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With reports of Dr. Luther Townsend Glover

*Prof^r Spencer F. Baird Smithsonian Institution
Washington D.C.*

Manuscript Notes from my Journal,

OR

ENTOMOLOGICAL INDEX,

TO NAMES, &c.,

IN

AGRICULTURAL REPORTS,

WITH LIST OF

VEGETABLE AND ANIMAL SUBSTANCES INJURED OR
DESTROYED BY INSECTS, &c.

CONTENTS.

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WASHINGTON :

Written by Townsend Glover. Transferred to and Printed from Stone by J. C. Entwistle.

1877.

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WASHINGTON:

Written by Tenenud Glover. Transferred to and Printed by Stone & J. C. Kutzbach

1877.

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Entomological Index to the Agricultural Reports.

This index refers principally to the insects mentioned in the Agricultural reports from 1854 to the present time. The report for 1875, having been written, but not yet published, the number of the page is necessarily omitted. — This work has been prepared out of office hours, for my own use, and for Agricultural Societies having a complete set of the Annual reports of the Department of Agriculture, as a means by which they may be able to identify insects, not only under their old names, but also under the new names recently given to many of them by scientists. The common English names, are also given when necessary. The scientific name given at the end of a paragraph, with the letters SS. and a number attached to it, signifies that is the latest name given by Scientists, and that a colored plate of it may be found at plate V, figure 50 and so. on my plates of insects figured for the use of the Department, in the Entomological cabinet of the Museum of the Department of Agriculture, in Washington. The following Abbreviations have also been used.

Col. Coleoptera ~ Cr. Crotch. ~ Dip. Diptera ~ Eu. Europe ~ Fig. Figure ~ Hist. Heteroptera
Hom. Homoptera ~ Insect. Insect. ~ Stillic. a line, under a name, signifies that it is merely a synonym. L. or Lar. Larva ~ Lec. Leconte ~ Lep. Lepidoptera. m. more mention. ~ New. Neuroptera ~ Orth. Orthoptera ~ p. page ~ Pl. plate ~ Pop. pupa ~ S. Am. South America ~ Syn. Synonym ~ Dep. Ag. Department of Agriculture, reports.
D. J. B. D. J. O'Brien a former chief clerk who misnamed the insects in Reports for 1855 &c. When double lines == are placed under the letters SS. and name or numbers at the end of a paragraph it signifies that the insect may be found under such a name and numbers in the colored plates in the Entomological Cabinet. Ag. Rep. Agricultural Report — H. misplaced in the published list.

Abraça (Eulophia) nileana (Lep.) Currant moth. Stenurus no protection. Chickens better. see Ag. Rep. 1869 p. 415. Eulophia SS. (Lep.) Lar. VIII 1/4, Ins. VIII 5, LXX 24.
Acanthis (Amix) tecularia (Hct) Red Bug. L. P. J. suck the blood of mankind and various animals and birds, as Bats, Fowls, pigeons, Swallows &c. and are said to be destroyed by cockroaches (Blattidae) (Orth.) & by other insects. Reduvius personatus, Forates ligustalis, Conorhinus (sanguisuga) variegatus, and other Heteroptera Ag. Rep. 1864 p. 558. remedies, 1875, p. 124, fig. 38. Acanthis SS. III 9. (Hct.)
Acanthcephala (Hct) ? (fnos. Thomasi ?) is the "brownish black Anisacelis of D. J. B. see Ag. Rep. 1850, p. 95. pl. VIII, fig. 9. (Hct) SS. IV 11/14 VII 22 (Hct).
Acanthcephala (Metapodius) declivis (Hct) see Ag. Rep. 1875, fig. 14 p. 120. SS. VII 26 (Hct).
Acanthcephala (femorata) (Hct) (Synonyms Metapodius Anisacelis & Rhinuchus nodulus) injures fruit of Cherry, Ag. Rep. 1875, fig. 13 p. 119. It is also found on Cotton. SS. 1/20 (Hct).
Acanthosoma, quisea (Europe) (Hct) sucks Sap of Birch. habits &c. Ag. Rep. 1876 p. 117. no fig.
" ratoralis (US) Hct. is the representative of A. Africa of Europe Ag. Rep. 1875 p. 118.
" nebulosa (Hct) sucks the sap of trees, plants &c. Ag. Rep. 1875 p. 116, fig. 6. SS. IX 7 (Hct).
Acanus ? see Stch insect, remedy Ag. Rep. 1864 p. 564. — Acanus scabies Stch insect Ag. Rep. 1861 p. 126.
" telarius, Red spider injures Lecorio (Saunders) Ag. Rep. 1871 p. 109.
" " " " injures blage of cotton. Ag. Rep. 1855/79, fig. 7. & 1862 p. 388.
" " ? a red mite infesting grasshoppers. (Aoridium Orth) Rathbone on Ag. Rep. 1862 p. 388. (see also Automa).
" " " saccharis, or Sugar mite. Ag. Rep. 1871, p. 426. infests. Sugar.
Acanus of Sheep scab. Nat. History. Habits. Symptoms, remedies, &c. with good figures. infests, sheep horses, dogs, cats & oxen. Ag. Rep. 1869 p. 366.
Acclimation, and domestication, of animals, by Dr Craig, Ag. Rep. 1859 p. 207. see also Animals.

Acclimation. Garden of in Paris. Animals in. See Ag^l Rept 1865, p. 95.

Acheta, abbreviata (Orth.) Black field cricket, hides under stones & timber. &c. Rathvon. Ag^l Rept 1862, p. 380 fig 15. SS. Gryllus abbreviatus VII/15 (Orth.)

Acheta domestica (Orth.) House cricket, habits remedies &c. Ag^l Rept 1874, p. 142 fig 15.

Gryllus domesticus SS. VI/14 (Orth.)

Acheta vittata (Orth.) Striped cricket, feeds on vegetables. Carrion. &c. Rathvon. Ag^l Rept, 1862, p. 381. Nemobius vittatus SS. III/4.10 (Orth.)

Acrolothus (Proctos) americanus. (Sep.) I destroy foliage of Grape vines. Ag^l Rept. 1874, p. 78. fig 6. remedy. 1864. 547. & 1870, p. 81. Acrolothus SS. XVII/3. Sep.

Acrolothus (Proctos) falsarius. (Sep.) I feed on foliage of grape vine & Virginia creeper. Ag^l Rept. 1870, p. 81, fig 42. Acrolothus SS. LXVIII/27. (Sep.)

Acronycta ? (Sep.) Larva destroyed by parasitic *Schneumon* flies, great numbers being in one larva. Ag^l Rept. 1866, p. 43.

Aceridias (Orth.) I. P. S. feed upon Grass & herbage. Ag^l Rept 1874, p. 135. { *Aceridii* Ag^l Rept 1869, 308 m.m.

Aceridium (Aceridium) Orth. Spine breasted Locusts. distinguished by having a spine projecting from below on the middle of the breast. Rathvon. Ag^l Rept 1862, p. 384. & 1866, p. 28.

Aceridium (Cyrtaanthroni) americanum. (Orth.) Rathvon. Ag^l Rept 1862, p. 385 fig 25. SS. I/15 (Orth.)

Aceridium alutaceum (Orth.) Rathvon. Ag^l Rept. 1862, p. 384 fig 24. SS. X/19 (Orth.)

Aceridium (Caloptenus) femur rubrum (Orth.) Rathvon. Ag^l Rept. 1862, p. 384 fig 23. I P. S. destroy almost all kinds of vegetation & when very hungry eat even the wood of fence rails. &c.

Caloptenus femur rubrum SS. V/7. & VIII/2. (Orth.)

Aceridium fuscivittatum. (Caloptenus femoratus) (Orth.) Rathvon. Ag^l Rept. 1862, p. 384.

Caloptenus viridatus SS. VI/6 & I/16 (Orth.)

Aceridium peregrinum. Migratory Locust (Orth.) of Arabia Egypt. Persia Senegal & Syria Ag^l Rept. 1874, p. 135 fig 7a. SS. XIV/4 (Orth.)

Aceridium tartanicum (Orth.) Migratory Locust of Algeria. France. Germany. Hungary. Italy. Spain Tyrol. &c. Ag^l Rept. 1874, p. 134. SS. XIV/9. (Orth.)

Aceridium. see *Aceridium*.

x *Algeria*. see also *Trochilium*

Adelops nexa (Col.) found on bones in the mammoth cave in Kentucky. U.S. Ag^l Rept. 1868, p. 116. fig 20. SS. XXXI/21. (Col.)

Algeria (Trochilium) exilis (Sep.) Peach tree borer. Larvae bore into & destroy roots & wood of the peach, nectarine Apricot, plum, Cherry, &c. Ag^l Rept. 1854, p. 53, pl. 7. Nat. Hist. habits. & remedies. 1857, p. 122. m.m. 1858, p. 360. remedy boiling water. berries of china tree &c. 1864, p. 550. remedies. &c. 1866, p. 29. m.m. 1870, p. 87. remedy hot water. 1872, p. 114, & fig (Myrcobala) in burrows made by Algeria. Algeria SS. I P. S. XLIII/2. (Sep.)

Algeria (Trochilium) podetiformis (Sep.) Grape vine root borer. Larvae injure the roots, & lower part of the stems of grape vines. Ag^l Rept. 1854, p. 80, pl. 6. Dr. Hron. habits. &c. 1867, p. 72. figured. Scuppernon grape said to be exempt. 1870, p. 72. more mention.

Algeria SS. VIII/5. (Sep.)

Algeria (Trochilium) tridentiformis (Sep.) Currant borer. I bores in the stems of Currants, habits, remedies &c. Ag^l Rept. 1864, p. 551. I P. S. p. XL/3. SS. (Sep.)

Agarantus (?) saturatus (Europe) (Col.) found in the great stems of Lucerne. Ag^l Rept 1865, p. 89.

Agraulis vanillae (Sep.) Caterpillar found in Cotton fields but does no injury as the caterpillar feeds on Passion vine or Maypop. Ag^l Rept. 1855, p. 106, pl. 13, fig 10. destroyed by Ichneumon flies Ag^l Rept 1866, p. 43. SS. Lar 1/8 In. XXXV/3. Sep.

Agrilini (Col.) European sp. I destroy Beech. Oak. & Pear. Ag^l Rept. 1868, p. 92. 112. 114.

Agrilus egemus. (Col.) Ins. eats holes in foliage of Locust Ag^l Rept 1868, p. 92. 111. fig 103. 1870, p. 67. SS. XXIII/7. (Col.)

Agrilus ruficollis (Col.) Larva bores into the pith of stems. of Raspberry. Ag^l Rept. 1868, p. 92, fig 101. { 1870, p. 67. fig. SS. XI/2 & XII/9. (Col.) SS. lower.

- Agrius viridis* (Europe) (Col) Larvae feed on Beech wood. Ag. Rept 1868, p. 309. 105
- Agriinodae* (New) 1868, p. 309.
- Agriotes mancus* (Col) Larvae known as wire worms feed on roots of grass & herbaceous plants &c.
 { *maris-potabae* " Ag. Rept 1868, p. 94 fig 112. Salt recommended Ag. Rept 1870 p. 67 fig 8.
 { *S.G.* XI/28 (Col)
- Agriotes silesius* (Col) Larvae feed on roots of grass & herbaceous plants. L. wire worms Ag. Rept 1868, p. 94 fig 112.
- Agriotes truncatus* (Col) habits & food same as above. Ag. Rept 1868, p. 94.
- " { *segetis* (Col) (Europe) " " " " Ag. Rept 1868, p. 94.
- Agromyridae* (Dip) feed the larvae of which are generally leaf miners. Ag. Rept 1872, p. 134.
- Agromyza tritici* (Dip) L. sucks grains of wheat when immature causing them to shrivel up.
 { Ag. Rept 1872 p. 134. They are destroyed a parasite *Diapria agromyzae* (Hym) remedies
 { *S.G.* IX/3 (Dip)
- Agrotis* (Lep) Larvae commonly known as 'cut worms', very destructive in fields pastures, and gardens
 { by cutting down vegetables & devouring them in their subterranean retreats Ag. Rept 1864, p. 533.
 { " Localities injured Ag. Rept 1872, p. 122. Caterpillars, or cutworms *S.G.* XCIX/11 (Lep)
 { " of the Onion (Lep) Ag. Rept 1865, 260. remedies & onion culture. 1866, p. 30 m. m.
 { " of Cotton (Lep) Ag. Rept 1855, p. 66, fig 1 cuts off young plants of Cotton & mags them into their holes
- * *Ailanthus Silk worm* (Lep) Introduction. Habits, culture, silk experiments, &c. Ag. Rept 1861, —
 { 374, to 382, as *Bombyx cynthis*. by Dr Jno G Morris. *Mod.* 4 additional observations with
 { figures, by Dr Morris in Ag. Rept 1862, p. 390. see also *Attacus* & *Samia*
 { *S.G.* I, *Sp. Cocon.* XXI/4, *Ins.* XLVI/5. *Samia cynthia* (Lep.)
- Ailanthus* Wood. value of % experiments with, at the Paris Exposition of Insects, 1865. Ag. Rept 1863, p. 92.
- Alaus myops* (Col), June beetle's snapping beetle. L. feed on wood of Oak, Apple, pine, Ag. Rept 1863, p. 92.
 { *S.G.* X, fig 17. (Col)
- Alaus ocellatus* (Col) big eyed snapping beetle. Ag. Rept 1860, p. 321. L. in Apple, % oak wood. —
 { *Pathwor* Ag. Rept 1861, p. 608, figs 57, 58, in Locust wood. 1865, p. 59; in decayed wood —
 { 1868, p. 92 fig 107. in Oak apple, *Yucca*, *S.G.* X, fig 15 (Col)
- Aletia aryliflora* (Lep) Latest name for *Anomis xylinas*, the cotton army worm, see remarks
 { made by Prof. A. R. Grote, of Buffalo, N.Y. at the meeting of the Am. association for the
 { advancement of science, held at Hartford, 1874, p. 126. See also *Anomis xylinas*. *S.G.* XVIII/1 (Lep)
- Aleochara anthomyia* (Col) destroys *Anthomyia* brassicae (Dip) a fly injuring cabbage. Report of
 { *Delep* Ag. 1870, p. 66. fig 2. *S.G.* XLIV/9 (Col)
- Allorhina (Cotinis) nitida* (Col.) June bug. Ins. feeds on Sap of Maple, Beech, & other trees.
 { eats into ripe fruit especially of figs & hence in Florida is known as the Fig eater.
 { Ag. Rept 1868, p. 90, fig 82. *S.G.* VII/19 (Col)
- x *Aleurodes* (Hom) 1876 fig 55 p. found on *Cornus*, *Tomato leaves*, & *Strawberry*.
- Altica circallata* (Lep) Ag. Rept 1864, p. 126. see *Unacampsis*, *Butalis*, % lastly *Gelechia* *S.G.* XVIII/1 (Lep)
- Aldus ater* (Hem) is the % of *Aldus euvinus* Ag. Rept 1875, fig 17, p. 120 *S.G.* IV/26 (Hem)
- Aldus euvinus* (Hem) frequents Golden Rod, & smooth Sumach. Ag. Rept 1875, p. 126, fig 16. *S.G.* VI/21 (Hem)
- Alysiis octonaculata* (Lep) Eight spotted Forester. L. feeds on the foliage of the grape vine, —
 { Paris green will kill the caterpillars but is apt to poison the fruit. Ag. Rept 1874, p. 129. . . .
 { *S.G.* I letter C/2 number C/11 *Ins.* XLIV/1 *S.G.* LII/6. (Lep)
- x *Amara* (Col) Some European species are said to destroy grain. Ag. Rept 1868, p. 110-116.
- Amanita muscaria* a fungus: poisonous to flies. Ag. Rept 1872, p. 132.
- x *Amanthium muscaetoxicum* fly or Gall poison. a plant growing in the southern states poisonous
 { to flies. Ag. Rept 1872, p. 131.
- American blight, a disease on apple trees, caused by an insect. see *Aphis lanigera* Hom. —
 { see *Eriosoma lanigera* *S.G.* VII/21. (Hom.)
- American Lackey moth (Lep) see *Chrysomela americana*. Ag. Rept 1860, p. 321. (Lep) 95
- Ammophila gryphus* (Hym) L. carries off % destroys caterpillars. Ag. Rept 1866. *S.G.* I/24 (Hym)
- * *Agralis segetum* (Lep) Europe. damage done in Picardy, France, Ag. Rept 1869, p. 632.

- Amphicerus* (*Bostrichus* & *Alphate*) *licaudatus*. (Col.) Apple twig borer, Ins. Inj. eats the twigs of Apple, grape, hickory, pecan, cherry. &c. Ag^l. Rept. 1868 pp. 99, 105. fig. 136. & 1872, p. 118, fig. 8.
 { *Ag. XXXVIII/26* & *XIX/9*. (Col.) & *Amphicerus*. (see also Ag^l. Rept. 1866 p. 321)
- Amphicerus* (*Stalae*) *livittata* (Horn) Found on Brambles & Grass. Ag^l. Rept. 1870, p. fig. 8. *Ag. I/167* (Horn)
- Anabrus* *simplex*. (Orth.) wingless cricket of Utah. destroys Grass, Wheat, &c. It is eaten by Gulls, & Indians. Ag^l. Rept. 1871, p. 79, fig. 130. & 1874, p. 111, fig. 14. *Ag. XIV/5*. (Orth.)
- Anacamptis*. (*Butalis* *Alucita*) *canaliculata* (Lep.) Angoumois moth. injures corn, maize, wheat, Grass. { *Sad. &c* Ag^l. Rept. 1854, p. 67, pl. 4. remedies. 1864, p. 556. 1858, m. m. see *Delachia* *Ag. XVII/1*, (Lep.)
- Anarsia* *lineatella*, see *A. pruinella*. Ag^l. Rept. 1872, p. 112. (Lep.)
- Anarsia* *pruinella*. (prod. *A. lineatella* of Kollar) (Lep.) Larvae destroy the ends of the twigs of Peach trees in Maryland, in spring. Habits. remedies &c. Ag^l. Rept. 1872, p. 112, fig. 1.
 { *Ag. CVIII/3* (Lep.)
- Anasa*. (*Coreus* *Gonocerus*) tristes (Koll.) Squash bug. L.P.S. injure Squashes, & Pumpkins, by sucking Sap & poisoning foliage. They are said also to destroy the Colorado Potato beetle.
 { *Goryphora decemlineata* (Col.) Ag^l. Report. 1875, p. 120, fig. 18. See also under *Gonocerus* & *Coreus*
Ag. II/14. (Holt)
- Anatis*. (*Cocciella* & *Myrui*) *15-punctatus* (Col.) destroys Cotton aphides. Ag^l. Rept. 1854, p. 85, pl. 8, *Ag. XXV/37*. (Col)
- Anbury, a disease of Turnips, once attributed to *Trichosera hyemalis*, or the Turnip gnaw (Lep.) { of Europe. Ag^l. Rept. 1872, p. 128, fig. 16. *Ag. X/31*, 32. (Lep.)
- * *Anaglyptus lineatus* (Col.) see *Buprestis*. Ag^l. Rept. 1868, p. 91. *Ag. XVI/13*, (Col.) (food pine)
- x *Anaglyptus striatus* (Col.) frequents Spruce & Pine. Ag^l. Rept. 1868, pp. 91 & 113, 115, fig. 95. See *Buprestis*.
 { *Ag. XI/12* (Col)
- Anchylopera vaccaeana* (Lep.) Cranberry or fern worm. Ag^l. Rept. 1868, p. 207. (Fish.) & Ag^l. Rept. 1870, p. 85, fig. 50. *Ag. C/1*, fm. Pack. (Lep.)
- Angoumois moth. see *Delachia* *coreatella*. *Ag. XVII/1* (Lep.)
- Animalculae. Fungi &c. origin. Ag^l. Rept. 1864, p. 529
- Animals. in garden of acclimation, Paris. Ag^l. Rept. 1865, p. 95. (cattle, goats, sheep, &c.)
- Animals, & Birds. by Herricott Ag^l. Rept. 1856, pp. 52, to 110, with plates. 1857, pp. 72, to 107, no plates.
- Animals. acclimation & domestication. (L^o Craig.) Ag^l. Rept. 1859, p. 207.
- Anisopteryx vernata* (Lep.) Canker worm. It destroys foliage of Apple, Elm, Cherry, &c. Remedies Habits.
 { &c. Ag^l. Rept. 1864, p. 554. destroyed by *Calosoma scrutator* (Col.) & *Eumenes* *fraternus* (Hym) -
 Ag^l. Rept. 1866, pp. 39, 43. remedies, &c. 1870, p. 84, fig. 29. - 1874, p. 139. - 1875, m. m.
Ag. &c. XIV/17. Ins. *LXX/16*, 17. (Lep.)
- Anisocelis* ? (Holt) Ag^l. Rept. 1864, p. 61, on Cotton. ? 1855, p. 94. resembles *Acanthopachala*, Thomas
 { *Ag. IV/11*. (Holt) (& is the brownish black *Anisocelis* of *Ag. I/50*, pl. 8, fig. 9)
- Anisocelis*, ? (Holt) more mention. Ag^l. Rept. 1854, p. 91.
- Anisocelis*, *albicinctus* (Holt) banded winged *Anisocelis*, q^d D.B. Ag^l. Rept. 1855, p. 94, fig. VIII, on Cotton, Bolls. See *Antiploglossus thyllopus*. *Ag. I/21*. (Holt)
- Anisocelis nasutus* (Holt) see *Acanthopachala femorata*. *Ag. I/20*, Holt, in Cotton fields.
- Anisota* (*Argyrocampa*) *nubicunda*, (Lep.) Larvae feed on foliage of Silver maple. Ag^l. Rept. 1870 p. 83, fig. 44. *Ag. Lar VI/14*. Ins. *LXVII/9*. (Lep.)
- Anisota* (*Argyrocampa*) *senatoria* (Lep.) It feed on foliage of Oak. Ag^l. Rept. 1870 p. 83 fig. 43.
 { & is destroyed by *Tetramesa fuscicornis* (Hym) 1866, p. 43. *Ag. Lar VI/56*. Ins. *LXVII/16*, 18. (Lep.)
- Anobium* *pumilentarium* (Col.) Ag^l. Rept. 1849, p. 834.
 { *pumilentum*. (") " 1849, p. 335.
- Anobium* (*obolium*) *panicum* (Col.) Ag^l. Rept. 1854, p. 72, fig. 5. injures Wheat, & other grains.
 { 1868, p. 99, fig. 132. see *Sitotroga panicea* *Ag. XIV/3*, (Col.)
- Anobium*, *striatum* (Col.) Europe. Known by the name of Death watch, from the ticking noise made by them. Ag^l. Rept. 1868, p. 99. -
- Anobium* *lucelatum* (Col.) Europe. habits same as above. Ag^l. Rept. 1868, p. 99. . . *Ag. &c.*

