, canker-worms, and the Hessian fly; together with descriptions of larvæ of injurious forest insects, studies on the embryological development of the locust and of other insects, and on the systematic position of the Orthoptera in relation to other orders of insects; with maps and illustrations. <Washington: 1883 [6 March, 1884], pp. 14+347+12+92, 18 figs., 64 pls., 4 maps.

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[The Walsh and Riley names are followed by W. & R. The first number following the name refers to the number of the paper in the list, the second to the page where the species is first described. As is well known, the Walsh collection was destroyed in the Chicago fire in October, 1871. A few of the types sent to Drs. Hagen and Riley are in the collections of the Museum of Comparative Zoology at Cambridge and the National Museum at Washington. Those at Cambridge are indicated by a *, those at Washington by **.]

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* Described and figured in A. S. Fuller's "Injurious insects." <Tilton's Journ. of Hort. and Florist's Companion, October, 1868, v. 4, pp. 207-209.

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² Proposed (Record of Amer. Ent., 1871, p. 8) for *Trichogramma minutum*. *Pentarthron* has, however, been used for a genus of beetles.

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