- Anomala*. (Col.) Ag. Rep. 1861. p. 603. & 1868. p. 88.
Anomala (*Nitela*) lucicola. Col. Ag. Rept. 1861. p. 609. fig. 39. 40. as the "anomalous grape vine beetle."
 (Ruthven). Ag. Rept. 1868. p. 88. pl. 74. destroys the foliage of grape vines. S.G. VI/1-IX/25. 33
 XXXIV/28. 42. (Col.)
Anomala junicula. (Col.) feeds on southern pine. (a variety of *A. lucicola*) Ag. Rept. 1868. p. 88. 113.
 S.G. VI/1. (Col.)
Anomala varians. (Col.) feeds on foliage of Grape, Sumach &c. Ag. Rept. 1868. p. 88. 110. S.G. IX/28. (Col.)
Anania xylinae. (= *Scelotia argyralacea*, of Grote) (Col.) is the Army worm, or caterpillar. It feeds upon foliage &c. of Cotton. Yell arched with figures. & comparison with grass worm.
Laphrygma macra? or *Psephenodes* (Dep.) of Smith & Abbott. 1867. p. 58. As *Noctua Xylinae*. Ag. Rept. 1855. pt VI, fig 5, page 74 to 76. First article on habits, food, appearance &c. — 1866. p. 30 mm
 { 1871. p. 63. remedies. Sprinkling liquid poison by machines &c. — 1872. p. 118 localities, injured. — 1873. p. 163. short article showing difference between grass worm & cotton Cat. similar. — 1874. 128. feeds on Cotton plant, exclusively. It comes as fly from the south. (see. Grote.) *Catantopus argyralacea*. D.G. L.P. XVIII/4. J. XIX/8. (Sep.)
Anthracas. (Bemb.) pernici. (Lep.) Ag. Rept. 1865. p. 93. — 1866. p. 88. Hab. China. food. Oak. silk producing caterpillar. (see also *Citacus* syn.) S.G. 23. CIV/16. J. CVIII/16 ser. 1. Anthracas. (Dep.)
Anthracas. (Bemb.) *Attacus* Yama nai (Dep.) Ag. Rept. 1865. p. 93. m.n.: 1870. p. 81. Japanese silk producing caterpillar. Used on Oak & Apple by Dr. Akhurst of Brooklyn N.Y. & M. Andrews &c. S.G. CIX/fig 3 (Sep.) as *Anthracas*. (Lep.)
 * Ant lion. *Mymecoleon*. (New) Lar. dig conical pit, falls to entrap ants & other small insects. in Cotton fields. Ag. Rept. 1855. p. 107. & 1868. p. 545. see *Mymecoleon*. S.G. V/12 p. 15 to 17. (New)
 Ants. (Formica &c.) (Syn) on Cotton, swarm on plants infested with plant lice Aphidides (Horn) for the sake of the so called "Honey dew" a sweet viscid substance discharged by the aphidides which feed upon the sap of the plant. Ag. Rept. 1855. p. 106. — frequenting orange trees for the same purpose 1858. p. 263. — Remedies 1868. p. 547. — producing "Honey dew" 1866. p. 33. destroy eggs &c. of Cotton army worm "*Alutis argyralacea*" *Anosis* &c. & caterpillars &c. of grass army worm (*Laphrygma*?) (Lep.) — ants at the roots of fruit trees in Texas. driven away by Tobacco. Ag. Rept. 1868. p. 536. — Ants eaten by Indians. Ag. Rept. 1866. p. 508 S.G. VII/10. Formica rufa &c. & 1874. 16. Formica? (Hymn)
 Ants white. see Termites. (New)
 Anthicidae. (Col.) never mention. Ag. Rept. 1868. p. 81.
 Anthrenoides (*pseudochinche*) insidiosus. (Hbt) (as *Lygaeus* of Latr.) on Cotton. Ag. Rept. 1855. p. 106. p. 104. { destroys church bugs (Hbt) Ag. Rept. 1870. p. 57. — destroys other insects. Ag. Rept. 1873. p. 123. fig 27. S.G. IV/3. w. *Anthrenoides*. (latest change *Tritrichoptera*)
Anthrenoides minutus. (Hbt) Europe destroys small insects. Ag. Rept. 1875. p. 123.
 " nemorum (" " " " " " " " " " " "
Anthomyia. brassicae. (Gris) "Cabbage fly, or maggot." injures roots of Cabbage. Said to cause the disease called Club-foot. & is destroyed by a beetle *Aleochara b. assicius* (Col.) Ag. Rept. 1867. p. 73. causing club foot, 1866. p. 54. — destroyed by *Aleochara*. 1870. p. 66. — \$100. offered for remedy. The best was one teaspoonful of caustic shell lime to each plant. 1871. p. 411. (no fig)
Anthomyia cephalaria. (Lep.) Onion fly. (Eastern) (Dip) Lar borrows into the bulb & destroy plant. Ag. Rept. 1866. p. 63. remedies &c. — 1863. p. 238 remedies history &c. — 1867. p. 73. larvae into bulbs & 1869 remedies. feeds. &c. — 1872. p. 133. fig 22. resembles a miniature house fly. habits remedies. &c. it is destroyed by *Achrysope*. (New) S.G. VII/33. VIII/18. (Dip)
Anthomyia radicum. (Dip) Europe. injures radish roots. Ag. Rept. 1872. p. 136.
 " *raphani* (Dip) Radish fly. (Eu) Ag. Rept. 1867. p. 73. & 1873. p. 136. injures Radish roots.
Anthrenus. *lignatus*. (Col) see *A. signatus*. 1874. 73. Strawberry blossom weevil. (Lat)
 " *anularum*. (Col) Europe. injures fruit of cultivated cherry. Ag. Rept. 1866. p. 90.
 " *incurrens*. (Col) Europe. cuts off stocks of strawberry. &c. fruit of Wild cherry. Ag. Rept. 1865. p. 90.
 " " " "

- Anthonomus pedicularis*, Col. Europe. injures flower buds, of Apple, Pear. Agl. Rep. 1865 p. 90.
pomerorum, (Col.) Europe. " " " " " "
punicida, see *A. scutellatus*. (Col.)
scutellatus, (*punicida* syn) a curculio the larva of which eats round holes into
the fruit of the plum. boring to the kernel & feeding upon its substance, usually
known by the name of the "plum gauger". Agl. Rep. 1867 p. 73 v 1870 p. 71. fig. 5.
see *A. scutellatus*. S.S. XXXVII 23, 24, XL 243. (Col.)
Anthonomus quadrigibbus, (Col.) I. eats round holes in Apples & Plums. Ag. Rept. 1867 p. 78.
1870. p. 70. fig. 14. S.S. XXXVI 413 hds. & XXXVII 288 29. (Col.)
Anthonomus signatus, (*hisignatus* syn) (Col.) Strawberry blossom weevil, I injures flowers of
strawberry so that they prove abortive. Ag. Rept. 1871 p. 73. fig. 3. (Col.)
Anthonomus suturalis, (Col.) Ins. Cranberry weevil, cuts off and destroys buds. I sometimes feeds
on berries of the cranberry. (Fish) Agl. Rept. 1869 p. 207. & 1870 p. 70. & is destroyed
by a Chalcid (Hym)
Anthrax, (Dip.) destroys The chrysalis of a moth (Lep.) Agl. Report. 1866 p. 44. (Dip.)
Anthrenus destructor. (Col.) see A varius. Ag. Rep. 1868. 85. 318 109. 115. 116. (Col.)
" varius. (destructor syn) (Col.) Insects in spring frequent flowers Larvae
injure or destroy dried skins, insect collections. & specimens of Natural history in
general. Ag. Rep. 1868 p. 58. 82. fig. 50. Anthrenus varius S.S. V 27. (Col.)
Apatel. (Bostrichus) aspericollis. (Col.) in path of Hickory. Ag. Rep. 1865. p. 91 & 1867. p. 71. & 1868.
99. Bostrichus. (Col.)
Apatel. basilaris. (Col.) see Synonymy. in Hickory Elm &c S.S. XIII 17. Synonymy. Col
Apatel. bicaudatus. (Col.) see Amphicerus. Apple twig borer. S.S. XXVIII 26. XIX 9. as Amphicerus (Col)
Aphidius. (Hym.) a four winged fly destroying Aphids on plane trees. Ag. Rep. 1866 p. 41.
Aphidius. S.S. IX 16. (Hym.)
Aphides, & aphids. (Hom.) plant lice Agl. Rep. 1864 p. 39. - 1849 p. 339 - 1855. p. 67 & 107. - 1858 p. 262.
1863 p. 275. - 1868 p. 82 & 315. - 1870 p. 87. - 1871 p. 81 - 1872 p. 123 - 1873 p. 368 - 1874 p. 145.
Aphis avenae (Hom.) oat aphid injures Barley Oats. Rye. Wheat. &c Ag. Rept. 1876. fig. 38.
S.S. III 15. (Hom.)
Aphis brassicae. (Hom.) Cabbage aphid, or plant louse. Red pepper a remedy. Ag. Rept. 1857 p. 52.
1873 p. 290
Aphis gossypii. (Hom.) Cotton aphid or "lice" this insect is very injurious to Cotton when young.
- it sucks out the sap & weakens the plant. Agl. Rept 1854 p. 53. pl. 3. -
Ag. Rept. 1855. pt. 17 fig. 2. - 1876. fig. 9. p. % see Mrs works on cotton insects. by 89.
S.S. III 14. (Hom.)
Aphis fabae. (Hom.) Bean aphid. Ag. Rept 1849. p. 338. (Hom.)
Aphis. (on Snap.) (Hom.) Agl. report. 1854 p. 97. pl. 6. % destroyed. by parasites.
Aphis. (on Hop) (Hom.) Localities injured. Ag. Rept. 1871. p. 73.
Aphis lanigera (Hom.) woolly aphid. or American Blight. remedies. &c 1864 p. 560.
1876 fig. 27. p. as Eriosoma lanigera S.S. III 21. (Hom.)
Aphis (on orange). (Hom.) injures young foliage shoots. & is destroyed by Evagorus rubidus.
(Het. III 18. Agl. Rept. 1866 p. 43.) orange aphid see Agl. Rept. 1868 p. 261. (Hom.)
Aphis mali. (Hom.) Apple plant louse. Ins injures young shoots, & foliage. Ag. Rept. 1876 fig. 37.
S.S. III 17. (Hom.)
Aphis persicae? (Hom.) peach leaf louse. 1876 p. (no fig)
" " P. " a sp. was found by Prof. Whiter. on both leaf and root. very injurious
in the peach orchards of Md. which he thought resembled. A artemesia. of Europe
1876. no fig. p. but after words he was somewhat doubtful. (P)
Aphis subterranean. Hom. remedies. Agl. Rept. 1874 p. 561. (Hom.)
Aphis (Hom.) destroyed by Aphidius & Tricorys Hym. Agl. Rept 1866 p. 41. in eggs. Schenckia flies
(Hym) 1866 p. 42. & destroyed by Baccha & Sympilus. (Dip.) 1866 p. 44.
Aphis. remedies. Ag. Rept 1864 p. 56. - 1870 p. 86. - more mention 1874 p. 145. S. Glover

- Aphodius*. (Col.) *Ag. Rept.* 1865, p. 40. & 1868, pp. 86 & 108. Col.
Aphodius juncatarius (Col.) fed on excrements of herbivorous animals. *Ag. Rept.* 1865 p. 39. — 1868.
p. 86. & 111. fig. 56. — *IS.* VIII/2, Col.
Aphodius maculipennis. (Col.) found on the stomach of pewee flycatcher. together with *A. juncatarius*
& *A. (Aph.) (M.)*. *Ag. Rept.* 1865, p. 539.
Aphrophora. (Hom.) Spittle, or Froth insect, Larva sucks the sap of plants, & covers itself with
a frothy liquid, which serves to hide it from birds, & other enemies. *Ag. Rept.* 1866 p. 539.
IS. I/11. (Hom.)
Aphrophora horvathii. (Hom.) found on White pine, & supposed by the negroes to produce the
forest horse flies (Md) *IS.* II/36. (Hom.) (see also *Syn Membracis*, *Ag. Rept.* 1876, p. 26)
Aphrophora (Circopus) quadrangulus. (Hom.) *Ag. Rept.* 1876, p. 24. said to injure the hay corn.
& is found on Brambles. (Md) *IS.* II/36. (Hom.)
Aphrophora Membracis quadrinotata (Hom.) (Frog spit) *Ag. Rept.* 1876, p. 27 found on grape
vines. (Md) *IS.* II/33. (Hom.)
Aphrophora. (Hom.) on Rueweed. *Ag. Rept.* 1876, p. 25. *IS.* I/11. (Hom.)
(*Uromus (Reduvius) spidipes*. (Het.) destroys other insects, & is said likewise to kill honey bees.
{ *Ag. Rept.* 1875 p. 130 fig. 43. — *IS.* VI/24 (Het.)
Apis, see also *Obea*. (Hym.)
Apis acraeaensis Honey bee of the east Indies. *Ag. Rept.* 1866, p. 32. (Hym.)
" *adansonii*, " " " Senegal. " " " " " "
" *fasciata*, " " " Egypt & Syria. " " " " " "
" *indica*, " " " India. " " " " " "
" *labressa*, " " " West Indies. " " " " " "
" *laetifica*, " " " Italy (acclimated in U.S.) " " " " " "
" *melifica*, " " " European domestic. " " " " " "
" *trigona*, " " " S. America (stingless). " " " " " "
" *unicolor*, " " " Madagascar. " " " " " "
Apple bark louse, or scale insect. See *Aspidiotus (Coccus) conchiformis*. (Hom.) *Ag. Rept.* (Illus.) 1860 & 319
{ Oyster shell Apple bark louse. (scale oblong, eggs white). Remedies. — 1867, p. 73. — 1864, p. 561.
1869, p. 336. — Remedies &c. 1870, p. 86, fig. 57. — 1876, p. 49. see *Aspidiotus*.
IS. III/28. (Hom.)
Apple bark louse. Native, or Harris' bark louse (Hom). *Aspidiotus (Coccus) harrisii*. Scale oval, pure
{ white, eggs red. injures apple bark of trees. Remedies, *Ag. Rept.* 1870, p. 88, fig. 58. &
1876, p. 49. fig. 50. *IS.* III/27. (Hom.)
Apple blight, or incorrectly "American blight", caused by an insect *Aphis*. *Eriosoma lanigera*.
{ Remedies, *Ag. Rept.* 1864 p. 560. — 1876, p. 41. see *Eriosoma* *IS.* III/21. (Hom.)
Apple (tree) borer. see *Saperda (bivittata) candida*. (Col.) *Ag. Rept.* 1863, p. 575. Larva bores
{ into wood of apple, &c. see *Saperda candida* *IS.* Lar. C/21. Ins. X/7. (Col.)
Apple bug, (see Whirligig) see *Tyrinus*, a small black beetle, which swims in circles on the
{ surface of water, feeding on insects & when handled giving out a scent like apples.
& see *Limnebius (gyrinus) americanus*. *IS.* III/14. (Col.)
Apple Burner. See *Chrysobothris (Puprestis) femorata*. (Col.) Larva bores into the wood of
{ Apple trees. *Ag. Rept.* (Illus.) 1860, p. 319. see *Chrysobothris femorata* *IS.* L/10/25.
{ Ins. XI/15. & XII/12. (Col.)
Apple maggot, or fly. (Dip.) see *Syrpheta pomonella*, Larva feeds in pulp of Apples. *Ag. Rept.* 1867, p. 72
IS. IX/14. (Dip.)
Apple midge. See *Sciara (Molobrus) mali* (Dip). Larvae found in injured apples. *Ag. Rept.*
{ 1872, p. 115. (Dip.)
Apple, or Codling moth. (Lep.) see *Carpocapsa pomonella*. Larvae feed in the interior of the
{ fruit & render it worthless, for habits, remedies, &c. — see *Carpocapsa pomonella*
{ *Ag. Rept.* 1854, p. 52, p. 7. — 1860 p. 315 — 1869, p. 536. — 1870, p. 86. . .
{ 1871 p. 375. *IS.* Lf. I, XV/8. S. LXVIII/7. 8. (Lep.) (syn *Penthina*) *IS.* lower.

- Apple tree Sphinx. see *Smormothus* (*Sphinx*) *Esacatus* (Sep.) Caterpillar eats foliage. Ag. Rep. 6.
 { I.G. I. 11/4. Ins XXXIX/2 (Sep)
- Apple Tortrix. see *Tortrix* (*Perotoma*) *rosaceana* (Sep.) destroyed by *Melias canalis* (Hb.) see Ag. Rep.
 { 1875 p. 130, fig. 4. I.G. III/12 (Hb.) Tortrix Sep. 1855 p. 85. pt VII, fig. 3 I.G. XXIV/3. I.P. XV/4. I. 1/26 LXV/69, 12 (Sep)
- Apple twig borer. see *Comphoceros* *bicaudatus* (Col.) Ag. Rep. (Uhler) 1860. p. 321. I borer in twig on
 { Apple tree. remedies 8^o I.G. XIX/9 (Col)
- Aradidae (Hb.) found under bark of trees. & feed on minute fungi. Ag. Rep. 1875. p. 127.
- Aradus americanus. (Hb.) feeds on minute fungi under bark. Ag. Rep. 1875. p. 127. fig. 37. I.G. III/3 (Hb.)
 " (Hb.) probably mistaken for Bed Bug. Ag. Rep. 1875. p. 127. (Hb.)
- Aracoceros coffeae. found on Peach trees, (south) under bark, & in shrivelled or rotten fruit.
 { Ag. Rep. 1872. p. 114. fig. 3. see *A. fasciculatus*. I.G. XXXIX/21. (Col)
- Aracoceros fasciculatus. see above, *A. coffeae* (Col)
- Archesia, yaleator, syn. *Smaka auriculata* (Horn) found on prairies, on *Verbena hastata*. Ag. Rep.
 { - 1876. p. 21. fig. 21. I.G. I/17. Horn
- Arctia textor, (affinis) (Sep.) found on Cotton. Ag. Rep. 1855. p. 84. pl. VII, fig. 2 see *Hyphantia textor*
 { I.G. I. VIII/5.8.16. I. LIV/13.18. (Sep)
- Arctia. sp. eats the foliage of Cranberry. (Fisk) Ag. Rep. 1869. p. 268. (Sep)
- Arctia. (*Pyrrarctia*) *isabella*, (Sep.) is destroyed by an *Scheumora* sp. (Thym) Ag. Rep. 1866. p. 41.
 { as *Pyrrarctia*. I.G. I. VIII/9.10. Ins LIV/4. (Sep)
- Anecda (*Cotalpha*) *lanigera*, (Col.) Woolly Anecda. destroys foliage of pear. Ag. Rep. (Uhler) 1860. p. 315. 349.
 { 1868. p. 69. 105. *Cotalpha lanigera*. I.G. Sep. C/11. I. VIII/17. (Col)
- Argynnis columbiana. see *Euptonia claudia* (Sep.) found in Cotton fields eating "May pop" or
 { wild passion vine. & sometimes, but very seldom, eats very sparingly of Cotton. Ag. Rep.
 { 1834. p. 61. - 1855. p. 66. 105. pl. IX/ fig. 9. abundant in Cotton fields. in *Cholumbia, SC.*
 { as *Euptonia claudia*. I.G. I.P. 1/9. Ins 36/1. (Sep) (see also Ag. Rep. 1868 m m)
- Arma? *Podius* (Hb.) a plant bug, that destroys *Doryphora* 10 lineata, or Colorado Potato beetle,
 { Ag. Rep. 1871. p. 74 8^o. see *Doryphora* (*Chrysomela*) I.G. XXIX/32. 9^o (Col).
- Arma (*Podius*) *spinulosus* (Hb.) Destroys Colorado potato beetle, *Doryphora* (*Chrysomela*) 10 lineata. Ag. Rep.
 { 1866. p. 43. 1874. p. 123 - 1875. p. 118. fig. 9. *Podius spinulosus*. I.G. II/28 (Hb.)
- Arma, grandis. see *Podius cynicus* (Hb.) destroys *Doryphora* (*Chrysomela*) decemlineata Ag. Rep.
 { 1874. p. 123. & 1875. p. 116. fig. 8. as *Podius cynicus*. I.G. II/29. (Hb.)
- Army. worm. Autumnal or fall. see *Prodenia autumnalis* (Sep.) Ag. Rep. 1871. p. 376. destroys turnips
 { Buckwheat, grain, grass. Tomatoes &c. &c. remedies 8^o. I.G. CVIII/15 (Sep)
- Army worm. of Cotton. see *Anomis xylinae* (*Alitia argylloa*). injures Cotton only. Ag. Rep. 1855.
 { p. 71. pt VI, fig. 5. (first article) 8^o Alitia argylloa. I.G. I.P. XVII/4. Ins XIX/8. Sep
- Army worm. Grass. of the east & west. see *Lucania umifuncta* (Sep.) destroys Grass. & Grass. Ag. Rep.
 { 1861. p. 552. remedies 8^o. I.G. LXX/11/22. Ins LXI/16 & LXV/7. (Sep) (see 1870 p. 83. fig. 46)
- Army worm. Grass. of the south. *Saphygnia macra* ? or *fragipoda*? S.B.A. (Sep.) caterpillar feeds
 { upon the grass, & weeds between the rows of cotton. seldom injuring the plants. Ag. Rep.
 { 1855. p. 77. pt VI/6 - as the grass caterpillar. I.G. XXIII/5. (Sep) (see also in article on the
 { *Anomis xylinae* *Alitia argylloa*. for differences between Cotton & Grass worm)
- Army worm. or Snake worm. see *Sciera Thomasi* (affinis) Ag. Rep. 1872. p. 115. - I.G. I/19. (Sep)
- Orthopelus (*Clytus*) *picatus* (Col.) Locust tree borer injures wood of Locust 8^o. Ag. Rep. 1870. p. 73. fig. 23.
 { remedies 8^o (syn *Clytus flexuosus* & *C. robiniae*) see *Cyllene robiniae* I.G. Sep. C/16. Ins XVII/25 (Col)
- Antomesia. Wormwood, dried stems & leaves used in China to fumigate Bees. Ag. Rep. 1860. p. 91.
- Arthronaema. aeneae, (Col.) I found on flowers. Ag. Rep. 1866. p. 101. I.G. XXXII/15. (Col) (*Stictyca* Syn.
- Articulata. Ag. Rep. 1868. p. 101.
- Ash, tree, borer. (Sep.) *Trochilium donaldsoni*.
- Aspilidae (Sep.) feed on other insects. Ag. Rep. 1866. p. 144.
- Asilus sordicus, Lipp feeds on other insects. Ag. Rep. 1866. p. 44. I.G. III/6. (Sep).

- Asopha costalis* (Lep.) (*Pyralis clonalis*, *Hyposyga costalis*, Noel Humphrey) Clover worm, or Gold
 { Hunga moth. L. Injures Clover, when dry, & on stalk or stem, also has been reared on
 { fresh Clover flowers. Ag. Rep. 1867, p. 78. & 1870, p. 84, fig. 48 as *Asopha costalis* DS. L.P. LXIII (25)
Asparagus beetle, (Col.) *Cnicus asparagi* injures Asparagus. (imported from Europe.) Ag. Rep.
 { 1865, p. 91. DS. L.P. 30, Ins. XXX/14.
Asphondylia, (*Acidomyia*, *gnathularia* (Lep.) Gooseberry midge, L. injures the fruit Ag. Rep. 1872, p. 127.
 { as *Acidomyia* DS. P. 2, XI/28. (Lep.)
Aspidiotus (*Coccus*) *citricola* (Hom.) Injures bark & tissue of Orange & Lemon Ag. Rep. 1876, p. 1, fig. 48.
 { DS. p. V (Hom.)
Aspidiotus (*Coccus*) *conchiformis*, (Hom.) Apple bark louse, Cydonia shell bark louse. Injures bark of
 { Apple trees. (scale oblong, mussel shape, brown. & eggs white. Ag. Rep. 1866, p. 319. (Ehren) remedy.
 { 1867, p. 73. — 1869/336. — 1870 p. 88, fig. 57, branches. — 1876, fig. 49, found on Apple.
 { *leuco*, above cherry. crab. currant. pear. plum. &c. DS. Aspidiotus III/28 (Hom.)
Aspidiotus *cryptolegatus* (Hom.) injures bark of Pear & Aspen Ag. Rep. (Rhine) 1860, p. 312. (Hom.)
 " " *lunifrons*, (Hom.) — parasitic on limbs of Pear " " " " p. 313 "
 " " *Gloveri* (Hom.) on bark, young & fruit of Orange & Lemon Florida, the most common
 { Aspidiotus species. (Coccus syn.) Ag. Rep. 1865 p. 115, p. 115, fig. 5. & 1876, fig. 47. DS. p. VI (Hom.)
 " " *Harrisii*, (Hom.) *Nolus* apple, Harris's 'bark louse, or scale insect.' scale oval, pure white.
 { Eggs, red. Ag. report, 1870, p. 88, fig. 53. remedies &c. — 1876, fig. 50. Apple. DS. III/27 (Hom.)
 { (syn *Coccus*)
 " " (*Coccus*) *pinifoliae*, (Hom.) Insect on pine leaves, or needles. Ag. Rep. 1865, p. 91. & 1876, fig. 51.
 { DS. III/23 (Hom.)
Astacus, (crayfish, eat down young plants of Cotton during the night, or in cloudy weather &
 { drag them to their holes to eat them — eastern Mississippi. Ag. Rep. 1867, p. 61, figures.
Astoma, (*Atoma*) *locustanum*? a small, red mite parasite on Grasshoppers. *Calopterus femur*.
 { *rubrum* &c. & found clustered on body or under the wings. Ag. Rep. 1876, p. 138.
Atacabus, *Egyptiorum*, (Col) the scarabaeus of the Egyptians. food, excrements. Ag. Rep. 1868, p. 86.
Attacus, (*Samia*) *acerifolia* (Lep.). I classed amongst native silk producing variety Ag. Rep.
 { 1864, p. 543. mm 557. — mm 1865, p. 93 — 1866, p. 36. — destroyed by *Ephestia*
 { *macarum* (Hym. DS. V/6) Ag. Rep. 1866, p. 41. — No. 314 mm — 1867, *Platysamia acerifolia*,
 { see *Platysamia acerifolia*. Ins. DS. XLVI/12. Ser VII/2, Lep., food. Apple, Cherry. Elm. Plum. &c.
Attacus, (*Samia*) *cynthia* (Lep.) see. *Ailanthus* silk worm, for introduction. *Samia* Ag. Rep. 1861, p. 374, & 382.
 { 1862, p. 390. — 1864, p. 542, 551. — 1865, p. 35 in Paris exhibition 1865, p. 92. — 1866, p. 37, 38.
 { attacked by birds. — 1867, p. 74. — Food. *Ailanthus* & Castor oil plant.
 { as *Samia cynthia* DS. L.P. Coc XXI/14 (Lep.)
Attacus, *pernyi*. See *Antheraea* (Lep.) Ag. Rep. 1866, p. 38 & 1870, p. 81 food Oak DS. L.P. CIV/16 & CVII/16
Attacus, (*Telae*) *polyphemus* (Lep.) a native silk producing insect. silk gut made — from *Samia*.
 { the caterpillar. — silk produced from the worm by M. Trouvelot. of Neap. re. Mass. Ag. Rep.
 { 1864, p. 531. — 1865, p. 93 specimens in Paris exposition & — 1866, p. 37 M. Trouvelot of
 { Neap. re. Mass. in 1865, had not less than a million of caterpillars feeding on bushes.
 { 1867, p. 82 m m. see *Telae polyphemus*. DS. L. VII/3, Ins. V/14 (Lep.) food. Apple. Elm. Oak. Cherry &c.
Attacus, (*Callosamea*) *promethea* (Lep.) said to be a silk producing caterpillar. the cocoon is
 { suspended from a branch like *Samia cynthia*. Ag. Rep. 1864, p. 531. & 1866, p. 37.
 { *Callosamea promethea* DS. L. II/13 VII/3, Ins. XLIX/1, p. 5. (Lep.) food. Sassafras, Oak, Syc. &c.
Attacus, *Yama mai*, (Lep.) see *Bombyx* & *Antheraea*. DS. L.P. CIV/16, SCVII/16 (Lep.) food. Oak, apple.
Atelabidae, (Col) Europe Ag. Rep. 1865, p. 89. m m. Ex. *Atelabus anali* DS. XXII/8
Aulacius (*Tetragonia*) *mollis* (Hom.) Ins. frequents grass. Cyperus. Ag. Rep. 1876, fig. 32. DS. III/30 (Hom.)
Aulonum, (*Colydium*) *parallelipedum*, (Col) found under pine bark. Ag. Rep. 1869, p. 88, 113, 113.
 { DS. V/29. as *Aulonum*

- Baccha*, sp? (Lep) Larvae destroy the aphides (plant lice) on the orange & Ag Rep. 1866 p 44
 { §§ III/25 (Lep)
- Bacon beetle*, see *Dermostes lardarius*, (Col) Ag. Rep. 1856 p 29. - 1861 p 595. - 1863 p 569. - 1865 p 589? §§ Larap 23 IV/27 (Col)
- Barid*, Spencer. I. Origin of domestic Turkey. Ag. Rep. 1866 p 288.
- Balaninus* (Col) nut weevil, destroys Acorns, Chesnuts, chinquapins, nuts, &c. &c. see also Weevil (Col) §§ XIV/9 }
- Balaninus, nascius*, (Say's. syn) (Col) L. injures Chesnuts, huckle nuts, Acorns &c. &c. Ag. Rep. 1870 p 70 fig 13
 { §§ XIV/10 as *Balaninus, nascius* (Col).
- Balaninus, rectus*, (Col) Lar injures fruit of Chesnuts, Huckle nuts, chinquapins, Acorns &c. Ag. Rep.
 { *Chinquapin* &c. §§ XIV/10 as *B. nascius* Col.
- Balaninus, rectus*, (Col) Lar injures fruit of Chesnuts, Huckle nuts, chinquapins, Acorns &c. Ag. Rep.
 { 1870 p 70. §§ XXIV/31 (Col)
- Bark beetles*, (small) see *Tomicids*. *Scolytus* &c. Lar. & Ads. injure Apples, Elm, Cedar, Peach, Pear & almost every fruit & forest tree. Remedies. 1863 p 574.
- Bark bed*, or *Scale insect*, (Hom) see *Aspidiotus*. *Coccus*, &c. Ag. Rep. 1866 p 42. &c. &c. (Hom)
- Baridius, chloris* (Col) Europe form galls near root of Cholla Ag. Rep. 1865 p 90. Col.
- Baridius, trinotatus*, (Col) US Lar. burrows in the stalk, Ag. Rep. 1865 p 90. see *Baridius*, §§ XIII/22 (Col)
- Barid. trinotatus*, (Col) see above *Baridius*,
- Basket. worm*, Hang worm (Lep) *Oiketicus* or *Aceticus coniformis*. L. almost omnivorous.
 { feeding upon foliage of fruit, & forest trees, & in this neighborhood, is especially injurious to Red Cedars, it is itself destroyed by the larva of an Ichneumon fly *Oryctes inquilus* (Hym) §§ II/5 Ag. Rep. 1864 p 353. Remedies. Habel, &c. — 1866 p 61.
 { see *Thyridothorax ephemerae formis*. §§ XII/1 to 5. (Lep)
- Bean weevil*, (Col) *Bruchus fabae* (Col) eats out the interior substance of field Beans. Larvae, several found in one bean. Ag. Rep. 1871 p 375.
- Bean weevil*, *Bruchus varicornis*, (Col) eats out substance of Beans §§ XIV/11 as *Metabris*, (Col)
- Box honey*, see *Apis mellifica* &c. (Hym) Ag. Rep. 1866 p 32. §§ IV/25 to 30. (Hym)
- Box, wax & honey culture in Russia* Ag. Rep. 1855 p 120.
- " nature & habits with figures of comb (planned by L. J. J.) Ag. Rep. 1857 p 10. pl. 2.
- " Beekeeping. Treatment of temperature in winter &c. &c. Ag. Rep. 1860 p 90.
- " in China, furnished with Artemisia, &c. 1860 p 92.
- " culture in Texas, by Buckish. Ag. Rep. 1860 p 268.
- " length of life, Italian bees, exportation, to China, &c. Ag. Rep. 1861 p 324.
- " Italian bees. Honey, by R. Colvins. Md. Ag. Rep. 1863 p 531, to 546. §§ IV/25 to 30.
- " Keeping, by Mrs. Tupper. Ag. Rep. 1865 p 458. to 475.
- " Winter Keeping, by Mrs. Tupper. Ag. Rep. 1867 p 209.
- " Egypt, & Syria. see *Apis fasciata*. Ag. Rep. 1866 p 32.
- " Indian East. " " *indica*. " " " "
- " Indian West. " " *labiosa*, " " " "
- " Italian. " " *agastica*, " " " " §§ IV/24.
- " *Prunus* near. " " *unicolor*, " " " "
- " Senegal. " " *adansoni*, " " " "
- " Syrian. " " *fasciata*, " " " "
- " Singers of S. Am. " " *trigoni*, " " " "
- Bee Keeping statistics hives pasturage diseases food plants Honey &c. Ag. Rep. 1868 p 272. 275. (Hym)
- " culture annals of by S. S. Adair Ag. Rep. 1870 p 540
- " Keeping. Ag. Rep. 1871 p 401 Artificial swarming & treatment. Ag. Rep. 1871 p 388.
- " " profits of by A. C. Wait. Ag. Rep. 1873 p 475
- Bees are destroyed in Europe by *Chorus apicarius*, &c. Ag. Rep. 1868 p 97.
- " (mason) " " " *Chorus alvearius*. " " " "
- Bees probably breed *Meloe angusticollis* (Col) in their bodies Ag. Rep. 1868 p 102. Meloe L. 22.3 XXXVII/256
- " " destroyed by *Asclepias* or milk weed. Ag. Rep. 1872 p 451. §§ 256

- Bees, honey, are killed by *Quomorus spissipes* (Hct.) Ag. Rept. 1875, p. 130, fig. 43. *Pedunculus* Syn.
 { SS. II/24 (Hct.)
- Bees are likewise destroyed by *Alilus missouriensis*, Dip. SS. IX/25. *Proctacanthus philadelphicus* (Lep.),
SS. X/34 & *Promachus bastardi*. SS. IX/22. (H. not yet in Ag. Rept.)
- Bee fly, *Bombylius* (Dip.) hovers over flowers extracting the nectar with its long sucker. Ag. Rept.
 { 1867, p. 317. example. SS. III/13 (Dip.)
- Bee-mock. (Lep.) *Galiera coreana*. Larvae destroy honey comb, & render hives filthy with their
 { web. & dirt, eventually causing the total destruction of bees & hives, the larvae eat wax &c.
 Ag. Rept. 1864, p. 335, remedies. (SS. IX/14. & P.S. LXXXIV/4. (Lep.)
- Beemare. French local name for *Rhynchites Baccus*, Ag. Rept. 1865, 90. Col. I. injures Apples
- Bed bug, see *Acanthia lectularia*, (Hct.) Ag. Rept. 1864, p. 538. Remedies 25. 1875, p. 127, fig. 33. habits.
 { first introduction to England, &c. &c. SS. III/9 mag. (Hct.)
- Beetles, Coleoptera. article on food habits &c. of Beetles with figures. Ag. Rept. 1863, p. 78.
- Bembex (Hym.) eat & carry off other insects, such as flies &c. Ag. Rept. 1872, p. 132. example, fig. associate.
 { SS. II/30 (Hym.)
- Benigne. . . to destroy insects on plants. Ag. Rept. 1861, p. 332.
- Berytus (Vaid.) spinosus, (Hct.) Ag. Rept. 1875, p. 121, fig. 20. SS. III/10 (Hct.)
- Berytus (Hedus) elegans (Europe) taken about roots & young stems of Root Harrow (*Oxalis arvensis*)
 { Ag. Rept. 1875, p. 121. (Hct.)
- Belostoma ? mere mention. Ag. Rept. 1868, p. 315.
- " " americana (Hct.) Ind. aquatic, destroy Insects, fish, & probably, fish eggs. Ag. Rept.
 { 1873, p. 134, fig. 6. SS. V/8 (Hct.)
- Bleedwit. Ag. Rept. 1875.
- Bilio. albipennis. (Dip.) food of robins in spring. The larvae are said to injure plants. Ag. Rept. 1864, p. 460.
 { SS. II/7 (Dip.)
- Big bed bug, see *Conorhinus variegatus*, (Hct.) said to destroy bed bugs & suck blood of mankind.
 { Ag. Rept. 1865, p. 127. SS. III/19, (Hct.)
- Big eyed snapping bug (Dip.) see *Alaus oculatus* (Col.) Ag. Rept. 1860, p. 281. 9. 7. L. in wood of
 { Apple Oak, & pine, see. *Alaus oculatus*. SS. X/15. (Col.)
- Bill bug, of the pecker. *Scarus* injures maize plant. & resembles *Sphenophorus caryosus*. SS. XII/6.
 { (Col.) Ag. Rept. 1870, p. 68. SS. XII/6. (Col.)
- Birds, in relation to Agriculture, by Dr. Holmes, Maine, with figures. Ag. Rept. 1866, p. 111 to 160.
- Birds food of, Ag. Rept. 1860, p. 89. feeding & growth of American Robin. Ag. Rept. 1860, p. 89.
- Birds, in Europe killed & eaten, & the consequent multiplication of insects. Ag. Rept. 1861, p. 322.
- Birds, by E. L. Samuels. Ag. Rept. 1863, p. 276, families, &c.
- Birds. — Bird laws, & use as destroyers of insects by J. R. Lodge. Ag. Rept. 1864, p. 431 to 446.
- Birds injurious & beneficial with the insects found in their stomachs named but not catalogued
 { Ag. Rept. 1867, p. 201
- Birds value of Birds on the farm, by E. L. Samuels. Ag. Rept. 1867, p. 201.
- Birds as insect destroyers. Ag. Rept. 1870, p. 90 & 510.
- Birds of Vermont in relation to Agriculture & insects, by Professor Perkins, Ag. Rept. 1873, p. 476.
- Biting Bird lice, see Mallophaga. — in Orthoptera, example *Trichodectes*. SS. VI/8.
- Blackberry bark borer, (Hym.) see *Olexa bipunctata*, (Col.) Lar. bore in pith of Blackberry & Raspberry.
 { Ag. Rept. (Hathorn) 1867, p. 619. figs 51, 52, 54. — 1863, p. 576. — 1869, p. 87. 1865, p. 159. & 1870, p. 67. SS. XIV/6, (Col.)
- Black horse fly, see *Tabanus atratus* (Dip.). Ins. sucks blood of horses mankind & other animals
 { Ag. Rept. 1872, p. 129. SS. IX/35. IX/40. Ins II/15 (Dip.)
- Black weevil? *Sitophilus oryzae* (Col.) (also Rice weevil) I injures seed, of Rice, Wheat, & other
 { grains, is a southern species. *S. granarius* being more plentiful in the northern states.
 Ag. Rept. 1861, p. 603, p. 573. & 1863, p. 573. for remedies. — 1854, p. 71 he 5. injures Wheat rice maize
 { 1864, p. 335. — 1858, p. 128. — 1866, p. 41. destroyed by *Metoponiscus graminicola* (Hym.) *Calamita oryzae*.
SS. XIV/1. (Col.)
- Black weevil, name *Alewis* applied to *Sitophilus granarius*. see *Calamita granarius* rem. *timpundata*
 { SS. XIV/2. (Col.)

- Blattella americana* (Orth.) Ag. Rep. 1862 p. 374, figs 4, 6, 7. (Rathvon) remedies parasites &c.
 { American Cockroach, said to be native, eats books, clothing, & actually feeds upon almost all animal & vegetable substances when hungry. See Periplaneta 59 1/23. (Orth.)
- Blattella germanica* (Orth.) Croton lug. eats Animal, & vegetable substances, books, clothing, paper, leather. Great & small "Small Cockroach" Ag. Rep. 1870 p. 77. — 1874 p. 132, fig 3. remedies &c. see Estobia germanica. 59 1/4. (Orth.)
- Blatta orientalis* (Orth. Ag. Rep. (Rathvon) 1862 p. 374, fig 5. food same as above, said to have been introduced from Asia. remedies &c. p. 375. — Oriental Cockroach. habit &c. almost omnivorous, traps & other remedies. poison &c. Pyrethrum. & root of Poke weed. Phytolacca decandra. recommended Ag. Rep. 1874 p. 133, fig 4. see Stylocoryza orientalis. 59 1/546. & VII/12. (Orth.)
- Blatta pennsylvanica* (Orth.) habits & food same as the above. see Blattamodes. 59 1/1.3. (Orth.)
- Blattidae*. — Ag. Rep. 1874 p. 131 &c. (Hom.)
- Blight, Cotton*, with five figures Ag. Orig. 1857 p. 126.
- Blissus* (Hct.) latest name for Microchus leucipterus, see Sist. of Hemip. of the region west of the Mississippi river, by J. B. Leles, 1876.
- Blister flies*, native. Na. species, Cantharis, nuttalli. (Cantharis, Epicauta, cineraria is the old Cantharis marginata.) (Cantharis, Epicauta, pennsylvanica, is the old Cantharis atrata & Cantharis, Epicauta, ultrata, is the old Cantharis rutilata of Harris &c.) &c. see also Sylla, syn. (Col.)
- Black Knot*, said to be a fungoid growth on Plum. & Cherry trees. Ag. Rep. 1874 p. 173.
 { see Sphaeria morborosa, Ag. Rep., 1863, p. 572.
- Blood sucking cone nose* (Hct.) Ins. sucks blood of mankind, & also said to kill locusts, Ag. Rep. 1875 p. 173
 { fig 28. Conothus variegatus 59 III/19. Hct.
- Blow flies*, or meat flies, see Calyptora, Lucilia, Sarcophaga &c. Ag. Rep. 1872 p. 132 &c. (Lep.)
- Boarmia* (Lep.) Ag. Rep., 1855 p. 92, pl. VIII, fig 4. eats cotton foliage, probably the larger species — worm of Ag. B.
- Boehmeria nivea*, a plant producing fibre. Ag. Rep., 1865 p. 33. & 1866 p. 21.
- Boletothragus* (Boletothragus) cornutus (Col.) frequent fungi. Ag. Rep. 1863 p. 100, fig 164, see Boletothragus bifurcatus, 59 XXVI/8. (Col.)
- Boletothragus bifurcatus*, syn. Boletothragus cornutus (Col.) 59 XXVI/8. (Col.)
- Bomb.* (Attacus) arminia (Lep.) native of Bengal, & British India, food Castor oil plant.
 { Ag. Rep., 1861 p. 375. — & 1863 p. 284. food. Vicinus, or palma Christi, resembles Attacus Cynthia in many respects. (Lep.)
- x *Bombus terrestris* Humble or Bumble bee. (Hym.) beneficial as fertilizing certain flowers. & injurious by eating holes in the calyx &c. Ag. Rep., 1849 p. 338.
- Bombycidae*. (Lep.) Ag. Rep. 1863 p. 314.
- Bombyliidae* (Dip.) Ag. Rep. 1865 p. 45.
- Bombuliidae* Bee flies. (Dip.) Ag. Rep., 1863 p. 317.
- Bombyx* (Attacus) bauchinis (or faidherbia) Hab. Africa, feeds on plant. Bauhinia, Ag. Rep., 1865 p. 93. & 1866 p. 38. 59 CXI/11. (Lep.)
- Bombyx* (Attacus) cecropia (Lep.) Ag. Rep. 1864 p. 523. 1865/93. 1866/36. 41. — 1867 p. 74. 1868 p. 284. see Platysamia cecropia 59, Loc. VII/5, XXVI/2. (Lep.) food Apple Plum &c.
- Bombyx* (Attacus) damia cynthia. Ailanthus Silk worm. (Lep.) food. Ailanthus, &c. see. Ag. Rep., 1861 p. 374. 1862 p. 390 — 1864 p. 542. 551. — 1865 p. 35. 92. — 1866 p. 37. — 1867 p. 74 — 1868 p. 284. 1870 p. 81. see Samia 59, L.P. Coc XXI/4 (Lep.) (soon also Castor oil plant?)
- Bombyx faidherbia*. see Attacus bauchinis (Lep.) above.
- Bombyx madrona* (Lep.) feeds on Arbutus & other trees in South America & makes silken nests composed of distinct separate layers Ag. Orig. 1866 p. 37. (Lep.)
- Bombyx mylitta* (Lep.) Tussock Silk worm. mild in Bengal, feeds on leaves of Typha tree. & failed in being reproduced in France. Ag. Rep. 1868 p. 284. (syn. Antheraea perithia L.P. 59, CXIII), (Lep.) flower

Bombyx. mori. (*Seicania* Syn) (Lep.) 1864, p. 455. 562. Fed on Osage Orange, (*Maclura americana*)
 1865, p. 93 m.m. — 1866 p. 35. destroyed by a fungoid growth *Botrytis bassiana*. Fed on the
 Osage orange. Mulberry *Morus multicaulis*. M. morrelli. M. alba. Bois d'arc. or Osage orange.
 ♀ - raised successfully on Osage Orange. 1867, p. 74. — 1868 p. 234. — 1869. p. 636. —
 1870, p. 82. successful experiment of raising silk worms on Osage orange leaves. by Mr
 Cornwall of Utah Territory. — 1871, p. 7. D.S. S.P. Co. XXI fig. 12 & 16. S. 46/1. (Lep.)

Bombyx (*Anthracae*) *paphia*, a syn of *B. mylitta*. Ag. Rep. 1866, p. 284.

Bombyx (*Anthracae*) *gamma* mal. Lep. Japanese silk worm, feeds on Apple Oak. Ag. Rep.
 1865, p. 92. 1866, p. 38. 1868, p. 234. — 1870, p. 81. ix *Anthracae* also D.S. C. 11, fig. 3. (Lep.)

Bordered soldier bug, (Hem.) *Stenotus Embricatus*. destroys Colorado potato bug, & other insects.
 Ag. Rep. 1874, p. 123. & 1875, p. 119. fig. 11. D.S. 11/20. (Hem.)

Bostrichidae. (Col.) Ag. Rep. 1865, p. 91. & 1868, p. 99. &c.

Bostrichini. Col. Ag. Rep. 1868, p. 99.

Bostrichus. (Crate) *apericollis*. (Col.) in pith of Hickory branches. Ag. Rep. 1865/91-1867/71-1868, 99 (Col.)

Bostrichus (*Bostrichus* in) *leucodatus*. (Col.) Apple twig borer. S. in wood of Apple twigs, with
 remedies. Ag. Rep. (Utah) 1860, p. 321. & 1868, p. 99. fig. 156 (Lep.) see *Umpireus* D.S. XI/2. (Col.)

Bostrichus (Col.) Europe. shown at the Paris exposition (1865 p. 91) as being destroyed by *Deloma*?

{ *Brontis*? & *Silvanus*? (Col)

Bot. Skin. of Cattle. *Hypodermia bovis* (Hym.) S. lives in or under skin of Cattle, forming open
 ulcers. or sores. Ag. Rep. 1872, p. 129. fig. 184. (See also Syn *Cestus*) *Hypodermia*. Ag. VIII/21. D.S. 263 }
 Bot. Stomach. of horses. *Gastrophilus*, equi. Lf. S. live in the stomach. Ag. Rep. 1872, p. 130.

{ D.S. I. VII/34. D.S. IV/11. & VIII/22. 120 (p)

Bot. head. of sheep. *Elanus Ovis* Lf. 1862, p. 553. Ag. Rep., remedy, & 1872. p. 129, fig. 17. Larvae live
 in frontal sinus of sheep. see *Cephalomyia ovis*. D.S. VII/36. (Lep.)

Botrytis bassiana. a fungoid growth destroying silk worms. Ag. Rep. 1866, p. 36.

Brachis. group. (Col.) 1868, p. 92. Ag. Rep. (Col)

x *Bombardier* beetle (Col) see *Brachinus fumans*. Ag. Rep. 1862, p. 79. fig. 5.

Brachinus fumans (Col) (bombardier beetle) Insect lives under stones &c. & feeds on other insects,
 it derives its name. from discharging a caustic fluid, & apparently smoke, from behind, when
 disturbed. Ag. Rep. 1861, p. 591. m.m. & 1868, p. 79. fig. 5. D.S. 1/4 (Col)

Brachys terminans (Col) m.m. Ag. Rep. 1868, p. 92 fig. 104 see *Brachys aerea* D.S. XI/36 (Col)

Braconidae. (Hym.) *Ichneumon*. flies. destroying the larvae of wood eating insects. Ag. Rep. 1866, p. 41.

Bracon. (Hym.) the larvae destroy the larvae of small wood eating beetles. &c. Ag. Rep. 1866, p. 41.

{ D.S. 1/31. (Hym.)

Brachytarsus varius (Europe) (Col.) destroys the cocoon on pine. Ag. Rep. 1865, p. 91. D.S. Lar. Europ. II/2. (Col)

Broad necked *Prionus* (Col) *Prionus laticollis*. Ag. Rep. (Rathwor) 1861, p. 612. figs. 68, 69. Larvae eat

wood. of decaying poplar. D.S. Lar. D34 Ins. XXI/5 (supra *P. brevicornis*)

Brochymena arborea. (Hem.) a plant bug very common here that sucks the sap of trees. Ag. Rep.
 1875, p. 117 fig. 4. D.S. 11/16 (Hem.)

Brontis planatus (Col) Europe. said to destroy bark beetles. *Scolytus* & *Bostrichus*. Ag. Rep. 1865, p. 91.

Brusca cathartes (Col) Europe. Ins. gnaws the stem of wheat. L. said to burrow in pith. Ag. Rep.
 1865, p. 88. (Col.)

Bruchus fabae (Col) Bean weevil. habits &c. Ag. Rep. 1871, p. 75. (Col.)

" *flummarus* more mention Ag. Rep. 1869, p. 360. (Col.)

Bruchus granarius (Col) Ins. frequents flowers. I destroy beans peas &c. Ag. Rep. 1849, p. 340.
 1870, p. 71, fig. 20. see *Myelobris*. D.S. XLV/12. (Col)

Bruchus obsoletus (Col) field bean. Ag. Rep. 1870, p. 72. (Col)

Bruchus pisi (Col) pea weevil. Ag. Rep. 1849, p. 338. 1863, p. 574, p. 574. Remedies &c. — 1870, p. 71 fig. 21.
 Europe. mere mention in pad. — 1871, p. 375. eggs deposited on the surface of pods, fastened
 by a viscid substance, & remedies. — 1872, p. 123 Localities injured. see *Myelobris*:
 D.S. XVI/6. (Col)

- Bruchus sinuatus* (Col.) field bean. Ag. Rept. 1870 p. 72. See *Mylabris*. IS. XIV/7 (Col.)
 " *varicornis* (Col.) " " " " " " IS. XIV/2 "
- Bryaxis* (Col.) found on Swamp grass. Ag. Rept. 1868. fig 26. example. B. abdominalis IS. XXV/5 (Col.)
- Buffalo tree hopper* (Hom) see *Cercal cubatus*. Ag. Rept. 1864. p. 560. & 1876, fig 16. I sucked sap of
 { *Apple* - peach - grapes & willow. IS. I/29 & 2/32 (Hom)
- Buprestidae* (Col.) Ag. Rept. (Rathvon) 1861 p. 607. 8. Lar. fig. 54, 56. feed on wood of Apple, pear, cedar.
 { *pine* - peach - cherry, &c. 1863 p. 274 - 1864 p. 439. - 1865 p. 89. m.m. 1868 p. 91. 109. 207. b. Larvae.
 { feed in wood. Ins. found on logs - trunks of trees. & in flowers. (Col)
- Buprestis* (Col.) in cherry &c. wood remedies Ag. Rept. 1863 p. 466.
- Buprestis* (*Anaglychura*) *lineata* (Col.) Orange. lined. *Buprestis*. Insect feeds on the tender
 { shoots of *pine*. Larva probably feeds in *pine* wood. Ag. Rept. 1868 p. 91 *Buprestis lineata*
 { IS. XVI/3 (Col)
- Buprestis* (*Anaglychura*) *striata* (Col.) frequents spruce & *pine*. Ag. Rept. 1868 p. 91. 113. 115. IS. XI/12 (Col)
- Buprestis* (Col.) Ag. Rept. 1816 p. 39. - 1861 p. 604 fig 52. - 1863 p. 566 - 1865 p. 39. - 1868 p. 91 - 1870 p. 67. (Col)
- Burying* beetles. (Col) see *Neocrophorus*. Ins. bury small animals, birds, &c. under the earth.
 { in the bodies of which they deposit their eggs. for example of which see *Sulpha*
 { *americana* &c. IS. IV/15 (Col)
- Butalis* (*Anagampis*) *canabalis* (Lep.) Angamous moth. Lixure maize. Corn. Wheat. grass seed.
 { Ag. Rept. 1859 p. 67. pl. 4. - 1864 p. 566. &c. &c. see *Gelechia Anagampis* IS. XVII/1
- Byrrhidae* (Col.) full beetles. Ag. Rept. p. 55. Ins. found in excrements of Cattle, horses, &c.
 { (example *Byrrhus Cistela americana*) IS. VI/11 (Col)
- Byturus tomentosus* (Col.) Injures fruit. raspberries, blackberries. &c. Ins. frequents flowers.
 { Ag. Rept. 1866. p. 84. 109. 114. IS. Larva A/20 (Col)
- Byturus unicolor* (Col.) Ins. frequents flowers. Ag. Rept. 1868 p. 84. 109. fig 47. see *Sitona* IS. XXXII/16 (Col)
- Cabbage bug* (Hbt.) See *Strachia* (*Murgantia*) *histronica*, or Harlequin bug. Ag. Rept. 1867 p. 71. fig 17
 { 1870 p. 90 habits remedy. - 1871 p. 84, fig 18. - 1875 p. 116. fig 3. injures Cabbages. Turnips, &
 { cruciferous plants. it is destroyed by *Leptoglossus phyllopus* (Hb.) see *Strachia Murgantia*
 { *histronica*. IS. II/22 (Hb)
- Cabbage* butterfly or worm (Lep.) European. see *Pieris rapae*. Ag. Rept. 1870 p. 79. fig 36. - 1872 p. 15.
 { IS. Lep C/18. Ins. 3/14 Ins. 70/2. (Lep)
- Cabbage* butterfly. of the north & East. (Lep.) see *Pieris* (*Pontia*) *oleracea*. pothens *Pontia* or white
 { butterfly. Feeds cabbages, pothens, turnips, &c. Ag. Rept. 1870 p. 79. fig 37. IS. LXXIX/15. -
 { L.P. CVI/28. - I. XXVI/7. & XXXI/2. (Lep)
- Cabbage* butterfly. of the Southern states (Lep.) see *Pieris protides*. Ag. Rept. 1870 p. 79. fig 38.
 { injures cabbages, turnips &c. Ag. Rept. 1870 p. 79. fig 38. IS. Lep. II/6 Ins. XXVII/1. 12. Lep.
- Cabbage* butterfly (Lep.) *Pontia brassica*? of Rathvon Ag. Rept. 1861 p. 592. is destroyed by a carabus
 { (Col). (is probably *Pieris oleracea*, as above mentioned.)
- Cabbage* flea beetle (Col) see *Halbia* (*Phyllotreta*) *striata* see *Orchestes vittata* IS. XXV/3 (Col)
- Cabbage* fly, or maggot. (Lep.) see *Anthomyia brassicae*. IS. XLV/9. (Lep.) (injures roots Cabbage)
- Cabinnot*. Different sp. see *Muscarda* Ag. Rept. 1864 p. 540
- Cadelle*. French name for *Trogosita* (Col) Ag. Rept. 1864 p. 540. - 1865 p. 91 - 1868 p. 83. - 1870 p. 66. see
 { *Trogosita mauritanica*. Catelet. Ag. Rept. 1849. & 1866. p. 88. said to destroy the larvae of the wheat
 { weevil (but doubtful) & is found under bark in grain & in bread stuffs, see *Trogosita*.
- Ctenobius mauritanica*. IS. XXXI/1. (Col)
- Coccigenae* (Hb.) Ag. Rept. 1875 p. 123. IS. fig 40
- Colletes macropus* (Col.) Grape fruit curculio injures grapes Ag. Rept. 1867 p. 72. see *Macrotus*
 { IS. XXXVI/42 (Col)
- Calamander gracilis* (Col) Europe (I called to Saperda.) pierces stem. boring through joints, &c.
 { hibernates in the lower part. of the plant. Wheat. Ag. Rept. 1865 p. 89. (Col)
- Calandra palmarum* (Col) Ag. Rept. Rathvon. 1861 p. 604. Palm weevil. (Trogosita). - may prove
 { to be *Rhyssophora* (*Zimmermanni*) *orientalis*. of Gmelin? IS. XIII/21 (Col) J. Flower

- Calandra granaria*. (*Sitophilus granarius*) (Col.) Grain weevil. Injures wheat, & other grains.
 { Ag. Rept., 1849 p. 355. — 1854 p. 71. — 1858 p. 23. — 1861 p. 603. — 1863 p. 573. remedies. &c.
 { sa *Calandra nemotaphrota*. (syn. *granaria*) SS. XIV/2. (Col)
- Calandra oryzae*. (*Sitophilus*) (Col.) Rice weevil. Ag. Rept., 1859 p. 535. 1859 p. 71. Pl. 5. — 1861 p. 603.
 { 1863 p. 573. L. Injures Rice, Wheat, maize, &c. sa *Calandra (Sitophilus) oryzae*. SS. XIV/1. (Col)
- Calandra oryzae*. (Col.) destroyed by *Metoporus grammicola* (Hym.) Ag. Rept. 1866 p. 21.
- Catanthus latus* (Col.) Europe. said to injure young wheat. Ag. Rept. 1862 p. 80. (Col)
- Calphagom*, *barbatum*. (Col.) (Psephenidae). Brunel. large size being 3 inches in length. Rathvon. in
 { Ag. Rept. 1861 p. 611.
- Callidium* (*Carpus error*, *vajulus*, Col.) Ag. Rept., Rathvon, 1861 p. 616. L. fed on wood of Oak & pine.
 { said to be able to bore through lead. see *Byctotrupes vajulus*. SS. XVI/3. (Col)
- Callidium violaceum*. (Col.) (Rathvon. in Ag. Rept. 1861 p. 616. fig. 75. 76. found in pine wood. and
 { under bark. see *Cantennatum*. SS. XVI/4. (Col)
- Callionus*. (Hym.) parasite in *Diplosis indic*. Ag. Rept. 1872 p. 127. (Hym)
- Calliphora vomitoria*. (Dip.) L. injure meat by depositing eggs on it. which hatching to maggots.
 { destroy it rapidly. Ag. Rept. 1872 p. 132. fig. 20. SS. N/21. (Dip)
- Calocoris*. (*Capsus*) *bimaculatus*. (Hom.) common on weeds in Maryland. Ag. Rept. 1875 p. 125 fig. 32.
 { SS. 1/10 (Hom)
- Caloptenus (Abridium) femur rubrum*. (Orth.) Red legged grasshopper of the eastern States.
 { very destructive to garden, & field crops, when numerous. injure fruit trees, grass.
 { Ag. Rept. 1866 p. 24. — 1867 p. 65. fig. — 1870 p. 76. fig. 32. fruit trees: — 1871 p. 78. fig. 12.
 { mere mention — 1872 p. 121. — 1873 p. 55. — 1874 p. 157. fig. 8. Remedies. — &c.
 { SS. V/22. VIII/2. (Orth)
- Caloptenus*. *spurius*. (Orth.) Halfpenny — Rocky mountain, or Western grasshopper Ag. Rept. 1866 p. 29.
 { exceedingly numerous & destructive in the extreme western states, & Rocky mountains
 { said not to be found in the east. general notes. — 1867 p. 65. — 1870 p. 76. fig. 31.
 { habits remedies &c. — 1871 p. 78. fig. 11. m. m. — 1872 p. 121. Localities injured. — 1873 p. 155. m. m.
 { 1874 p. 126 186 fig. 9. Localities injured. Colorado. Neb. Kans. Tex. &c. latest remedies. habits
 { History, &c. SS. VIII/1 & young XIII/15. (Orth)
- Caloptenus femur rubrum*. It is attacked by a small red mite. see *Antonia locustorum*.
 { Ag. Rept. 1874 p. 38 (see also *atomus*)
- Calosoma* ? (Col.) L. *predatorius*. Ag. Rept. 1865 p. 91. (Col)
- Calosoma calidum*. (Col.) Rathvon in Ag. Rept. 1861 p. 591. I & L. fig. 6. destroy caterpillars & other
 { insects. — 1866 p. 39. — 1868 p. 79. fig. 3. destroys army worm *Scenania unipuncta*
 { extranea. — 1874 p. 123. destroys Colorado potato bug. *Chrysomela (Lycophora)*
 { *decomata*. SS. I/3. 1/10. 11. & D/2. (Col) (Ins. spotted with golden dots)
- Calosoma scrutator*. (Col.) L. I. destroy other insects. Ag. Rept. 1861 p. 592 — 1866 p. 39
 { 1868 p. 79. (no fig.) SS. 1/2 (Col)
- Calosoma Micoxi*. (Col.) Rathvon in Ag. Rept. 1861 p. 592 m. m. (Col.)
- Calosoma* (Col.) (Europe) destroy other insects. Ag. Rept. 1865 p. 91. (Col)
- Comptotheria* (Col.) error! should be *Comptotheria*. (*Omalophila*) *sericea* (Col)
- Camel Crickets. see *Mantidae*. (Orth.) Ag. Rept. 1874 p. 133. Orth. SS. 11 plate
- Campyconura*. (*Capsus vitticornis*. (Het.) destroy the Grape vine leaf hopper. incorrectly called
 { the Grape vine Thrush. *Erythronura ulidis* (see Hom.) Ag. Rept. 1871 p. 237. found on Oak
 { but destroys the grape vine leaf hopper — 1875 p. 125. fig. 30. SS. VIII/8. (Het)
- Canker worm. *Anisopteryx vernata*. (Lep.) L. destroy foliage of Apple-plum, Cherry &c. Ag. Rept.
 { 1864 p. 534. Remedies &c. — 1866 p. 43. — 1870 p. 65. fig. 49. 1871 p. 123. Localities injured.
 { SS. L. XVIII/7. Ins. LXV/16. 17. (Lep)
- Cantharidae*. *Cantharides*. (Col.) Blister or potato flea (as some of our native species. are used for
 { blisters (see Blister) see also *Cantharis*. *Epicauris*. *Syllis*. *Macrolabis*. *Pomphobea*. &c.
 { remedies used Ag. Rept. 1859 p. 103. — 1863 p. 275. V 569. — 1866 p. 39. — 1868 p. 105 SS. (Col)
 { J. G. Love

- Cantharus, atratus* (Horn) see *Eucanta. pennsylvanica* Ag. Rep. 1868, 1869. JS. XV 10 2-2
- Cantharus, curvica* (Horn) *C. fabius* see *Manulius unicolor* Ag. Rep. 1862, 1863, 1864, 1865. JS. XV 10 2-2
- Cantharus, marginatellus* see *Epirasta curvica* Ag. Rep. 1864, 1865. JS. XV 10 6-2
- Cantharus, singula* Col. Ag. Rep. 1865, p. 183. Pl. III. fig. 3. *frugalis* also *frugalis*, 1862, 1863.
- see *Eucanta* JS. XV 10 11-2
- * *Cantharus, curvica* (Col.) *C. curvica* notated in Horned Ag. Rep. 1864, 1865. JS. XV 10 2-2
- Cantharus, loricatus* (Col.) Ag. Rep. 1871, p. 16, fig. 7. injures potatoes, remedy found from effects of
 { substitutes see *Eucanta* JS. XV 10 8-10
- Cantharus, venustior* (Coker, Col.) Ag. Rep. 1866, p. 20. D. after fig. 10 in more, but on Col.
 plates. Rose, border, Col.
- Cantharus, mutata* Col. Ag. Rep. 1862, p. 60. m. n. 1865, p. 60. - 1868, 1869, fig. 25. I suppose, place of
 potatoes, injures. 1871, p. 16, fig. 7. remedy found from effects of
Cantharus, laevis, violaceus, viridis, see Ag. Rep. 1865, 1866, 1867, 1868. direct notes could tell
 of change in which they deposit two eggs in hole in the earth. common name found bag
 from near rail of calling the hole "wormhole" or "cotton hole" 1868, 1869, fig. 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
- Carnicorn, luteus* Col. Ag. Rep. (Horned) 1864, 1865. see also *Longicornis*.
- Cerid, l. maculatus*, (Horn) on weeds 1865, p. 12, fig. 32. see *Calceid*. JS. 110, 1865.
- Cephus, contractus* (Horn) frequent weed, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2960, 2961, 2962, 2963, 2964, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981, 2982, 2983, 2984, 2985, 2986, 2987, 2988, 2989, 2990, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 2999, 3000, 3001, 3002, 3003, 3004, 3005, 3006, 3007, 3008, 3009, 3010, 3011, 3012, 3013, 3014, 3015, 3016, 3017, 3018, 3019, 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3518, 3519, 3520, 3521, 3522, 3523, 3524, 3525, 3526, 3527, 3528, 3529, 3530, 3531, 3532, 3533, 3534, 3535, 3536, 3537, 3538, 3539, 3540, 3541, 3542, 3543, 3544, 3545, 3546, 3547, 3548, 3549, 3550, 3551, 3552, 3553, 3554, 3555, 3556, 3557, 3558, 3559, 3560, 3561, 3562, 3563, 3564, 3565, 3566, 3567, 3568, 3569, 3570, 3571, 3572, 3573, 3574, 3575, 3576, 3577, 3578, 3579, 3580, 3581, 3582, 3583, 3584, 3585, 3586, 3587, 3588, 3589, 3590, 3591, 3592, 3593, 3594, 3595, 3596, 3597, 3598, 3599, 3600, 3601, 3602, 3603, 3604, 3605, 3606, 3607, 3608, 3609, 3610, 3611, 3612, 3613, 3614, 3615, 3616, 3617, 3618, 3619, 3620, 3621, 3622, 3623, 3624, 3625, 3626, 3627, 3628, 3629, 3630, 3631, 3632, 3633, 3634, 3635, 3636, 3637, 3638, 3639, 3640, 3641, 3642, 3643, 3644, 3645, 3646, 3647, 3648, 3649, 3650, 3651, 3652, 3653, 3654, 3655, 3656, 3657, 3658, 3659, 3660, 3661, 3662, 3663, 3664, 3665, 3666, 3667, 3668, 3669, 3670, 3671, 3672, 3673, 3674, 3675, 3676, 3677, 3678, 3679, 3680, 3681, 3682, 3683, 3684, 3685, 3686, 3687, 3688, 3689, 3690, 3691, 3692, 3693, 3694, 3695, 3696, 3697, 3698, 3699, 3700, 3701, 3702, 3703, 3704, 3705, 3706, 3707, 3708, 3709, 3710, 3711, 3712, 3713, 3714, 3715, 3716, 3717,

- Ceratonia amyntor*, (*quadricornis*, Syn) (Lep.) Royal Walnut moth, the caterpillar feeds on Elm & Linden. It is infested with small *Schnemann* flies the larvae of which make cocoons agglutinated together like honey comb. SS. pl. 1/1 (Hym.) *C. amyntor* SS. LXIII, p. 14/1 (Lep.) see Ag. Rep. 1866 p. 12.
- Cercopis bicincta*, (Hom.) Found on meads, Brambles, and grass. Ag. Rep. 1876 fig. 23 SS. 1/13 (Hom.)
- Cercopis obliqua*, (Hom.) Frequents black alder. Ag. Rep. 1876 p. 29. see *Clastoptera*. SS. 11/15 (Hom.)
- Cercopis proteus*, (Hom.) frequents cranberry. & Blackberry bushes. Ag. Rep. 1876, fig. 32. see *Clastoptera* SS. 11/15 (Hom.)
- Cercopis quadrangularis* (Hom.) frequents grass & brambles. Ag. Rep. 1876, fig. 24 see *Aphrophora* SS. 1/35 (Hom.)
- Cenostoma brassicella*, see *Platella limbipennis*. (Lep.) caterpillars eat Cabbages. It is itself destroyed by a small *Schnemann* fly. Ag. Rep. 1866 p. 41 (Hym.) feeds on Cabbages. 1877 p. 92, fig. 16. *Platella limbipennis*. SS. XX/23 & LXVIII/30.01 (Lep.)
- Cneda bubalus*, (Hom.) Buffalo tree hopper, perforates a row of small holes. Lengthwise of the twig in fruit trees. Ag. Rep. 1866 p. 360. — injures twigs of Apple, peach, grapes, & willows. SS. 1/29, 11/32. (Hom.)
- Cneda discors*, (Hom.) injures twigs of apple, Peach, & Grapes, as above. Ag. Rep. 1876 fig. 16. SS. 1/27 (Hom.)
- Cetoninae*, (Col.) Ag. Rep. 1861 p. 601. & 1863 p. 274. *Cetonini*, (Col.) m.m. Ag. Rep. 1868 p. 89. (Col.)
- Catonina*, (Col.) Ag. Rep. 1861 p. 601. & 1863 p. 298. (Col.)
- Cetonina hirta* (Col.) Europe. Ag. Rep. 1868 p. 90 injures of Apricot
- Cetonina*, (*Euryomia*) *indica*, (Col.) Ag. Rep. p. 96, pl. VIII fig. 10. frequents Cotton bolls. — 1863 p. 58, cat. into fruit of peaches, & feeds upon the sap of trees. remedies, &c. see *Euryomia*. SS. 1X/27 (Col.)
- Cetonina*, (*Euryomia*) *melancholica*, (Col.) dark shaded *Cetonina* of L. J. B. on Cotton bolls. Ag. Rep. 1856 p. 61. { 1855 p. 96 pl. VII fig. 9. & 1868 p. 89. frequent bolls of cotton. see *Euryomia melancholica* SS. XXIV/30 (Col.)
- Cutorhynchus P. affinis* (see also *Phyllobius*?) (Col.) L. eat out blister like spots in leaves of tulip poplar { cocoons formed in the blister like spot, between the outer cucules of the leaf. Ag. Rep. 1870. p. 68, fig. 11. SS. XL/18 (Col.) (Pupa formed in a cocoon).
- Cutorhynchus macula alba*, (Col.) Europe. found in poppy heads. Ag. Rep. 1866, fig. 90. (Col.)
- Chaffers. see *Sachnosterna*, *Melolontha*, &c. (Col.)
- Chalcididae, (Hym.) on Orange Cecus, or scale insect. Ag. Rep. 1862, p. 112, 8. (Hym.)
- Chalcis? (Hym.) destroys the larva of *Chrysobothris femorata*, (*Syn calcarata*) (see *C. flavicollis*) { in Apple & Oak wood. Ag. Rep. 1866 p. 62. as *Chrysobothris flavicollis*, SS. XI/7 (Col.)
- " — destroys; Cranberry gnāt, *Cecidomyia*, Ag. Rep. 1868 p. 172 m.m. & 1869 p. 207. (Hym.)
- " } " *Anthonomus sulcatus*, (Col.) on Cranberry weevil Ag. Rep. 1869 p. 207 "
- " } example *Chalcis flavipes*, SS. III/22 (Hym.)
- Chalcis? Parasitic in *Cecidomyia destructor*, or *Hessian fly* (Lep.) Ag. Rep. 1872, p. 126. (Hym.)
- Chalcophora liberta*, (Col.) L. feed in Pine wood. Ag. Rep. 1868, p. 91, 113. SS. XI/19 (Col.)
- Chalcophora virginica*, (*virginensis*) (Col.) Ag. Rep. (Hatchers) 1864 p. 53, fig. 53. injures wood of { Pine. — 1868 p. 91, fig. 89. — *C. virginensis*, SS. XI/19 (Col.)
- Charancon*, d'argente, (Col.) French common name for *Polydrosus sericeus*. Ag. Rep. 1863 p. 79. (Col.)
- " de grosveller, (Col.) " " *Polydrosus planifrons* " " "
- " } destroys grasshoppers. (Col.)
- Chauliognathus americanus*, (Syn *pennsylvanicus*) Ag. Rep. XII/123: see *C. pennsylvanicus* the { old and more common name. (Col.) *C. americanus* SS. XI/12 (Col.) of Oratch
- Chauliognathus marginatus*, (Col.) Ins. frequents flowers of Cotton, &c. on the pollen of which it is said to feed. Ag. Rep. 1855, p. 89, pl. VII, fig. 10. & 1868 p. 86. SS. XI/12 (Col.)
- Chauliognathus pennsylvanicus* Col. I. frequents flowers of cotton &c. feeding on pollen. Ag. Rep. 1854 p. 60 { 1855, p. 89, pl. VII fig. 9. — 1868, p. 96, fig. 129. *C. americanus*, SS. XII/11 (Col.)
- Chermes* see *Coccus ilicis*, used as a dyeing material, (Hom.) feeds on Evergreen Oak (Europe) { Ag. Rep. 1866 p. 33 example *Chermes coccineus* 11/13. (Hom.)
- Chermes*, Pear, (Hom.) see *Psylla pyri*. Ag. Rep. (Achil.) 1864, p. 314. SS. 11/10. SS. 11/10

- Cherry, or Pear, slug, *L.* injures the foliage. Remedies. *Ag. Rep.* 1864, p. 547. see *Selandria*.
 { *ceresi*. *Ag. Rep.* 1860, p. 315. eats parenchyma, of leaf of Pear & cherry. — 1870, p. 78.
 fig 34. *L.* injures fol. of pear & cherry. see *Selandria ceresi* *IS. IX/89.* *Hym*
- Chesnut weevil, (Col) *Ag. Rep.* (Rathvon) 1861, p. 606. *L.* feeds in Chesnut, &c see *Balaninus*
 { *Sayii nasutus*. *IS. XVI/10.* (Col)
- Chigoo, or Tigger, see *Sarcophylla penetrans*, a species of Flea, the larvæ of which hatching
 { in the flesh of mankind, form troublesome sores. the insect generally prefers the
 foot, & buries itself under the toe nails. Remedy. *Ag. Rep.* 1872, p. 136. see *Sarcophylla*
penetrans. *IS. XIV/10.* (Dip.)
- Chilocorus* (*Coccinella*) *bivulnerus*, (Col) destroys the coccus, of the Orange, &c. *Aspidiotus Gloveri*.
 { *Ag. Rep.* 1858, p. 261. — 1863, p. 579. — 1865, p. 91. destroys, bark or scale insects, on
 pine, *Aspidiotus punifoliae* (Hym.) 1866, p. 39. destroys bark loc. see *Chilocorus*
bivulnerus *IS. XXV/36.* (Col)
- Church bug, (Hb) see *Micropus* (Blissus) *Leucopterus*. *IS. II/16.17.* (Hb)
- Chinese method of taking honey. *Ag. Rep.* 1860, p. 91.
- Chion (*garganicum*) *cinctus*, (Col) — *Pickering boner* (Rathvon) *Ag. Rep.* 1861, p. 674. Eat
 { wood of Hickory, Apple, &c & is said to have even eaten through lead. see *Chion*
cinctus *IS. X/3.* (Col)
- Chilocatus*. *Seripennis* (Orth) *Ag. Rep.* (Rathvon) 1862, p. 387. feed grass, & herbage. see
 { *Stenobothrus*. *IS. VI/15.* (Orth) (Some resemble immature specimens.)
- Chlorops*. (Dip) *L.* injures grain, wheat, Barley, rye, &c. *Ag. Rep.* 1872, p. 134. — in Europe injures
 { grain, by destroying the central shoot. 1872, p. 134. (Dip)
- Chlorops* *pic.* Europe (Dip) injures Barley in Northern Europe to the amount of \$100,000 in
 { one year the larvæ live in the grain causing it to shrivel up. *Ag. Rep.* 1872, p. 134 (Dip)
- Chlorops taeniosus*, (Eus) (Dip) *L.* injures wheat, & Barley, causing a swelling of the joint,
 { called "Goat" & is destroyed by *Ciclinus niger*, (Hym) *Chlorops taeniosus*, *IS. X/1.* *Hym*
- Chlorops*. *Dip* in Europe is destroyed by a *Phaenocarpa* (Hym)
- Chrysobothris calcarata* — (Col) — see *C. floridula* (Col) the larva. Flat headed Apple borer.
 { *L.* injures apple, peach, & oak, by boring in the wood. *Ag. Rep.* 1868, p. 92 & 1870, p. 67.
 see *Chrysobothris floridula* *IS. XI/1.* Col (Fed. also, wood of white oak)
- Chrysobothris dentipes* (Col) *L.* feed in Oak wood, "Tooth Egged Buprestis" *Ag. Rep.* 1868, p. 92
 { *IS. XI/18.* (Col)
- Chrysobothris femoralis*, (Col) *Ag. Rep.* 1861, p. 608. m.m. Apple Buprestis, or thick legged Buprestis.
 { *Ag. Rep.* (Chlor) 1860, p. 319. *L.* bor into the wood of Apple. — with remedies. &c.
 1866, p. 42. in Oak & apple wood & is destroyed by a *Chalcid*, (Hym) — 1868, p. 92 fig 97
 in wood of Apple, peach, & oak. (Thick legged Buprestis. — 1870, p. 67. *Chrysobothris*
femoralis *IS. Sur C/5.* XI/15 var *Alabama*. & XII/12. (Col)
- Chrysobothris Harrisii*, (Col) *L.* feed in White pine wood, *Ag. Rep.* 1868, p. 92. *IS. XXXIII/33.* (Col)
 " in Maple (Col) in Maple *Ag. Rep.* 1870, p. 67. Remedy soap. (Col)
- *Julus guttata* (Col). see *Melanophila*, *Ag. Rep.* 1868, p. 97. *L.* probes feet in wood of white pine
 { *IS. XI/9.* (Col)
- Chrysomela* (Col) Europe. *L.* feed on foliage of trees shrubs, & herbage, &c. *Ag. Rep.* 1865, p. 91. — 1863, p. 308 (Col)
- Chrysomela decimlineata* (Col) British see *Doryphora 10. lineata*. or the Colorado Potato bug.
 { 10 lined speckman &c.
- Chrysopa*. or Lace wing fly. (New) Larvæ feed on Aphides or plant loc. &c. *Ag. Rep.* 1864, p. 565
 { example. *IS. V/3.* (New) (also 1866, p. 40.)
- Chrysopa*. (New) *L.* destroy the eggs of *Anthomyia ceparum*. (Eastern Onion fly) (*Ag. Rep.* 1872, p. 133, New)
- Chrysopa*. *floridulunda*. *L.* once mention. *Ag. Rep.* 1870, p. 514. once mention. (New)
- Chrysops*. (Dip.) Golden eyed forest fly. "Ear fly of the west." from its habit of attacking
 { horses, chiefly about the head, & ears. *Ag. Rep.* 1863, p. 276. — *Is* story, or bites
 horses &c & sucks their blood. *Ag. Rep.* 1872, p. 139. fig. 16. example *Chrysops irritatus*
IS. XI/18. (Dip.) *J. Glover*

- Cicada*. { Horns said to produce the manna of the briggiats, by puncturing the flowering oak.
Ag. Rep't 1866, p. 38. — 1866 p. 43. m.m. (Horn)
Cicada. or harvest fly. erroneously called Locust. Ag. Rep. (Rathvon). 1862 p. 386. — is destroyed
& carried to its nest, or hole by a hornet. (*Syrus Speciosus*) Hyem. 11/19 JS) to serve as food
for its larvae. Ag. Rep. 1866. p. 48. — It is also destroyed by *Anabrus simplex*.
on the Utah cricket. 1871. p. 79. fig 18. (With.) JS. XIV/5. —
Cicada. The Boll. of eggs of poultry are said to be nearly white, when fed on Cicadas—Ag. Rep. 1866 p. 70.
— 1868 p. 35. preservation as specimens. — 1869 p. 514. good history in W. Mo. Ag. Rep.
— 1872. p. 122 in Va. m.m. — 1875 p. 70. — 1862 p. 386. 17 years. m.m. (Ortch.)
Cicada. *pumosa* (Ortch.) common Harvest fly. vulgarly called Locust. Lar. two under ground
& feed on subterranean roots. Ins. cuts incisions in branches of Fruit & forest trees,
in which they deposit their eggs. the larvae when hatched fall to the ground, &
feed up'n roots. Ag. Rep. 1876. fig 1. JS. V/5. Horn.
Cicada septendecim (Horn) seventeen year Locust. (or harvest-fly) m.m. Ag. Rep. 1859 p. 554.
{ Insect so called from its appearance in certain localities in immense swarms.
regularly every seventeen years. The habits of the larva & insect are much the
same as *C. pumosa*, & it injures Fruit & forest trees by making incisions in the
twigs, & in which to deposit its eggs. — 1866 p. 557. — 1862 p. 386. — 1866 p. 29.
1867 p. 67. fig. with full article. — 1868 p. 466. — 1876. fig 2. L. JS. V/10. Horn.
Cicindelidae (Col) I & S destroy other insects. Ag. Rep. 1854 p. 62. habit predaceous. 1866 p. 79.
Cicindelidae (Col) food, habits, &c. Ag. Rep. 1861 p. 589. — 1863 p. 214. — 1865 p. 91. — 1862 p. 79. 114. (Col)
{ Example. *Cicindela vulgaris*. JS. V/19. (Col)
Cicindela dorsalis (Col) Ag. Rep't. (Rathvon) 1861 p. 590. destroys other insects. frequents coasts, of bays.
Beads, color almost white, or very light. JS. V/15. (Col)
• *punctulata* (Col) habits predaceous. feeding on other insects. Ag. Rep. 1861 p. 590. JS. V/16. (Col)
• *sagittata* (Col) Ag. Rep. (Rathvon). 1861 p. 590. destroys insects. JS. V/20
• *vulgans* (Col) Ag. Rep. (Rathvon) 1861 p. 589, fig 1. " " 1868 p. 79. fig 1. JS. V/19. (Col)
• ? (Col) Ag. Rep. 1834 p. 62. pl. 8. destroys insects. in Cotton fields. (Col)
• Larvae destroy root eating larvae & other insects Ag. Rep. (Rathvon) 1864 p. 590. fig 2. (Col)
• method of catching the larvae, which inhabit holes in the ground. & feed on other insects
- which either crawl over their burrows, or fall into it. see *Petrachia (Cicindela) virginea*
~ JS. V/22, 23, 24. (Col)
Cimex lectularius (Linn) *lucorum* (Kol) common bed bug. Ag. Rep. 1865 p. 127. fig 3 & somewhat magnified
JS. III/9. (Hol) (see also Cimicidae 1868/36)
Cistela cerambycides (Col) Swamps L. live in oak. Ag. Rep. 1868 p. 101. Col
Cistela seneca (Col) Ins frequent flowers. Ag. Rep. 1868 p. 101. fig. 165. see *Cystids*. JS. XV/2. Col
Cistelidae (Col) I said to reside in wood. Ins in flowers. Ag. Rep. 1868 p. 101. (Col)
Claviger foveolatus (Europe) (Col) found in nests of the yellow ant. Ag. Rep. 1868 p. 52. p. 104. (Col)
Clasoptera (*Ancopsis*) *obtus* (Horn) Ag. Rep. 1876 fig 29. frequents Black Alder JS. VI/18. (Horn)
Clasoptera (*Ancopsis*) *protens* (Horn) sucks sap of plants. - (by some called spittle insect) Ag. Rep.
1869 p. 207. — 1876 fig 28. frequents clambery & blueberry? *Clasoptera* JS. VI/16. (Horn)
Cleonymus chrysomphus (Hyem) destroys Caterpillars of *Clasocampa* (*decipiens*) americana (Eps)
Ag. Rep. 1866 p. 42. (Hyem)
Cleri (Col) Ag. Rep. 1868 p. 97. p. 106. in Europe destroy bees. (Col)
Cleridae (Col) said to destroy insects in wood. Ag. Rep. 1866 p. 39. (Col) Lar. predaceous.
feeding on the larvae & wood eating insects. 1861 p. 98. — 1866 p. 39. — 1866 p. 97. 109. 114. 207
Clerus (Col) I frequent flowers feeding on honey I feed upon the larvae of was & are very
destructive. Ag. Rep. 1868 p. 97. p. 106.
Clerus alvearius (Col) Europe destroy mason bees (Hyem) Ag. Rep. 1868 p. 97. 114. JS. Lav A 35 (Col)
" *Opacicus* " " " hive bees " " " " "
" *(Thanasimus)* *formicarius*. Eu (Col) L. feed on the grubs of wood boring insects in fir
Ag. Rep. 1868 p. 97. JS. Green.

Clerus humeralis. (Col) see Hydnocera .. mon. Ag. Rept. 1868, p. 97. Hydnocera. 38. XII/30 (Col)

Clorus. ichneumonaeus. (Col) Ag. Rep. (Rathvon) 1861. p. 597. pgs 25, 26, 27. L-parasitic in nests of was.
Ins. feeds on pollen of flowers. see Thanesimus 33 XII/22 (Col)

Chalc. beckeri (Col) *Cratonychus brevicornis*? (Col) Alg. Rep. (Rathbun) 1864 p. 600. I feed in wood of oak & other trees, see *Melanotus communis*. ♂♂ x/4 (Col?)

Climbing cricket. (Orth.) see *Acanthus*, Ag. Rep. (Rathvon) 1862, p. 381. (Orth.)

Clasticampa decipiens, see *C. americana* - Ag. Rep.: 1889: 389, makes nests in Apple trees, in early summer 1886, p. 42, & is destroyed by *Cleonus maculicampae* (*Hymin*) destroys foliage of Apple, Cherry, & plum: see *Clasticampa americana* D.S. eggs C1/9. LxII/9. In. LVIII/1. C1/9. (See)

Cladocampa americana [Lep.], American Lackey moth, *Ag Rep.* 1860, [32]. (Walker) L forms tent like
cups, or nests, on trees and destroys the foliage of Apple trees. remedies, &c. — 1864 p. 557. L
forms large cones like nests, in the forks of Apple & cherry trees. remedies, &c. — 1866 p. 29.
— *Ag Rep.* 1870, p. 83, fig #5. Tent caterpillar, of Orchards, injures Apple foliage &c.

Chrysomela americana 33. eggs 8/19. Lxii/9. In Lxii/1. 8/9. (Sep)

Cloaked Desmocerus. Col Desmocerus palliatus, cyanus, Syn. Elder boxer, 2 lines in pitch. 53.XX/3 (Col)

Clostera americana (Lep.) see Ichthyura. inclusa Ag. Rep. 1864, p. 552, L fed on foliage of Potamo. & willow. Ichthyura inclusa. DG. vi/16 & LVII/3. (Lep.)

Clothes moth. *Tricla pleurostella*, Lef. L. eat clothing, furs, feathers. & Ag. Crisp 1864 p. 556. remedies
Pg. 441/14 (Sep)

Clover worm, *Asopia costalis*. (*Pyralis clivis*) L. Eats clover, when dry in stacks or bays.

Ag Rep. 1867, p. 73. - Gold fringe math. 1870, p. 84 fig. 48. Asopha costalis DG LP LXXIII/25
 on XX/14 XLVIII/2. 6/1/22. (2 sep)

Club foot, in Cabbage, said to be caused by a small fly, *Anthomyia brassicae*, Dip.

Cyllocus (*Arhopalus*) *flavusculus* (or *pectus*) (Col.) Locust. bor. Ag. & Rep. 1865, p. 89. Larvae very destructive to the wood of Locust. 1870, p. 73. fig. 23. var. *Cyllone robiniae*. XVII/25. Sci. (Col.)

Clytus pubescens (Col) s. C. sagittatus. Ag. Rep. 1870 p 73 fig 24. Col in pine wood s. Xyotrechus 33 Kb/42

Clytus. robiniae (Col.) see Cyllene. Ag. Rep. 1863. p 275. — 1868. p 315. v. 9. see Cyllene robiniae XVII/25. J. G. Koe.

Cobalt. used to poison insects, see poisoning &c.

Coccidae, scale insects or bark lice; Ag. Rep.^o 1863. p. 275. - 1868, p. 375. 4^o see also Coccus. Aspidiotus 7^o

Coccinella (15 punctata) (Col) Ag. Rep. 1854 p. 84, pl. 8. destroy the cotton Aphid. (Horn) see *Annals*.
syn also *Musca*. IS. XXV/37. (Col)

Coccinella, ladybird, Col. destroys Aphides on Cotton Ag Rep. 1855 p 173 pl x fig 6. same as above
see *Anatis quindecimpunctata* 39 xxv 37. Col.

Cocemella? (Col.) *Ag. Raf.* 1857, p. 124. — 1858, p. 261. — 1864, p. 433. — 1871, p. 74 destroys *Chrysomela* (*Toryphora*) 10 lineata. (Col.) — 1872, p. 120, m.m. — 1872, p. 127, destroys, *Diplosis tritici* the wheat midge, or red weevil. (Dip.) 1873, p. 154, destroys eggs of *Chrysomela 10 lineata*. (Col.)

Coccinella - munda [sic] Ag. Rep. destroys *Chrysomela 10 lineata* Ag. Rep. 1874 p. 123 see *Cycloneda oculata*
 { 33. xxxv/41. Coe.

4 — novemnotata " " " " " " " " " / 133. 33. KX5/35 40 1/4 XL/13 Col

Coccinellidae (Col) destroy *Aphididae*, scale insects, & have even been taken in the act of eating into a freshly formed & yet soft chrysalis of a Lepidopterous insect Ag Rep 1863 p 274 — 1865 p 91
 & chrysalis. — 1866 p 39. 8½ (Col)

Coccus aceris-corticis. (Hom) acericola? Secanum maderae? Maple scale insect resembles a mass of cotton partially covered with scale common on Maple limbs. see Secanum aceris-corticis.
 59. 1/3. (Ag Rep 1876 fig. 53)

Coccus. baphuca. (Hom) an insect used for dyeing. by the Romans. & Greeks. *Uq. Rep.* 1855. p. 6.

Coccus, cacti (cochinifer) (Hom) 1855, p. XXXIV. — 1857, p. 59. — 1866, p. 53 hab. So. America,
cochineal insect. used for dyeing crimson. D.C. III/24.

Coccus cochiniellifer. Hom. Ag Rep^t 1868 p 268 see C. cacti.

x Coccus. ceriferæ. (Hom) (China) from insects Ins produces wax Ag Rep. 1866, p 33. (Hom)

Coccus? bark louse. (Hom) Ins on bark of Pear & ash. Remedies. Ag. Rep. (Uhler) 1860, p. 312-314 (Hom)

39 Lover.

- Coccus citricola*. (Hom.) see *Aspidiotus*. injures foliage of Orange Lemon &c see *Aspidiotus*. IS. PL. V. (Hom)
- Coccus conchiformis*. see *Aspidiotus*. Aphididae shell bark louse. — scale insect. or Oyster shell bark louse. injures Apple. Apricot. Alac. cherry, crab, currant, pear, plum, &c. See Ag. Rep. 1860. p. 319.
- Coccus*. Aspidiotus. IS. III/22. (Hom)
- Coccus Gloverii* (Hom.) Orange scale insect. injures Orange, Lemon. Ag. Rep. 1855. p. 115. pl. x. fig. 5.
 { see *Aspidiotus Gloverii* PL. IV. IS. (Hom) it is destroyed by *Chilocorus binivittatus*. Col. Ag. Rep. 1863. p. 579.
- Coccus harrisii* (Hom.) native Apple bark louse or scale insect. (Hom) Ag. Rep. 1867. fig. 50. see IS. 111/22. (Hom)
- Coccus hesperidum* (Hom.) injures foliage & bark of Orange, & Lemon trees. Ag. Rep. 1876. fig. 52.
 { see *Secanium hesperidum*. IS. p. VI. (Hom)
- Coccus ilicis* (Hom.) — see Ag. Rep. 1855. p. 61. (Europe) Cherries, furnishes crimson dye. Ag. Rep. 1866. p. 33. (Hom)
- Coccus laeca*. (Hom.) Asia. feeds on Indian fig. (*Ficus indica* & *F. religiosa*). it produces the so called "Gum lac" of the Druggists. Ag. Rep. 1866. p. 34. — 1868. p. 269.
- Coccus manniharus* (Hom.) produces tamarisk manna, by puncturing Tamarisk trees, near Mount Sinai, & elsewhere. Ag. Rep. 1870. p. 184. (Hom)
- Coccus pinicortis*. (Hom) Ag. Rep. 1876. fig. 52 a white scale in tufts of. IS. III/22. (Hom)
- Coccus pinifoliae* (Hom) scale insect. on pine leaves, or needles. Ag. Rep. 1876. fig. 51. see *Aspidiotus*
 { IS. III/23. (Hom)
- Coccus* on pine in Europe is destroyed by *Brachytarsus varius* (Col) IS. D/2 Ag. Rep. 1865. p. 91. (Hom).
- Coccus on pine* (PLS) (Hom) is destroyed by *Chilocorus binivittatus*. (Col. Ag. Rep. 1863. p. 579. IS. XXV/36)
 { Ag. Rep. 1865. p. 91. see *Aspidiotus pinifoliae* IS. III/23. (Hom)
- Coccus polonicus* (Eu.) (Hom) feeds on *Eriogonum*. & produces a red dye. (Hom) Ag. Rep. 1866. p. 34.
- Cochineal insect. *Coccus cacti*. (Hom) feeds on a species of cactus. & produces a red dye was
 { once introduced. near Fernandina. Fla. (Hom) IS. III/24.
- Cockchafer. see *Melolontha*, *Saccharostoma*, *Phyllophaga*, &c.
- Cockroach. see *Blattella*, *Ectobius*, *Naupholetia*, &c. (Orth)
- " destroyed by *Sphax*, *Schneumon*, & *Eulophus*. (Hym) Ag. Rep. 1862. p. 376. (Kathvon) by exsults
 { (Orth) 1862. p. 388. & poisoned by *Phytolacca decandra*. (Poke Root) Ag. Rep. 1873. p. 157.
 { for other remedies see p. 1861. p. 564. (Orth)
- Cockroach. small or German see *Ectobius germanica* (also vulgarly called the Croton bug)
 { IS. I/4. (Hom)
- Codling moth. see *Carpocapsa pomonella*. (Lep.). IS. I/3. XV/8. LXVIII/7.8. &c.
- Colletes* (*Stenotus*) *subfasciata* (Hom) frequents black alder, and blackberry. Ag. Rep. 1876. fig. 3.
 { see *Colletes*. IS. II/36. (Hom)
- Colletes inaequalis* (Col) injures the fruit of the grape vine. by eating into it. Ag. Rep. 1867. p. 72.
 { 1870 p. 70 fig. 12. see *Meqretes* IS. XXXVI/12. (Col)
- * *Colletes niger* (Hym) destroys *Chlorops tomiopis*, a fly causing a swelling in the joint of wheat.
 { barley, called gout. (Europe). (Dip.) See 1872. p. 154. (Hym.)
- Canocara oculata* (Col) *Dorcatoxema similis* Say. Sym. Its found on fungi, puff balls. Ag. Rep. 1868. p. 79.
 { see *Canocara oculata* IS. XXXVII/8. (Col)
- Canocara rubis* (Hym) destroys the of *Agavea*, *Trochilium apuleiformis*, the currant worm Sep.
 { Ag. Rep. 1866. p. 81. (Hym.) (*Aegeria trochiliformis*, Sep. IS. XLIII/6. (Sep))
- Colaspis latissima* *strigosa* of W. S. (Col) Ag. Rep. 1865. p. 91 injures foliage of grape in Europe. (Col)
- Colaspis strigosa* (Col) injures foliage of grape. Ag. Rep. 1867. p. 71. (Col)
- Colaspis punctatus* (Col) in decayed cotton bolls. "probably feed on minute insects." IS. IV/20. (Col)
 { " in Cotton bolls & decaying ears of maize. Ag. Rep. 1868. p. 83. fig. 30. " " "
- Colaspis* (on beetles) Ag. Rep. 1864. p. 214. — 1861. p. 588. — 1862. p. 572. — 1863. p. p. 214.
 { 1865. p. 89. — 1866. p. 164. 166. 306. — 1869. p. 266. see *Sisal hemp*. — 1872. p. 127. (Col)
- * *Colaspis*? an insect (order & form not mentioned) feeds upon young leaves of Juncos, or *Sisal*
 { hemp of Yucatan. — (placed provisionally amongst *Colaspis*), as one is mentioned
 { in the same article. in Ag. Rep. 1869. p. 266. in "the enemies of the *Sisal hemp*"
 { Ag. Rep.

- Colias* (Lep.). Caterpillars feed on *Clorox*, Ag. Rep. 1864, p. 548. example *Colias Philodice*. IS.
- Colias* 117. *See XXXII/1. G.H. 1864 var. 1/5 (Lep.)*
- Collops quadrimaculatus* (Col.) *Ins. frequens flavesc.* Ag. Rep. 1868, p. 96, fig. 131. IS. XII/25.
- Colorado potato bug* (properly beetle, or ten lined sparrowman) see *Chrysomela* (Lep. & Lep.)
- decom Chrysoth.* feeds on *Potato*. *Solanum*. Egg plant. 6: see Ag. Rep. 1866, p. 43.
- 1871, p. 74, fig. 4. Origin history, in creeds & remedies. 1863, p. 578 — 1864, p. 511. — 1866, p. 27.
- 1867, p. 63. — 1866, p. 79, fig. 6. 234, 301. — 1869, p. 536. — 1874, p. 65, 75. — 1871, 74. — 1872, p. 126, 121. — 1874, 74
- 1871, 122. — 1875, p. 116. 130 74. 55. see *Chrysomela* (*Doryphora*) *10 lineata* IS. XII/103 (Col.)
- Colorado potato beetle*. *falla*. see *Chrysomela* (*Doryphora*) *juncta* (Col.) Ag. Rep. 1874, p. 123, fig. 2, 3.
- 1867, p. 63 & fig. see *Chrysomela* (*Doryphora*) *juncta* IS. XXV/27. & XXIX fig. 34 Col.
- Colydiidae* (Col.) found under bark, in earth, or in fung. Ag. Rep. 1868, p. 63, 105. example *Colydium*.
- Colydium*. *See also Autonomum*. Ag. Rep. 1868, p. 83. (Col.)
- Columbaechar gnath.* (Lep.) see *Simulium columbaecharense*. Ag. Rep. 1872, p. 128. *I. hirs. horses, Callis.*
- See in Hungary* by their poisonous bites. *See Simulium*. IS. I p. A 36. Ins. XII/5 (Lep.)
- Comptosia* (*Amelopsia*) *vestertina* (Col.) *I injure foliage of Sweet briar & rose.* Ag. Rep. 1868.
- 1871, fig. 63. see *Derisio vestertina*. IS. IX/17. (Col.)
- Conocerphalus*, *ensiger* (Orth.) more mention. Ag. Rep. 1871, p. 80. IS. IV/12 (Orth.)
- Conorhinus* (*sanguisuga*) *variegatus* (Hes.) big bed bug. Insect. stings or pierces flesh of man & kind.
- Also* *derisio* *germine* bed bugs. (*Acanthia lectularia* (Hes.) IS. p. III fig. 9. 2 Ag. Rep. 1875, p. 127.
- See* *Conorhinus variegatus*. 1875, p. 131. Fig. 10. & IS. III/19. (Hes.)
- Conotrachelus* (*Chrysochoreus*) *nemophor* (Col.) or *Plum weevil*, or *Circulio*. Ag. Rep. 1864, p. 84, fig. 7.
- 1853, p. 311. — Ag. Rep. (Wheeler) 1860, p. 314. makes small crescent shaped incisions, in fruit.
- in which to deposit its egg, which hatching into a small potter maggot, like larvae.
- forming a small head, eats its way to the stone, & destroys the fruit & is exceedingly
- injurious to plum orchards. — Ag. Rep. (Rathbourn) 1861, p. 605, fig. 81. *plum weevil.*
- injures fruit of plum, Apple, & cherry. — 1864, p. 570. injures plum, melarinos, peach
- Apple, pear, Cherry, quince & walnut. & remedies recommended — 1866, p. 490. *Conotrachelus*
- shows nemophor in destructive habits & manner of injury, resembles somewhat *Acanthia*
- cupressus* of Europe (in the Paris exposition) which attacks the plum. — 1870, p. 69. *Ransom's*
- remedy of laying pieces of loose bark on the ground under the trees, described, &c.
- 1871, p. 376. only one brood annually, & recommendation, of chips or pieces of shingle laid
- under the tree under which the curculio's take shelter during cold nights.
- jumping the trees at night recommended. also a statement that three fourths of the larvae of
- Curculio* were killed by a parasitic Hymenopterous insect (*Sigalphus curculionis*) in 1869.
- (Hym.) — 1871, p. 47. remedies suggested. & parasites mentioned. *Sigalphus curculionis*
- (Hym.) — & *Ponera conotrachelus* (Hym.) — 1872, p. 123. remedies, dust, flowers
- with road dust, & sulphur. — burn leather? — The *Plum weevil* said to be
- destroyed by a Hymenopterous insect. (*Apilodius lucidus*, *Evagoras viridis*) IS. XIV/5 (Hes.) (Col.)
- Coprophora*, *cornuta*. Orth. Hesh. Para. more mention. Ag. Rep. 1871, p. 41. (Orth.)
- " " *gracilis* (Orth.) Hesh. Neph. Maranon. " " " " " "
- Coprophora* (*Coprophora*) *micronota* (Orth.) new species taken alive in the greenhouse of the
- Department of Ag. Ag. Rep. 1871, p. 80, fig. 14. IS. VIII/14
- Copris* (Col.) (by some called *Stumble bug*) Ag. Rep. 1868, p. 307.
- Copris cardinalis* (Col.) Ag. Rep. (Rathbourn) 1861, p. 600, fig. 38. form balls of excrements in which
- to deposit eggs. *Ap. 8*, on animal excrements. IS. VIII/17 (Col.)
- Copridae* (Hes.) *plum bugs*. Ag. Rep. 1868, p. 313. (Hes.)
- Coprus* (*Donocorus*) *tristis* (Hes.) squash bug. injures squashes & other cucurbitaceae by sucking
- saps, & blighting plants. Ag. Rep. 1870, p. 79. — 1875, p. 122, fig. 18. see *Anas* IS. III/114 (Hes.)
- Covimelaena* (Hes.) injures grafted cherries *Crabapple* *Strawberries* & other fruits see Ag. Rep.
- 1875, p. 116, fig. 1. example *Covimelaena atra*. IS. IX/16. Hes. 1910

- Corixa femorata* (Hbst.) eggs used as food for mankind. Ag Rep. 1866, p. 33. *habits aquatici.* (Hbst.)
- " " or *mercenaria* (Hbst.) Hab. Mexico. Ag Rep. 1875 p. 134. *aquaticus in habitis.* & the eggs when made into cakes under the name of *Huante*, and by the Mexicans, as an article of food. (Hbst.)
- Corixia interrupta* (Hbst.) *aquaticus.* Ag Rep. 1875 p. 61. destroys other insects frequently water. -
 Sg. V/4. (Hbst.)
- Corn. (Indian) see *Maire*, & sometimes used in a general sense as when speaking of wheat &c.
- Corn moth. (grain) Lep. - *Hoff* or grain moth. see *Tinia granella* Ag Rep. 1854 p. 536, remedy 1869 p. 332. & erroneously named *Heliothis* by D. J. B. Ag Rep. 1855 p. 98 pl. 1X fig. 3. Sg. C/12 (Lep.)
- Corn worm. (Lep.) *myrae mairei*, & cotton boll, & known to the planters also as the *Boll worm*.
 of Cotton. Ag Rep. 1854, p. 69, pl. 4. *Heliothis armigera*. - 1866, p. 554. Remedies.
Heliothis armigera (Syn. *unibrosus*) remedies. - 1874 p. 84. Corn worm of the north,
 & cotton boll worm of the southern states. Caterpillars, injure maize, cotton &c.
 & exceedingly destructive. *Heliothis armigera* Sg. I p. 9, XI/121. Sg. I p. 2, 84 (Lep.)
- Corynetes (Col.) more mention Ag Rep. 1863, p. 97. see also *Neoclerus*
- Corynetes, (*Neoclerus*) *rufipes* (Col.) feeds on Cheese Ag Rep. 1868 p. 97, fig. 143. *Corynetes*. Sg. XII/23 (Col.)
- Cossus, (Lep.) Larva used as food for mankind. Ag Rep. 1866 p. 38. (Lep.)
- Cotlearia, (*Arctodes*) *lanigera* (Col.) mostly *Arctodes*. (Why some as *Goldsmith's beetle*). Eats roots
 & I feed on foliage of Forest & Fruit trees Elm, pear, Poplar, Hackberry, Oak, & Willow, &c.
 Ag Rep. (Lep.) 1860, p. 315, 349. & 1868, p. 89, fig. 77. *Cotlearia lanigera* Sg. VII/17 (Lep.)
- Cotinis *Urochorda nitida* (Col.) June bug of the middle states & big eater of Florida. Insects
 feed on the sweet sap of maple beech & other trees also eat into ripe fruits figs &c.
 Ag Rep. 1868 p. 94 fig. 82. *Urochorda*. Sg. VII/14 (Col.)
- Cotton, caterpillar, or Army worm. Lep. see *Anomis xylophagae*, or later, *Aletia argyrella*, of Grote
 has injured foliage & of Cotton. *Aletia argyrella* Sg. XIV/4. Sg. X/8 (Lep.)
- Cotton, arctic, of D. J. B. Lep. is closely allied to *Arctia laxator* Ag Rep. 1855 p. 84 fig. 2, p. VII
 eats foliage of Cotton plants.
- Cotton, blight, a disease of Cotton in certain lands in Mississippi, affecting the whole plant
 by injuring the central portion of the stalk caused probably by the root-rot, penetrating
 into color and subsoil. Ag Rep. 1857, p. 125, with figures.
- Cotton, description of varieties. Indian. &c. Ag Rep. 1856, p. 255. 286. 296, &c.
- Cotton, insects Ag Rep. 1854 p. 39. - 1855 p. 64 to 115.
- Cotton, louse. (Hom.) see *Aphis gossypii*. suck sap of plants. Ag Rep. 1855, p. 68, pl. VI fig. 2. Sg. III/16 (Hom.)
- Cotton, stainer or Red bug (Hbst.) see *Pyralis conica* (*Dysdercus*) *sutinelus* (cotton stainer) stains
 cotton, when ripe on the boll, or as to damage its sale or manufacture, Ag Rep. 1853 p. 272
 1875, p. 124, fig. 99. *Dysdercus sutinelus*. Sg. I/11 (Hbst.)
- Cotton by true labor, by Mel. Sander, Helena, Miss. - made out of cotton caterpillars taken from flowers
 Report but entirely wrong as it represents a true Geometer. figure in Ag Rep. 1864 p. 90.
- Coupe boggeon French local name for *Rhynchulus latialis*, Ag Rep. 1865 p. 59. (Col.)
- Cranberry, insects injurious to the wine & fruit, by Wm. Fisk. Ag Rep. 1869 p. 207.
- " (Col.) found injuring the fruit Ag Rep. 1870 p. 86, fig. 51. (caterpillar only fig. 8) (Lep.)
- " culture, by J. A. P. White, Insects Remedies, Ag Rep. 1870 p. 526.
- " fly or gnaw. (Dipt.) *Acadomyia* injure the minute under leaves at the cut of lugs Ag Rep. 1869 p. 208.
- " stem fly. *Phaenophora identidem*, injures foliage, Ag Rep. 1869 p. 207.
- " leaf hopper, *Chalcidoptera proteus* injures vines somewhat Ag Rep. 1869 p. 207. Sg. IV/4 (Hom.)
- " weevil, *Anthonomus sativus* (Col.) injures blossoms & buds. Ag Rep. 1870 p. 207. (Col.)
- " worm or caterpillar injures plants.
- " fire worm, or Cranberry worm. Lep. *Anchylopera vacuicaria* Ag Rep. 1869 p. 207.
 as fire worm. - 1870 p. 85 fig. 58. Sg. C/1 (Lep.)
- Crane fly. (Euv) (Lep.) see *Tipula cloracea*, feeds on roots of grasses. Sg. Lar. VII/10. Sg. X/27 (Lep.)
- Cratichneumon brevicornis* (Lep.) hab. *Melanotus communis*, Ag Rep. (Rathvon) 1861, p. 600.
- " fig 59. 60. *Melanotus communis*. Sg. X/4. Sg. over.

- Craw fish, or Cragy fish. (*Astacus*) destroys young cotton plants in Mississippi. *Ag. Rep.* 1867, p. 61. *Figures*.
Cnecrotus villorus. (Col.) feeds on Cotton. *Ag. Rep.* 1868, p. 62, fig. 26. *§§. XXIX/2*. (Col.)
Crepidodora pubescens. (Col.) Flea beetle, or Cucumber flea beetle. (*Psylliodes* syn.). very injurious to young plants, by eating holes in leaves. *Ag. Rep.* 1863, p. 37. remedies: 8° see *§§. XXIV/2*. (Col.)
 Cricket. black. field. see *Gryllus*. (*Acheta*.) abbreviatus. *Ag. Rep.* Rathvon. 1860, p. 350, fig. 15.
 Cricket. house or domestic (Orth.) *Ag. Rep.* 1874, p. 142, fig. 15. habits domestic. 8°. *Gryllus* (*Acheta*)
 Cricket. domestic. *§§. VII/14*. (Orth.)
 Cricket. striped. (Orth.) It feeds on vegetable substances & unequal plants - see *Pernodius*
 " villatus. *§§. III/9, 10*. (Orth.) see also *Acheta* syn.
 " climbing tree, or white climbing tree cricket. (Orth.) *Ag. Rep.* 1862. Rathvon. p. 361, fig. 17, 18. *§§. IV/1, 2*. (Orth.)
 " female injures fruit trees, by piercing branches small limbs, & depositing eggs in the punctures. peach, apple, &c. see *Pantus nives* — 1874, p. 143, fig. 16 *§§. IV/1, 2*. (Orth.)
 Cricket. wingless. of Utah (Orth.) *Anaxilus simplex*, swarms in certain localities. It is said to destroy the locusts, or harvest fly, feeds also on vegetable substances. It is eaten also by the Indians. *Ag. Rep.* 1874, p. 79, fig. 18. — 1874, p. 141, fig. 14. *§§. XIV/5*. (Orth.)
 Crickets. (Orth.) *Ag. Rep.* (Rathvon) 1862 p. 372 eat both vegetable & animal matter vegetables & dead insect insects &c. — *Pernodius* 1864 p. 546. see *Gryllus Acheta* 8°. (Orth.)
 Cuckoo. carried off by *Larada argentata*. (Syn. *§§. 9/16*. & *VI/29*).
 Criceridae. (Col.) *Ag. Rep.* 1863 p. 275.
 Cricoides asparagi. (Col.) insect imported from Europe, feeds on Asparagus, & so injures that 10000 damage was done by these insects in a single County alone, in Long & mid. in one year. (Nat. Europe. & W.S.) Asparagus beetle. *Ag. Rep.* 1863, p. 573, remedies: 18° 1874, p. 1870, p. 570. *§§. XXX/7*. (Col.)
 Cricoides. (Lema) trilineata. 8° it destroys the foliage of the potato. *Ag. Rep.* 1863 p. 576. — *Lema* *§§. XXVII/10*. (Col.)
 Crotos bug. (Orth.) see *Ectobia germanica*. *Ag. Rep.* 1870 p. 177. remedies, abundant principally in house, supplied by hot water pipes. they eat indiscriminately animal & vegetable substances. boots, clothing, paper, leather, &c. &c. sometimes called the "small cockroach" *Ag. Rep.* 1874 p. 132, fig. 3 *§§. 1/4* (Horn) *Ecilia germanica* syn.
 Cryptophagidae. (Col.) feed on fungi, under bark of trees. *Ag. Rep.* 1868, p. 88, m. m. examples. *Cryptophagus humerulus*. *§§. XXXVI/35*. (Col.)
 Gryllus. inquisitor. (Horn) an Ichneumon fly, destroying *Thyreophorus*, ephemera, orms, (*Chalcus* conisurum) the hang, drop, or basket worm, (*Ag.* *§§. XII/1 to 5*) *Gryllus*. *§§. 11/3*. (Horn.)
 (Tenix) nidularius. (apinis) 8° spider Spider. specimen from So. Car. habits Nat. Hist. & *Ag. Rep.* 1873, p. 162, fig. 9.
 Cucujidae (Col.) mere mention. *Ag. Rep.* 1863, p. 84. (Col.)
 Cucujes or Cucujes. (Col.) 8° fly of the West Indies, see *Pyrophorus noctilucus*. It feeds on Sugar cane. *Ag. Rep.* 1868, p. 92. — 1873 p. 154. (Col.)
 " In species of fine fly found in Florida. see *Pyrophorus phylodorus*, *Ag. Rep.* 1873, p. 153, fig. 8. *§§. XIV/2*. (Col.)
 Cucujes? (apinis) (Horn) Rathvon (Error) see *Callidium bajinus*, *Ag. Rep.* 1861, p. 616. food Oak & pine wood & said to have been imported from Europe, & recorded by Kirby & Pierce, to have "emerged from an old water, & to have eaten their way through shell, lead, or zinc" the moths being afterwards found in their stomachs" see *Styctoporus bajinus*, *§§. XXV/3*. (Col.)
 Cucujes testaceus. Col. m. m. in grain. *Ag. Rep.* 1869, p. 332. Col.
 Cucujes. (see *Laomothicus modestus*, found injuring hemp seed. *Ag. Rep.* 1868, p. 84, fig. 43, (Col.)
 " *§§. remolatus*, modestus. *§§. VI/32*. (Col.)

- Cucumber flea beetle. (Col.) eats holes in young plants of cucumbers, further Cucurbitaceae? Harbilia
 { or Crepidodera pubescens (Syn) see Epitrix cucumeris. IS XXIV/2. (Col.)
- Cucumber moth. see Phaenocarpa nitidalis (Lep.) injures Melon, squash, cucumber fruit by boring holes
 in them. Feeding on the inside & said by Guent. to injure Potatoes. Ag Rep 1870. p. 84. fig 47.
IS XIII/6. (Lep.)
- Cucumber striped beetle. (Col.) Diabrotica vittata. Injures cucumber, melon & squash plants. L. on or
 stems. Ag Rep 1870 p. 74 IS XXIV/3. (Col.)
- Culex. Mosquito (Lep.) Ag Rep 1863 p. 276. (Lep.)
- Culex, ciliatus " " L. live in water & are commonly as "Pollywogs" history & remedies Ag Rep 1872
 p. 125. fig 9. IS I/132. (Lep.)
- Culicidae. Ag Rep 1868 p. 317.
- Cybes concolor. (Caneva of Say) (Col.). I found under bark. Frequently old frame houses. Ag Rep 1868 p. 78. fig 148.
IS XIII/13. (Col.)
- Cybididae. (Col.) Ag Rep p. 38. more mention. (Col.)
- Curculio. { or plum weevil (Col.) Ag Rep 1861 p. 303. Col. See also Conotrachelus. Phrynchaenus &
 { see Conotrachelus rennhar for habits history remedies &c. IS XIV/5 Col.
- Curculio, catcher. (new) machine for catching Curculio. Ag Rep 1872 p. 651. invented by J. H. Hall. (Col.) Am Ent 1872.
- Curculio. { Numerous method of exterminating, by pieces of bark laid on the ground under which they
 { creep at night, in spring. Ag Rep 1873 p. 43. (Col.)
- Curculionidae. (Col.) (Rathvon) Ag Rep 1861 p. 608. — 1865. 89 — 1868 p. 305. &c. (Col.)
- Current borer. (Lep.) L. bores in pits of stalks & shoots, of currant bushes. Ulexia Trochileum
 { trifoli. formis. Remedies. Ag Rep 1864 p. 520. — 1866, & 51. Aegria. IS XLIII/1. (Lep.)
- Current. worm, or saw fly. (imported) L. destroys the foliage. see Nematus ventricosus (Hym)
 { Ag Rep 1870 p. 77. fig 33.
- Current worm, or saw fly. (native) (also Gooseberry saw fly) Ag Rep 1870 p. 77. (Hym) habits.
 { remedies &c. See Psithophora grossulariae
- Current, or Gooseberry, caterpillar, or moth. (Lep.) L. eats foliage. see Elopus (Abnaxos) ribourae.
 { IS CXXIII/14. IS LIII/5. LXXVII 24. IS. Ell. pair. Lep.
- Cursonia. Orth. Runners. Cockroaches &c. Ag Rep 1874 p. 130. 131. (Orth)
- Cut worms. — Larvae or caterpillars of the Agrotidae, so called from their habit of cutting
 { off young vegetables. & dragging them to their holes or hiding places to devour.
 { during the night, or in cloudy weather. on Cotton. Ag Rep 1855 p. 69. fig 1. —
 { 1858 p. 271. — 1864 p. 553. remedies IS Examples IS XCIX/11. 3. LIII/8. 11. 16. 18. &c.
- " " { of onion. see Agrotis.
- Cyrtene rubicula. (Col) Locust borer. see also syn. Cyrtus pictus. C. flexuosus. Orthopagus pictus
 { C. rubicula & L. injures wood of Locust. as Cyrtene. IS XIII/25.
- Cymatodora. (Tillus) undulata. (Col.) hibernates under bark of trees. Ag Rep 1868 p. 97. fig 133.
 { IS XII/20. XIV/44. (Col.)
- Cynipidae. (Hym) Ag Rep 1863 p. 276. (Hym)
- Cynips pascu. or fig wasp. (Hym) and perforates the fig in Europe. Ag Rep 1859 p. 332. (Hym)
- Cynips quercus calicis (Hym) on Oak. Valencia, Europe. The cups & worms used for tanning. (Hym)
 { Ag Rep 1853. Liv.
- Cynips scriptorum. I make common commercial gall nuts used for making ink. &c. Ag Rep
 { 1853 p. Liv
- Cynips quercifolia. (Hym) Diplolepis gallatinctoria. (Hym) which produces the Aleppo galls
 { of commerce. feeds on the Oak, & is used for dyeing. Ag Rep 1866 p. 35. (Hym)
- Cynips. { four winged flies are parasite on the true gall making cynips, or gall insects
 { & live also in the gall. Ag Rep 1866 p. 42. (Hym)
- Cynips. galls on Oaks, uses &c. Ag Rep 1864 p. 547. (Hym)
- Cyphura glatorina. see Ptilodactyla (Col) feeds probably on Oak. Ag Rep 1868 p. 94. & 112.
 { fig. 120 Ptilodactyla glatorina. IS XXXI/29. (Col) IS lower.

Cyphon, pallidus, (Col.) Europe. hibernates in the stems of reeds Ag Rep. 1868, p. 95. (Col.)
Cyphon. (Col.) Ias frequents flowers. Ag. Rep. 1868 p. 95.
Cyrtocantharis. (Orth.) see *icridium umricinum*, (Orth.) JS. 1/15. (New)
Cyrtosyllus cneaeus, (Orth.) Kalydid. feeds on foliage of trees. Ag. Rep. 1874, p. 141, fig. 126. (Orth.)
 JS. IV/15.

Dactylospheera, vitifoliae, (Hom) a gall louse forming a gall the size of a small pea on the
 { under side of grape leaves. Ag. Rep. 1867, p. 72. — Shiner. 1870 p. 87, fig. 56.
 { gall. JS. plate 10, fig. 26. see in Diptera. *Dactylospheera*. see *Pemphigus bellifoliae*
 JS. 10 fig. 26. (Hom)

Laddy long legs of Europe. Ag. Rep. 1872, p. 128 is *Syrula cloracea*. Dip JS. X/27. Lp.

" " of U.S. is *Phalangium a spider*
 Darning needles. Devils. New. *Silbelididae*, or dragon flies. Ag. Rep. 1862, p. 545. New. Ex. JS. V/11/10.
 { predaceous. feed on other insects.

Dasyllidae, (Col.) frequent plants usually near water. Ag. Rep. 1868, p. 94. (Col.)

Dasygogon, (Dip) predaceous. feeds on other insects. Ag. Rep. 1866, p. 44. Ex. *Ladiscolor* JS. 11/21 (Lp.)

Dasytes, (Col) see also *Odontomyx*. Ag. Rep. 1868, p. 94, fig. 118. Ex. *Odontomyx* *truncatus* JS. XX/17 (Col.)

Dasytes, (Col) Europe injures raspberries. Ag. Rep. 1868, p. 94. (Col.)

Dasytes flavipes, (Col) Europe. said to destroy *Rosinichidae*? Ag. Rep. 1868, p. 91. (Col.)

" *niger*, (Col.) Europe. cuts off blossoms of raspberry. Ag. Rep. 1868, p. 114. (Col.)

Day fly (New) see *Ephemera*. ex. *Palangenia*. *limbata*. exceeding abundant in Washington
 { LC. & sometimes called May fly. JS. 4/6. New. (May fly Syn)

Death watch, (Col) see *Anobium tabulatum* & *striatum* Ag. Rep. 1868 p. 99. (Col.)

Decortication, recommended for the destruction of wood boring insects. by Mr Eugene Plabent.
 { Ag. Rep. 1868 p. 92.

Deopex. *Utchaisa*. bella. (Lep) or the beautiful Diopex. I said to feed on Lupines, but found
 { feeding in pod of *Crotalaria*. or rattle box. on the seeds. Ag. Rep. 1867, p. 72.
 { JS. 1878, p. 80, fig. 41. *Utchaisa* bella. JS. L/1/32. XXXV/5 (Lep)

Delphax arvensis, (Hom) Ag. Rep. 1876. no fig. (Hom)

Delphax carinata, (Hom) Ag. Rep. 1876, fig. 6. found on grass & frequents young pines. (Wheeler)
 { *Delphax tricornata*. JS. 11/23/3. (Hom)

Dimorpha French name for the Dragon fly. *Silbelidula*. (New) Ag. Rep. 1866 p. 40. (New)

Dinorthis. *canadensis*, (Col) *Pyrochroa dendroidea* Ag. Rep. 1868 p. 101. *dendroidea*. JS. XXXVI/4. (Col.)

Dismetidae (Col) destroy specimens of nat Hist. skin's bones. fur. feathers look almost all animals
 { remains & are exceedingly destructive in museums of nat hist. (Col) Ag. Rep. 1868 p. 84 (Col)
 { 1861. n. 396. (Col)

Dermestes caninus, (Col) see *C. nubilus*. destructive to animal substances JS. C. nubilus. JS. VI/1. (Col.)

Dermestes caninus. 1 Col Bacon Beetle. Col. Ag. Rep. 1856, p. 29. Ag. Rep. 1846, p. 375.

{ fig. 22, 23, 24 destroys Books peltry meat, birds horns hoofs. Col. nat hist. almost insects
 { 1863 p. 569. — Bacon. furs. &c — 1868. p. 84 fig. 49. JS. V/27. Lar A/23.

Dermestes maculatus. syn. *vulturnus*. see below

Dermestes vulturnus. *maculatus*. (Col) injures skins cork. cell of nat Hist Ent 9^c see *Dermestes*

" *maculatus*. JS. XXXIV/14. (Col.) (Ag. Rep. 1868, p. 47. fig. 28.)

Derochrachys (Col) *Rathum* Ag. Rep. 1861, p. 613. more mentioned. (Col.)

Dorodontidae (Col) frequent fungi. under bark. Ag. Rep. 1868 p. 84. m. m. ex. *Dorodontes maculatus*.
 { JS. XXXII/72. & VI/1.

Desmia maculatus, (Lep) Lar injure foliage of the grape. Ag. Rep. 1854 p. 78. JS. XXV/4 (Lep.)

Desmocer cyanus. *pallidus*. (Lep) *Rathum*. 1861 Ag. Rep. p. 628. fig. 55. L. in Elder. Toror in jets.

{ *D. pallidus*. JS. XXV/3. (Col.)

Devils horse see *Prionotus cristatus*. Ag. Rep. 1875, fig. 41. destroys other insects. (see also *Reduncus*

{ *novenarius*. *Prionotus cristatus* III/14. (Holt.)

Devils darning needles. see *Silbelidula* & *Agrom. civile* JS. 11/10. (New)

JS. 11/10

x *Diabrotica undecimpunctata* see *Taleruca* Col. Dep. Ag. 1854 p. 60. 1858 p. 90. p. vii. fig. 1 *Diabrotica*

JS. XXV/24 (Col)

Diabrotica (*Haltica*) *vittata* (Col) Striped cucumber beetle. *Remedies*. Ag Rep 1863, p. 577. Col
 { F. bark of cucumber, &c & frequently hollow out lower part of stem. I feeds on foliage of
 Cucumber. Melon Squash & destroys blossoms of Bar. cherry &c — habits & remedies Ag. Rep
 1870, p. 74 fig 28. on Squashes & Pumpkins. — remedy after foot have some fruits to collect
 the insects & then destroy them. *Diabrotica*. *IS*. 13/50. *Ins* XXIV/3.

Diapheromera (Syn *Spectrum* & *Phasma*) *temoralis* (Orth) feed on buds, shoots & foliage of Sassafras.
 { & of various trees & shrubs. Ag. Rep 1874, p. 135. fig 6. Insects resemble twigs, —
Diapheromera. *IS*. 11/7 (Orth).

Diapria agromyzae. (Hym) destroys *Agromyza tritici*, a fly injuring wheat Ag Rep. 1872, p. 134. (Hym)

Nicaeus dilutatus. (Col) (Rathvon) Ag Rep. 1861, p. 578. fig 10. *IS*. XLIV/28 (Col)

Dicerca (*Stenurus*) *divanicata* (Col) (Rathvon) Ag Rep. 1861, p. 60, fig 84 L. eat. wood of Apple.

{ Beach Cherry, Beach Plum. wild & Cult? &c — 1868, p. 91, fig 91. & 1870, p. 67, fig 6. — remedy —
Dicerca. *IS*. 31/5 (Col)

Dicraea lurida (Col) Lar. live in wood of Hickory. Ag. Rep. 1868, p. 91. *IS*. XI/11 (Col)

Dicraea punctulata. (Col) L. eat wood of pitch pine. Ag Rep. 1868, p. 91. *IS*. XI/17 (Col)

Dichelonycha hexagona. *elongatula* (Col) I feeds on foliage of hawthorn. Ag Rep. 1868, p. 87.
 { see *D. linearis*. *IS*. IX/13 (Col)

Dichelonycha linearis. see above. (prob linear fork claw?)

Dichelonycha subvittata (Linear fork claw?) Ins. feeds on foliage of hawthorn. Ag Rep. 1868, p. 87 (Col)

Diedrocephala (*Tettigonia*) *quadrivittata* (Hom) frequents Blackberry Ag Rep 1876 fig 34
 { see *Diedrocephala coccinea* *IS*. V 53, 4 11/29. (Hom)

Dineutes (*Tenebris*) *americanus* (Col) swims, or creeps on the surface of the water. Feeds on dead
 insects (sometimes called Rose water bug from its smell) *Dineutes*. *IS* III/13 (Col)

Diplodus luridus (*Enagomus viridis*) (Hb) said to destroy the plum weevil, or Curculio

{ *Conotrachelus nemophilus* and other insects. Ag. Rep. 1875, p. 181, fig 50. —
Diplodus luridus *IS*. IX/19 (Hb)

Dyblolapha gallica tinctoria (Hym) (Hab. Asia) see also *Cynips quercifolia*. Ag. Rep. 1866, p. 35.
 { produces the "Alpho galls" used in dyeing. &c (Hym)

Dyblolapha (Error) *Cecidomyia destructor*. Ag. Rep 1872, p. 125, fig 10. *IS*. 1/89. (Dybl)

Dyblolapha tritici. error in Rep as *destructor*. Ag Rep. 1872, p. 126, fig 11. *IS*. 1/10. 11 (Dybl)

Dyblolapha (*Cecidomyia*) *tritici* (Dybl) Wheat midge. Red weevil. injured grain of wheat, barley.
 { Ryge. Grass, &c Ag Rep 1866 p. 562. remedies. See also under *Cecidomyia*. — 1866 p. 62.
 Wheat midge destroyed by *Tachymenus calceator* Hym — 1866 p. 40 destroyed by
 Thrips (Orth) — 1867 p. 71 destroyed by *Mormidea typhosa*. (Hb)

1872, p. 126, fig 11. Error in Rep as *Cecidomyia destructor*. *Dyblolapha tritici* *IS*. 1/10. 11 (Dybl)

Dyblolapha (*Cecidomyia*) *tritici* (Dybl) Wheat midge. Red weevil. Habus. History. remedies. Parasites
 { Thrips (Orth) — *Coccinella*. (Col) — *Callimene*. *Macroglenes*. *Platygas* (Hym) &
Forficula (Orth) Ag Rep 1872, p. 126 fig 11. Localities injured 1874 p. 129 — eggs
 destroyed by Thrips. 1874 p. 145. See also *Cecidomyia*

Dyblolapha tritici. *IS*. 1/10. 11 (Dybl)

Diploctaxis (*Melolontha*) *sordida* (Col) L. eat foliage of Forest & fruit trees. Ag Rep 1868, p. 87.
 { fig 66. *Diploctaxis*. *IS*. IX/3. (Col)

Diptera. Remedies Ag Rep. 1864, p. 561.

" predaceous. " 1866, p. 74

" notes on. Remedies &c Ag Rep 1868 p. 274 — 1868 p. 316 — 1872 p. 123, 124. Remedies

Ditoma osenata. (Col) Europe. said to destroy *Bostrychus*. *Scolytus*, &c Ag Rep. 1865, p. 91. (Col)

Dodge, J. R. Birds, & Bird laws. Ag Rep 1864, p. 181.

Dodge, C. R. "Entomology for Farmers sons," or "How to collect and preserve insects," with figures

Ag. Rep. 1868 p. 305

Dorcaschema Wildii (Col) (Rathvon) Ag Rep. 1861, p. 614 fig 70. L. feed on wood of Mulberry. *IS*. XI/15. (Col)

Dichelonycha albicollis. (Col) white necked pine beetle, I. feeds on fol. of white pine. Ag. Rep. 1868, p. 87.

IS. IX/3 (Col)

IS lower

Locatomia similis (Col) see *Canosara*. Ag Rep. 1868, p. 98. JS XXXVII/3. (Col)
 Dorr beetle. see *Melolontha Lachnosterna*. &c. (Col)

Doryphora, *Chrysomela* (*Polygramma*) *decumlineata*. Ten lined speckmon, western or Colorado potato beetle, or bdy. Ag Rep. 1863, p. 578. — remedies. — 1866, p. 581. m. m. — 1866 p. 27, remedy? — 1867, p. 63. Full article and figures, & it is destroyed by *Melyras cinctus*, *Lebia grandis*. &c. — 1868 p. 79, fig. 6, destroyed by *Lebia grandis* (Col) — 1869 p. 434. 501. experiments for destroying with *Pard ykon*. &c. — 1869, p. 536. mere mention, 1870 p. 65. destroyed by larva of *Stetracha virginica* (Col) — 1870 p. 75. I feeds on foliage of *Potato*. *Tomato*. Egg plant. Horse nettle. Jamestown weed, ground cherry. Long article. poisoning with pox green recommended. — 1871, p. 74, fig. 4. Origin history, habits, remedies, &c. Insect enemies destroying it. plant bugs. *Coma*, *Strophactor* & (Holt) *Lebia* & *Coccinella* (Col) & a *Tachina* (Dip) — 1872, p. 120. Localities injured, 1873, p. 154. lost assurance in Washington. D.C. & eggs destroyed by a *Coccinella*. 1874, p. 123, fig. 1. 'habits, remedies, localities' & parasites, destroying it *Hippodamia convergens*, *maculata*, & *quinque notata*, *Coccinella munda*, & *novem notata*. *Stetracha virginica*, *Calosoma calidum*, *Staphalis caliginosa*, *Pezomachus elongatus*, *Lebia grandis*, (all *Coleoptera*) *Anna spinosa*, & *grandis*. *Melyras* (*Strophactor*) *cinctus* *Euschistes*, *punctipes*, *Sticticus*, *Pimplistius* (*Heteroptera*) — *Tachina doryphorae* — *Diptera*. — *Solitis vulgaris* (*Hymenoptera*) — *Ephialtes pensylvanicus* *ana maculosis*, *Fabricii* (Col) — 1875 destroyed by *Sticticus pimplistius* *podus cynicus*, *Melyras cinctus*. &c. (Holt) *Chrysomela decumlineata*, JS XXIX/32 (Col)

Doryphora? (Col) destroying potatoes, in La. 1873, p. 154.

Doryphora, intermediate between *D. decumlineata* & *D. juncta*. Ag Rep. 1874, p. 123, fig. 2. JS XXIX/33 (Col)

Doryphora juncta *Chrysomela Polygramma* (Col) Ag Rep. 1867, p. 63, fig. 6. feeds on Horse nettle. *Solanum carolinense*, potatoe, & egg plants. — 1870, p. 76, fig. 30. — 1871, p. 74, fig. 5. as the false Colorado potato beetle, feeds on *Solanum carolinense*, injures the potato, somewhat, & eats Egg plants: — 1873, p. 153. Larva, described, — 1874, p. 123, fig. 2. *Chrysomela juncta*. JS XXIX/34 (Col)

Dorthisia cataphracta (Horn) Ag Rep. 1876. — fig. JS, III/26 (Horn) & larva Dragon fly. *Demiselle* (France) Devils damning nests (US). *Libellula Agrion* &c. L.P.S. prey upon other insects living in or frequenting, waters.

Drepanaria ontariensis. (*herichia* Syn; Lep) L. destroy the seed of parsnip & other umbelliferous plants. Remedies &c. Ag Rep. 1864 p. 556. JS XII/11 (Lep)

Drilus flavescens, (Col) Ex. destroy slugs & snails Ag Rep. 1855, p. 91. (Col)

Drop worms. see *Octicus* or *Octicus uniferum* (Lep.) see *Thysanotus* *Ephemeriformis*. JS XII/1 to 5 (Lep)

Dryocampa imparialis. (Cates.) (Lep) Great plane borer or imperial moth. foot, fol. Oak Rose? (see Cates)

Dryocampa Anisota senatoria (Lep.) I feed on foliage of Oak Ag Rep. 1870 p. 63, fig. 43.

It is destroyed by *Schnemum flis* Hym. Ag Rep. 1866 p. 13 *Anisota senatoria*. JS. Lar vi/5, 6. In LIII/15. 18. (Lep) (see also 1869, p. 536)

Dung beetles. see *Copris*; *Phanous*. &c. Col.

Dying materials from *Pyraonius suturellus*, article by Dr Jackson. Boston, see *Dysdercus suturellus* Ag Rep. 1855 p. 272

Dynastes tigris (Col) L. found feeding in the wood of Cherry, Willow & oak Ag Rep. 1868, p. 59, fig. 80. JS. L.D/31 Ins. VIII/16 (Col) (one of our largest native beetles):

Dynastidae (Col) L. in decaying wood. beetles with singular horns on head or thorax Gen. found in vegetable mold. Ag Rep. 1868, p. 47. 89. 117. (Col)

Dysdercus suturellus, (*Pyraonius*, Syn) (Holt), Cotton stainer, or Red bug. L.P.S. stains fibre of cotton, when in the opening boll. Ag Rep. 1858, p. 271. 1875 p. 124, fig. 29, *Dysdercus*. JS. 1/11 (Holt) see also article on Dying material. Ag Rep. 1855 p. 272.

Dytiscus fusciventris. (Col.) (Rathvon) Ag Rep. 1861. p 543. fig. 11. 12. Aquatic. & carnivorous. Feeding on worms. ^{not to insects of} SS. III/26. (Col.)

Dytiscus hybridus. (Col.) food & habits same as *D. fusciventris*. but mentioned here, as having been taken on the roof of a four story building. Ag Rep. 1865. - 82. fig 14. see Endophorus SS. III/7. (Col.)

Eacles. (*Agrypnia*) *imperialis*. (Lep.) Imperial moth. or Great plane tree moth. L. feed on foliage of Oak, plane, pine, sweet gum, &c. &c. & are destroyed by the larva of - *Tachinus viridis*. (Dip.) *Eacles*. SS. LCVI/23. 11/7. VI/7.8. Ins. V/10. (Lep.)

Early of the most. see *Chrysops nitens* (Lep.) so called for attacking horses principally about the ears or head. Ag. rep. 1863. p 276. - 1872. p 124. fig 16. SS. XI/13. (Lep.)

Earth worm. see *Lumbricus*? Japanese Earth worm. see *Megaceros* Ag Rep. 1871 p 82.

Earwig see in *Euphroptera*. (Rathvon) Ag Rep. 1865. Torficulidae. Tries to catch them of hollow nests, of ox hoofs. &c eggs laid under stones. on the ground. & wooded over like a hen, by the female. &c - 1862 p 238. Rathvon. preyed upon by a Lucid fly? (Hym.) 1864. p 564. remedies. - 1872 p 127. Earwig destroys wheat midges. (*Diplosis tritici*) & a Hawk frequenting wheat plants. (see also Torficula. Example - Toricula SS. VI/19. (Orth.)

Earwig. see also *Toricula*. Ag Rep. 1871 p 131. (Orth) Labia. 1862 p 373. *Labiidura*. 1862 p 373.

Ectobia (*Blatta*) *germanica*. (Orth) Common bug. Small german cockroach, or vulgarly Roach very destructive, especially on dwellings heated by hot water pipes. destroys Animals & vegetable substances, books, clothing, paper, leather, & has been known even to eat red lead & red water color paints. Ag Rep. 1870 p 77. - 1874. p 132. fig 3. Ectobia SS. II/14. (Orth.)

Ectonichodius. (*Ectonichodius*) *cruciat*. (Hem.) probably carnivorous. & destroys other insects. Ag Rep. 1875 p 130. fig 16. SS. III/17. (Hem.)

Egyptian (see. (Hym.) see *Apis*. *Fasciata*. (Hym)

Eight spotted Forester (Lep.) *Alysiis maculata*. L. feeds on foliage of Grape. Ag Rep. 1874. p 129. SS. LXXXIII/2. Ins. XLVI/13. (Lep.)

Elaphidion alternatum. (Col.) (Rathvon) Ag Rep. more mention 1861. p 615. fig 74. (Col.)

Elaphidion putator. (villousum) (Col.) Rathvon. Ag Rep. 1861. p 615. L. lives in Oak twigs. (Col.) ..

Elaphidion villousum. (Col.) Oak pruner. Ag Rep. 1868. p 576. Remedies. 1871. p 72. fig 2. *Stenocorus putator* (peck). Syn. L. cuts off twigs of Oak. Apple, peach, Hickory, chestnut &c. SS. L. 33/13. Ins. X/13. (Col.)

Elatridae. (Col.) (Rathvon) Ag Rep. 1861 p 608. L. are wood borers. & also feed on roots under the earth. the perfect insects are known by the name of Snapping bugs. Skip jacks. &c. & the larvae as wire worms. I. sometimes also called spring beetles. from their habit of springing suddenly in the air when placed on their backs on a level surface. example *Elatr. nigricollis* SS. XI/23. (Col.)

Elatridae. Larvae known as Wire worms. very destructive to roots of plants. (Col.) Ag Rep 1863 p 274 - 1865 p 89. - 1868 p 92 - 1873 p 162 -

Elatr (Col.) Ag Rep. 1861 p 606. - 1873 p 163 mere mention in connexion with *Melanactes* which has probably a luminous larva. *Melanactes*. 1873 p 163. fig 10 example of insect *Melanactes moria*. SS. XI/20. (Col.)

Elatr obscurus. (Eu) (Col.) Insect of an European wire worm. Ag. Rep. 1868. p 93. 110 &c. Col.

Elder, borer. (see) see *Desmocerus* (*cyaneus*) *calliatus*. Ag Rep 1861 p 620 SS. XI/13. (Col.)

Ellichmus (*Photinus*) *corruscus*. (Col.) Lightning bug. or fire fly. Ag. Rept 1868 p 96. fig 125. Larvae said to be predaceous. & found in Maryland hibernating. under bark of trees? *Photinus corruscus*. SS. XII/5. (Col.)

Ellichmus (*Photinus*) *pyralis*. (Col.) Larvae feed on Earth worms. Ag. Rep 1868. p 95. fig 126 *Photinus*. SS. L. C/33 ? Ins. XI/6. (Col.)

- Eilopius*. (*Abraxos ribana*. (Lep.) Goodberry, Spun worm, or Currant worm. L. eat foliage of Strawberry, and Currant. *Eilopius* L. Cuv. 14. J. Linn. 5. LXXVII/2 + 1 (Lep.)
- Elm tree beetle. *Galeruca calmarensis* (Gutierrez; xanthochlousna.) L. feed on the foliage of the Elm. eating the inner substance of the leaf, & leaving the midrib & veins untouched, causing the tree to assume a brown & burnt up appearance. Ag. Rep. 1863. p. 575.
& 1870 p. 50. remedies. Thales. *Galerucella xanthomelaena*. J.S. XXIV/5 XL1/33
- Elongated, fork (Lep.) see *Licholonycha* (*elongata*) Linnaeus. Ag. Rep. 1863. p. 67 L. 14 60. J.S. IX/13 (Col.)
- Emmonedia says. (*Phosphorodes* Lecot.) Ag. Rep. 1868 p. 102 fig 175. on flowers J.S. XXVI/1 (Col.)
- Emesa longipes* (Steb.) probably feed on other insects. Ag. Rep. 1875. p. 131. fig 52. J.S. IV/25 (Steb.)
- Emphytus maculatus* (Hym.) Strawberry Saw fly. Ag. Rep. 1876 p. 73. injures foliage. (Hym.)
- Empusa*. (*Sporondonema*) muscae. a fungoid growth parasitic in flies. eventually killing them
Ag. Rep. 1872 p. 132.
- Enchenopa* (*Membracis*) *birotata*. Ag. Rep. 1876. fig 11. frequent. Butterwort. Hop-three. & Locust.
J.S. 422. (Hom.)
- Endecatomis* (Col.) mere mention. Ag. Rep. 1863. p. 99. (Col.)
- Endecatomis rugosus* (Col.) in Jungi. & found under bark of Salix poplar. Ag. Rep. 1863. p. 94. fig 154.
J.S. XXXIII/17. (Col.)
- Ennomos *subsignaria* (Lep.) New York measuring worm. (Lep.) L. feed on foliage of Elm, poplar.
Linden &c. Ag. Rep. 1864 p. 554. remedies &c. J.S. XXVIII/6. (Lep.)
- Enoplus* *thoracicum*. Say. *Orthopleura damicornis*. (Col.) L. feed in wood. Md. Ag. Rep. 1863. p. 77. fig 162.
Orthopleura damicornis. J.S. XII/26. (Col.)
- Entilia* (*Membracis*) *felamona*. (*Hom*) frequents weeds. Ag. Rep. 1876. fig 13. *Entilia* J.S. I/1 (Hom.)
- Entilia* (*Membracis*) *carinata* (Hom.) frequents the Potato plant. Ag. Rep. 1876 fig 14. *Entilia* J.S. I/24 (Hom.)
- Entomological Reports. Uhler. Ag. Rep. 1860 p. 312.
- " " Rathun. Lancaster. Pa. part 1. Ag. Rep. 1861 p. 535. — 2^a 1862. p. 571.
- " classification of Ag. Rep. 1863. p. 563.
- " Report of Paris Exposition des Insects. Aug. Sep. 1865 p. 88
- Entomological division. history & museum. Ag. Rep. 1863. p. 10.
- Entomology "practical for farmers sons." by C. R. Dodge. Ag. Rep. 1869 p. 345.
- " " in Michigan (Insects spoken of). *Doryphora* 10 Anals. Col. — *Doryphora*, *senatoria*.
Carthocia pomonellata, *aspidiotus conchiformis* (Holtz) Ag. Rep. 1869 p. 536.
- Entomological Science. Application of * by Prof. J. S. Smith. Ag. Rep. 1872 p. 448.
- Ephemera. May or May fly. Ag. Rep. 1866. p. 545. Food for fish. L. live in water Example.
{ *Salinaria* (*Ephemera*) *limitata* J.S. V/5 (Hem.) (very abundant in Washington D.C.)
Trilator (Hym.) L. destroys small wood boring larvae Ag. Rep. 1866 p. 41.
J.S. 1/20 ♀ VII/13 ♂ (Hym.)
- Epicaerus*. *imbricatus* (Col.) injure foliage of Apple & Cherry trees. Ag. Rep. 1870 p. 71. J.S. XXXVI/18 (Col.)
- Epicaerus*. *fallax*? (probably *vadosus* var) see *Graphorhinus*. (Col.) L. eats cabbage. Cowsl. Cherry.
{ Apple. Gooseberry &c. Ag. Rep. 1863. p. 573. — 1865 p. 40. (Col.)
- Epicaerus*. *Graphorhinus* *vadosus*. (Col.) injure leaves of Cabbage. Clover &c. Ag. Rep. 1870 p. 71. fig 13.
{ *Graphorhinus* J.S. XII/25. Col.
- Epicaula*. Col. see also *Cantharis*. L. 14. v.
- Epicaula atrata*. *pennsylvanica* (Col.) Ag. Rep. 1866 p. 103. L. eats flowers of China aster. fol of potatoes.
{ frequent flowers of Golden rod, 1863 p. 107. (*Cantharis atrata* of Harris) see *Epicaula*
pennsylvanica. J.S. XXXVII/5. (Col.)
- Epicaula cinerea*. (*Cantharis marginata* of Harris) (Col.) food. Clematis. Buttercup &c. (Ag. Rep. 1863.
{ p. 103. fig 181. — 1871 p. 71. eats buttercups potatoes? & Egg plants *Epicaula cinerea*
J.S. XXXVII/6. Col. another *cinerea* see *Macrobasis unicolor* J.S. XXXVIII/9. (Col.)
- Epicaula cornuta*. Col. injures potatoes in Kansas. Ag. Rep. 1870 p. 68. fig 5. J.S. XL/45. (Col.)
- Epicaula uncinata* Col. injures potatoes & more mention, 1871 p. 76 fig 7 Ag. Rep. remedy, bones green
{ Effects, & substitutes. J.S. XXVII/8 J.S. 1960

- Epicauta marginata*, see *E. cinerea*, above. Ag. Rep. 1862, p. 106. — 1874, 70. — JS. XXVII. 6. C.
- Epicauta pennsylvanica* (Col.) (*Cantharis atrata* Horn) eats flowers of *Chenopodium* & *Solidago*. frequent flowers of *Solidago* Rod. (*Solidago*). Ag. Rep. 1863, p. 103, fig. 184. — *E. pennsylvanica* JS. XXVII. 5. C.
- Epicauta pennsylvanica* & *Macrodactylus* (Gabricu) unicolor are said to destroy *Cynipid* & *Cynipid* on
- Epicauta lineata* on the Colorado potato bug, or beetle. Ag. Rep. 1874, p. 132. (Col.)
- Epicauta stigmaea* (Col.) injures flowers of the cotton. Ag. Rep. 1865, p. 152, pl. 8, fig. 8. — JS. XXVII. 11. C.
- Epicauta Cantharis* irritata (Col.) 1854, p. 60. Ag. Rep. m. m. 1867, p. 64. — 180. h. 103, fig. 182. & injures foliage of Potatoes, vegetable & flowers. — 1874, p. 76, fig. 7. injures potatoes. remedy. Paris (green) Effects, substitutes. JS. XXVII. 12. C. (Col.)
- Epilachna borealis* (Col.) spotted squash beetle, or lady bug: I injure foliage of Squashes, & *Asclepias* *curvicauda* {lar. Remedies. habits, &c. Ag. Rep. 1863, p. 579. — 1865, p. 91. — 1866, p. 42 & is destroyed by a bug (*Stenotus* (*S. anchorago* syn) *diana* (Holt) JS. XI. 22. 11/20. 11/25. *Epilachna*, JS. XXIX. 35th. (see also Ag. Rep. 1875, p. 113 fig. 10. for *Stenotus* destroying Squash beetle *Epilachna*) Col.
- Er. carnivorus*, feeds on other insects. Ag. Rep. 1866, p. 44. example *Er. aestuans* JS. III. 34. 10p.
- Eriosoma umbricator* (Hom) Ag. Rep. 1876, fig. 42. frequent leafhopper. JS. III. 17. (Hom)
- Eriosoma lanigera*, Apple blight. (Hom) Ag. Rep. 1876, fig. 41. — 1864, p. 560. see also *Raphis* (syn) woolly *Eriosoma*, JS. III. 21. (Hom)
- Eriosoma Pemphigus* pyrali (Hom) a woolly Aphis on the root of Pear. Ag. Rep. 1870, p. 56, fig. 54. (see also *Pemphigus*, page 7) (Hom)
- Eriosoma tessellata* (Hom), Ag. Rep. 1876, fig. 43. frequent Birch. JS. III. 19. (Hom)
- Eurhynchus* (Cetonia) inde (Col) feeds on sap of Cotton bolls, maize stalks, & locust trees, &c. injures, & kills peaches, figs, pumpkins, &c. frequently Golden rod flowers, &c. Ag. Rep. 1863, p. 90, 107. — see. *Euryomyia* (Syn *Euphorbia* also) *inda*. JS. IX. 24. (Col)
- Erythroneura*, *Tettigonia*? Hom, leaf hopper, & incorrectly thrips, injures grape foliage. Ag. Rep. 1854, p. 77, pl. 6. — 1864, p. 559. remedies, &c. — *E. vitis*? 1874, p. 55. Grape leaf hopper. (fig. 19) habits remedies &c. & destroyed by a true thrips (Hom) & here called *Erythroneura vitis* 1874, p. 145. — 1875, is destroyed by *Campylomma vitis* (Holt) (the glassy winged Soldier bug fig. 1875, p. 125 fig. 30) & note as there is much doubt as to what insect is the true *Erythroneura* (*Tettigonia*) *vitis*, many of them appearing to be merely varieties of *Erythroneura basiliana*, we have classed all those feeding on the grape vine together under the head of *Erythroneura*.
- Erythroneura basiliana* (Hom) very abundant and destructive to the Grape foliage, in the neighborhood of Washington, D.C. I may prove to be a var. of *E. vitis*? *E. basiliana*. — 1876, p. 33 JS. II. 5. 3. 30. (Hom) (a new sp. or var. is figured at 1/5. (Hom) p.)
- Euchaetes*, egle. Lef., a moth feeding on the endemias, is destroyed by plant bugs. *Elysiac*, tancious, & *L. fasciatus*. Hol. *Euchaetes*. JS. IX. 22. 3. 11/22. & LVIII. 14. (Sep.)
- Eucnemidae* (Col) see also *Throedeidae* (Col), Ag. Rep. 1863, p. 92, 112. Col.
- Eucnemis amaenicornis* (Col.) found on leaves or under bark of trees Ag. Rep. 1868, p. 92, fig. 106 {see *Deltochymus amaenicornis* JS. XII. 38. Col
- Eulophus* (Hym) (*Rachmon*) Ag. Rep. 1862, p. 376. destroy eggs of Cockroaches, & *Blattella* (see) (Hym)
- Eumetopoma* (*Stantana*) *ministra* (Sep.) Handmaid moth, or yellow necked Apple worm caterpillars cluster together, & when alarmed hold up both ends of body. feed upon foliage, of Apple, Cherry, Oak, &c. &c. Ag. Rep. 1856, p. 389. *Stantana ministra*. JS. IX. 27. 1/22. 1/23. 1/24. (Sep.)
- Eumenes*, *fraterna*. Potter wasp. (Hym) makes a flask like mud nest, on stems or small branches of plants or shrubs, containing one larva in which nest it stores up caterpillars, to serve as food for its larva. Ag. Rep. 1866, p. 33. it destroys larvae of *Anopheles* *varietis*, or *Canker worm*. JS. XVIII. 11/16. 1/17. (Sep.) & is itself destroyed by *Ichneumon*. JS. IX. 35. (Sep.) — 1870, p. 78, fig. 25. *Eumenes fraterna*. JS. II. 27. 28. 29. 1/35. see in Diptera. (nest)
- Euphorbia* (*Euryomyia*) *melancholica* (Col) see *Euryomyia*. JS. XXXIV. 30. (Col)
- Euphorbia* (*Euryomyia*) *inda*. Col. see *Euryomyia*. JS. IX. 29. (Col)

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- Flies. and destroyed by wasps, or hornets. Ag. Rep. 1866. p. 43. (64 p.) *Hemobalia*. Bred
 { *Meloe angusticollis*. in their bodies. Ag. Rep. 1868. p. 102. (*Meloe* SS.D/22.23. SS.XXXVII/22 (Col)
 Fly. the larvae of a species of fly in Mono Lake, is eaten by the Indians. Ag. Rep. 1870. p. 226. (Lep)
 Flies. . . are destroyed by *Bombex*. *basia*. Chalci. & also by a parasitic growth *Empusa*
 (*Spic. nidionema*) *muscae*. Ag. Rep. 1872. p. 132.
 Fly, or Fall poison. *Amianthimum. muscae toxicum*, a plant growing in the southern states.
 { & used for poisoning flies, Ag. Rep. 1873. p. 131.
 Fly. common house fly. *Musca domestica*, is sometimes dangerous to mankind, by conveying
 { noxious, & infectious diseases, from house to house, Ag. Rep. 1872. p. 132. SS.V/33 (Lep)
 Food of Coleoptera, or Beetles. See "Vegetable and animal substances destroyed by Coleoptera"
 { Ag. rep. 1868. p. 104. (Col)
 Forest fly. golden eyed. see *Chrysops. vittatus*. Ag. Rep. 1863. p. 276. — 1872. p. 129. fig. 16. SS.XI/18 (Lep)
 Forester eight spotted see *Allypia octomaculata* (Lep) It feeds on foliage of grape
 { Ag. for letter Cor number 133/2. Cor 100 p. SS.XI/11. & W/11/6. (Lep).
 Forficulacilla. gigantea. (Orth) (*Euplex. Rethuron*) Ag. Rep. 1862. p. 373. fig. 1. SS.X/2. (Orth)
 Forficula (Orth) (Rethuron) Ag. Rep. 1862. p. 373. *Barwig*. 1868. p. 308. — 1872. p. 150. 89. SS.VI/19 W/19 (Orth)
 Forficula (Orth) *Barwig*. (*Eunophe*) *habus*, food. eat young plants, injure young grain by
 { eating the pollen. gnaw the hollow of flowers. eat holes in grapes. Peaches. & other fruit.
 { but said by some, to be beneficial, by eating the wheat midges. (*Diplosis tritici*)
 plant lice. & probably the *thrips*. Ag. Rep. 1874. p. 131. fig. 2. *Forficula* SS.VI/19 fig. (Orth)
 Forficula auricularia. Europe (Orth) (Rethuron) Ag. Rep. 1862. p. 372. fig. 2 & 3. — destroy fruit.
 { flowers. cabbages &c. (Orth)
 Forficulidae. Ag. Rep. 1862. p. 373. — 1868. p. 305. — 1874. p. 130. (Orth)
 Formica (Hym) See ant.
 Fornax. (Col) in old Oak stumps. Ag. Rep. 1868. p. 92. example. *Fornax* (*Dromaeolus*) *cylindricollis*.
 { SS.XXXVI/25. (Col)
 Four humped Carculi. (Col) *Anthonomus. quadrinotatus*. eats round holes in Apple & plums.
 { Ag. Rep. 1870. p. 70. fig. 14. SS.XXXVI/44.45 XXXVII/28-29. (Col)
 Fowls &c in garden of acclimation. *Pons. discussion*. Ag. Rep. 1865. p. 95.
 Frog spit or Froth insects (Hym) see *Aphrophora* &c Ag. Rep. 1866. p. 589. — 1876. fig. 25. Froth. SS.I/11 Hym
 Fulgora sulcifera. (Hym) frequents branches, twigs, &c. Ag. Rep. 1876. fig. 4. see *Scot. sulcifera*. SS.7/30 (Hym)
 Fung. origin of. Ag. Rep. 1864. p. 529. See also *Amantia* &c
 Fur. fig or horse fig. (Lep) see *Tabanus atratus* stings & torments horses &c. SS.W/15. LX/35 24. (Lep)
 Galerita americana. Col Rethuron. Ag. Rep. 1861. p. 69. destroys other insects. (Lep. fig. 3. 2) & *Galerita bicolor*.
 { SS.W/11. (Col)
 Galerita. *duroci. punctata* (Col) Ag. Rep. 1874. p. 60. — 1875. p. 90. fig. VIII/fig. 1. I eats holes in Cotton & other
 { plants. very troublesome in gardens. see *Diabrotica. 12 punctata*. SS.XXV/24 (Col)
 Galeruca. *californiensis* *Galerucella. xanthomelaena*. (Col) *Lim tree beetle*. It destroys foliage of
 { Lim trees, eating the entire substance of the leaves, leaving the mid ribs & veins untouched
 { causing the whole tree to present a scorched or burnt appearance. — remedies
 { 1865. p. 578. — full article fig. 1867. p. 63. — 1870. p. 74. fig. 27 (Hym)
 { *Galerucella xanthomelaena*. SS.XXIII/5. XLII/63. (Col)
 Galerucella xanthomelaena. (Orth) (Lep) see above. under *Galeruca*.
 Galgules oculatus! (Hym) Ag. Rep. 1875. p. 132. fig. 55. probably destroy other insects. amongst which
 { Mr Thomas says is *Xys. tridactylus teximaculatus* (SS.III/5. (Orth)) *Galgules* SS.V/2. (rest)
 Gall making larvae. destroyed by *thrips*. Ag. Rep. 1870. p. 145. (Hym) (*thrips* Orth)
 Gall goat. see *Acromyza*. & (Lep)
 Gall nuts. Ag. Rep. 1855. p. 6. (Lep) Oak formed by *Gymis*. used &c Ag. Rep. 1864. p. 527.
 Gall insects themselves subject to parasitic four winged flies Ag. Rep. 1866. p. 62. (Hym)
 Gall flies. native. (Hym) on Blackberry. Ag. Rep. 1866. p. 85 (Hym)
 Gall louse. causing galls like a bag or purse. the size of a small pea. on the underside of grape
 { leaf. Ag. Rep. 1867. p. 72. — 1874. fig. 56. see *Pentapleus. vitifolia* (Hym) SS.VI/26 (Lep)
 { *Gallus*.

- Galleria cerasna*, (Lep.) Bee or Wax moth. It eat the wax in beehives, & form silken tubes,
 { in the comb, to protect themselves from the bees., remedies, &c. Ag. Rep. 1864, p. 555.
Galleria. §§. VII/4. LXXXVI/7. (Lep.)
- Garnasus*, a. mite infesting *Necrophorus*. (Col.) Ag. Rep. 1868, p. 82.
- Garden of Acclimation, Paris. Ag. Rep. 1865, p. 95. Animals. Cattle, goats, & sheep, horses, swine & fowls. &c. &c.
- Garden/ Plead. see *Smynthorus*. & sometimes *Podura*; feed round the holes made in the leaf
 { by *Phyllobela striolata* & other insects, see *Orchestus vittata*. §§. XXIV/8. Ag. Rep. 1874, p. 145.
Smynthorus. §§. VII/7a. (Orth.)
- Gasterophilus*. (*Gastrophilus*) equi, (Lep.) Stomach bot of the horse, history, habits, & remedies. Ag. Rep.
 { 1873, p. 130. *Mela* ardeorach or pride of China berries mentioned.
Gasterophilus. §§. L. VII/34. 14/2. VIII/23. (Lep.)
- Gastrophilus*, equi, see *gasterophilus*, above.
- Selechia*, cerasella, see also *Unacampsis* & *Butalis*. Angoumois. moth. *L. injures*, corn. *Murex*.
 { grain. *Habal*. &c. Ag. Rep. 1852, p. 67, pl. 4. — 1864, p. 556, for remedy. — 1858, p. 23, m. n.
Selechia. §§. XXIII/1. (Lep.) see also, *Unacampsis*.
- Geocossidae*. Earth bugs. *Het.* 1875 p. 118. Bugs living on the land or earth, in contradistinction
 { to the *Hydroscoracae*, or bug, frequenting water.
- Geometrae* or *Geometridae*, (Lep.) span worms, or loopers, from their mode of progression
 { 1855, p. 90, pl. VIII, fig. 2. & 1868, p. 314. (Lep.)
- Georgian leaf eater, see *Phyllophaga georgiana*.
- Georyssidae*, (Col.) more mention. Ag. Rep. 1868 p. 85. example *Georyssus pusillus*. §§. XX/10 (Col)
- Geotrufes splendidus*, (Col.) food excrement, manure, &c. Ag. Rep. 1868, p. 86, fig. 57. §§. XX/10 (Col).
- Geotrufini* Ag. Rep. 1868, p. 86. (Col)
- German Cockroach. Orth. see *Ectobius germanica*. (also *Croton* bug of 184.) §§. 1/4, 16 (Orth)
- Gerris conformis* (Het.) water skimmer, aquatic in habits & destroys other insects, Ag. Rep. 1875,
 { p. 132, fig. 53. — §§. 4/6. (Het)
- Gerris lacustris*, (Het.) carnivorous, & eats other insects. Ag. Rep. 1870, p. 132, fig. 64. §§. 4/1. (Het)
- Gerris*, Europe. Egg & Ins destroyed by *Selecia*? (Hym.) Ag. Rep. 1875 p. 132. (Het)
- Glasy winged, Soldier bug. see *Campyloneura vittipennis*, destroys the grape vine, leaf hopper.
 { *Euphyronneura vittipennis*? Ag. Rep. 1875 p. 125 fig. 30. §§. Campyloneura, 11/18.
- Glow worm, see *Sampyrus*. Ag. Rep. 1869 p. 98. (Col)
- Golden eyed Forest fly. See *Chrysops* (Hym.) Ag. Rep. 1864, p. 545. ear fly of the work, Ag. Rep.
 { 1872, p. 129, fig. 16, *Chrysops*. §§. XI/18. (Lep.)
- Gold Fungus moth, & Clover worm. *Asopia costalis*. *Ogryalus obscurus*, eat clover in stacks or
 { barns, &c. Ag. Rep. 1867 p. 73 — 1870, p. 74. 54. fig. 48. Asopia costalis. §§. LXXIII/25-XX/14. &c.
 { see Clover worm. (Lep.)
- Golden ground beetle, (Col/Luc) destroys other insects, see *Carabus auratus*. (Col.)
- Goldsmith beetle see *Allorhina nitida*. (Rathvon) in Ag. Rep. 1861 p. 601. §§. VIII/9.
- " — " but voracious. see *Cotalpa lunigera*, or the woolly Acreda. Ag. rep. 1866, p. 87, fig. 71, }
§§. VIII/19. (Col)
- Gonocorys*. (*Anasa tristis*) squash bug is eaten by toads. Ag. 1870, p. 91. injures squashes, remedies.
 { 1864, p. 557. — injures squashes, pumpkins, &c. & is said to destroy the Colorado potato beetle.
 { 1873, p. 120, fig. 18. — remedy suggested 1871, p. 76 — 1870, p. 87, fig. 60. — 1875, p. 120, fig. 15
Anasa tristis §§. 1/14 (Het)
- + Gooseberry midge. see *Acidomyia* (*Aphondylia*) *grossularia*. injures fruit of Gooseberry.
 { Ag. Rep. 1872, p. 127. §§. XI/28. (Lep.)
- Gooseberry (or Currant) saw fly, (unhatched) see *Nematus ventricosus*, (Hym.) remedies. 1864, p. 546.
 { 1870, p. 77, fig. 33. §§. 0. The native currant worm or fly is *Pristiphora grossulariae*.
 { Ag. Rep. 1870, p. 77. §§. 0.
- Gooseberry. Span worm, (Lep.) *Elaphia* (*abraxas*) *nileana*, L. eats fol. of Currant, & gooseberry.
 { §§. L. evul/14. L. un/15. LXXXVII/24. (Lep.) §§. 0.

- Gortyna*. *nitida*. (Lep.) bores into the flesh of cabbage, Asparagus, Potato, Tomato. color of mouse.
 { various fruits, usually known as the spindle worm, or stalk borer. Ag. Rep. 1867, p. 64.
 } IS. & XCVIII/24. CIV/16. IXV/13. (Lep.)
- Gout, a disease in wheat, & barley (in Europe) consisting of an enlargement, or swelling of the joint. Ag. Rep. 1872, p. 124.
- Grain moth, or Wolf. see *Tinea granellus* (Lep.) destroys grain. maize. Cotton bolls, &c. 1856, p. 65, & 4. 1855. (Error of I. T. B. as Heliothis) 1858, p. 98, p. 1X fig 3. 1864, p. 556. IS. IX/1 (Lep.)
- Grain weevil, (Col.) *Sitophilus granarius*. (Rothvorn) Ag. Rep. 1861, p. 603. I. destroys Grain. Wheat. Maize, &c. see. *Calandra remotipunctata*. IS. XN/2. (Col.)
- Grape disease in Europe, *Mucedo*. *Fungus*, &c. fig 1863, p. 31, & 1864, p. 311.
- Grape berry moth. (Lep.) see *Penthestis ulivorana*. L. calls into the berry, or fruit. Ag. Rep. 1872, p. 86, fig. 32. IS. XCVII/3. XCVI/2. (Lep.)
- Grape root borer. (Lep.) *Algoria (Drochilura) polidiformis*. (Lep.) L. injures root, & lower part of stem, of grape vines, Ag. Rep. 1862, p. 80, p. IV. — 1867, p. 72, fig. — 1870, p. 72. IS. XVII/5. (Lep.)
- Grape seed curculio, or weevil. (Col.) *Calodius inaequalis*. injures fruit of grape, by eating into it. Ag. Rep. 1867, p. 72. — 1869, p. 83. — 1874, p. 70, fig. 12, see *Megascites* IS. XXXVI/42 (Col.)
- Grape vine flea beetle, or Steel blue grape leaf beetle (Col.) injures foliage & buds Ag. Rep. 1863, p. 576, 1870, p. 74, fig. 29. *Brachidera* IS. XXV/9 (Col.)
- Grape vine leaf gall cause, (Hom.) see *Symphagus vitifoliae* (*Stylosiphon*) forms galls the size of a small pea, shaped like an open mouthed bag, or purse on the under side of grape leaves. Ag. Rep. 1867, p. 72, — 1872, p. 57, fig. 56. — 1874, p. 57, fig. 23. (Hom.) IS. X/26 (see in Ligne a)
- Grape leaf hoppers (Hom.) *Erythroneura (Tetragonia) nitida* &c. injure foliage of grape. see example *Erythroneura basileoides* IS. III/37. (Hom.) (see Ag. Rep. 1874, p. 146)
- Grape process. Lep. *Leucithus Proctus americanus*. I eat the foliage of the grape vine. Ag. Rep. 1854, p. 76, p. 6. 1864, p. 549. — Remedy 1870, p. 81. IS. XVII/3. (Lep.)
- Grape root gall cause. *Phylloxera vastatrix*. (Hom.) L.P.S. suck the sap from the roots of grape vines, under the earth, forming knotty swellings on the roots, frequently causing the death of the vine. Ag. Rep. 1870, p. 57, fig. 55. — 1874, p. 88, fig. 22. — 1875, p. 289. — French prize of 3000 francs to be given in 1874 to discover the manner in which it is carried from vine to vine, — 1873, p. 150. — 1874, p. 127, 422, &c. — 1876, fig. 46. see article on *Phylloxera* (Hom.)
- Grape vine saw fly, (Hom.) *Selandria viciae*, remedies, &c. Ag. Rep. 1864, p. 546. IS. IX/86. (Hym.)
- Grapelodera (*Halictia*) *chaelybea*. (Steel blue grape leaf beetle, or Grape vine flea beetle. injures foliage & buds of grape. Elm, plum, Black alder &c. Ag. Rep. 1863, p. 576. 1870, p. 74, fig. 29. *Grapelodera* XXXV/9. (Col.)
- Grass army worm, of the north-west. *Leucania extranea*. *unipuncta*. L. feeds on grass grain, &c. Ag. Rep. 1870, p. 83, fig. 46. IS. XCVIII/22. LXI/16. LXVI/7. (Lep.)
- Grass worm or caterpillar (Southern) Lep. in cotton fields where it eats the grass & weeds between the rows of cotton. & resembles *Lophyrus frugiperda* of Smith & Abbott. Ag. Rep. 1855, p. 77 PL VI fig 6. — destroyed by ants. (Hym.) 1866, p. 43. Compared with the Cotton army worm, *Anomis xylinæ*, *argyllæa*, 1867, p. 59. see *Lophyrus macra* IS. XVIII/5 (Lep.)
- Grasshoppers, & in cotton fields, see *Locusta*, &c. Ag. Rep. 1855, p. 67, p. VII, fig 2. (Orth.)
- Grasshoppers. Ag. Rep. 1866, p. 87. — eaten by Indians, 1870, p. 426. — very destructive in Texas, California, 1838. 1846, 1855, 1858, &c. see article in Ag. Rep. 1874, p. 138. (Orth.)
- Grasshoppers, machines for killing grasshoppers. in Salt Lake city. Ag. Rep. 1871, p. 80.
- Green tree, (Col.) a worm feeding in palm trees, it is used as food for mankind & esteemed as a great luxury by the negroes in the west Indies. Ag. Rep. 1866, p. 38. Larva of *Calandra palmarum*. (Rothvorn) Ag. Rep. 1861, p. 604. feeds also on Palms, & *Rhynchospora orientatus Zimmermanni* was found abundantly in Florida in decayed Palmetto wood. IS. XIII/21. (Col.) J. Glover

- Gressonia*. Fam. *Mantodea*. (Orth.) *Mantidae*, &c. Ag. Rep. 1874, p. 130. (Orth.)
- Ground beetles. see *Carabidae*. (Col.) (Rathvon) Ag. Rep. 1861, p. 591. (Col)
- Grouse Locusts. see *Tetrix*. (Orth.) (Rathvon) 1862, p. 357. (Orth.)
- Grouse locust. black sided. (Orth.) *Tetrix* (Tetrix) later clid. Ag. Rep. 1862, p. 387. *IS*, IV, VII, 12. (Orth)
- Grub in head of sheep. see *Asinus Ovis* (Orth.) Ag. Rep. 1864, p. 563. *Cephalomyia*. *IS*, VII, 36. (Orth.)
- Grub white, is the Larva of *Phyllophaga*. *Lachnosterna*. ex. Larva of *Phycos*. *IS*, C, 10. (Col.)
- Grubs destroyed by sowing coarse salt. Ag. Rep. 1869, p. 296. (Col)
- Grubs in stems of plants (Europe), destroyed by *Malachius ceneus*. Ag. Rep. 1865, p. 91. (Col)
- Gryllidae. Ag. Rep. 1865, p. 308. 1874, p. 142. (Orth)
- Gryllotalpa*. mole cricket (Orth.) Remedies. Ag. Rep. 1864, p. 544. 1868, p. 300. (Orth.)
- Gryllotalpa*. (*breuhenis*) *bonalis*. (Orth.) (Rathvon) Ag. Rep. 1862, p. 378. 12, injures, & destroys roots of plants. — short winged mole cricket. injures potatoes, &c.; green sod vegetables. &c. Ag. Rep. 1874, p. 144 fig 17. *Gryllotalpa bonalis*. *IS*, VII, 13. (Orth)
- Gryllotalpa didactyla* (Orth.) said to injure sugar canes in the West Indies (Rathvon) Ag. Rep. 1862, p. 378. 1874, p. 144. *IS*, XVI, 14. (Orth)
- Gryllotalpa* (Orth.) Mole crickets. feed on both vegetable & animal substances. 1874, p. 143.
- Gryllus*, *centurio*. see *Romalea microptera*. injures vegetables, &c. & range of U.S. & melon. commonly known in Florida as the "rubber" grasshopper. (Ag. Rep. 1865, p. 265. 1862, p. 384. — 1872, p. 116 fig 6.7. *Romalea microptera*. *IS*, III, 14. (Orth)
- Gryllus*. *hebetus domesticus* (Col) & U.S. (Orth) domestic or house cricket. feeds on animal & vegetable substances. Ag. Rep. 1874, p. 142, fig 15. *IS*, VI, 27. (Orth)
- Gryllus*. (*Locusta*) *migratorius*. (Orth) Migratory locust of Europe, Sweden, France, &c. &c. and Asia. more mention (Rathvon) Ag. Rep. 1862, p. 385. see *Pachytelus migratorius*. *IS*, XIV, 10. (Orth.) (*Locusta migratoria* *IS*, XIV, 10. *Acrilium peregrinum* *IS*, XIV, 11. we said to be the true *White Locust*.)
- Gulls, destroy *Anabus simplex*, or the Utah cricket. in Utah. Ag. Rep. 1871, p. 79. This cricket is said to injure grass, wheat & is winged. *IS*, XIV, 15. (Orth)
- Gymnetis nitida*. June beetle, *Altorthina nitida*. known in Florida in the fig eaten from its holes & eating into ripe figs. (Ag. Rep. 1863, p. 569. *Cotinus*. 1868, p. 94 fig 82. *Altorthina nitida*. *IS*, VIII, 14. (Col)
- Gymnetis nitida*. Col. (Rathvon) Ag. Rep. 1861, p. 601, fig 37. says these insects, are sometimes abundant on Potato tops, & the larvae feed on the roots, *Altorthina nitida*. *IS*, VIII, 14. (Col)
- Gyrinidae. (Col) little black beetles, seen circling about on the surface of still waters & hence called Whirligigs, or Apple bugs, from their smell, devour dead insects on the water. Ag. Rep. 1868, p. 80. (Col)
- Gyrinus, *natalator* (Col) Ag. Rep. 1864, p. 469. habits as above. (Col)
- Gyrinus, *americus*. Col. Ag. Rep. 1868, p. 81. I. swims in curves or circles, on the surface of still pools. Feeds on dead insects. *IS*, III, 14. see *Dineutus* (Col)
- Haltica*. *graptodora*, *chalybea*. (Col) see *Graptodora*. Ag. Rep. 1863, p. 576. & 1870, p. 74 fig 29. *Graptodora*. *IS*, XXV, 4. (Col)
- Haltica* (*Phyllophaga*) *sinuata* (Col) Cabbage flea beetle. I. eats minute holes in leaves of Cabbage & Ag. Rep. 1865, p. 289. see *Orchestos vittata*. *IS*, XXIV, 3. (Col)
- Hammatocerus*. (*Habes*) *pusillus*. (Hb) destroys other insects. Ag. Rep. 1875, p. 130, fig 47. *IS*, III, 6. (Hb)
- Hanneton (Col) Europe French common name for May bugs, or cockchafers. Ag. Rep. 1865, p. 89. (Col)
- Haute, cakes made from the eggs of *Lonix*. in Mexico. see *Lonix femoralis*, or *Mexicanaria* {example of *Lonix intermedia* (Hb) *IS*, V, 7. Hb.
- Harlequin Cabbage bug. *Strachia Murgantia*, *astrioncha*. injures Cabbages, radishes, mustard, & Turnips, & other Cruciferae. Ag. Rep. 1867, p. 71, fig. — 1870, p. 90. — 1871, p. 84 fig. 16. 1875, p. 116 fig 3. *Murgantia*. *IS*, II, 22. (Hb)
- Hemiptera. (*Meloidae*) *caninus* (Hb) destroys *Doryphora Chrysomela* 10 lineata. Tortoise of Apple {prod rosaceana} & other insects. Ag. Rep. 1867, p. 63, 1874, p. 123. 1875, p. 130, fig 44. *Meloidae caninus*. *IS*, III, 12. Hb.

Harpalus (Col) (Rathvon) Ag. Rep. 1861, p. 592. "one or two species are said to feed in the

perfect state, on young grain & grass seeds & upon the roots in the larva state." (Col)
Harpalus (Col) Ag. Rep. 1864, p. 87, p. 88. feed upon other insects. (Col)
Harpalus. predatory beetle. L. JB. Col. Ag. Rep. 1865, p. 110, Ag. 2. destroys, other insects, in cotton
 fields. (Col)

Harpalus (*Pangus*) *calycomus*. (Col) supposed to feed on wheat & grass seeds, & probably on
 other insects also. Ag. Rep. 1863, p. 80, fig. 10. — & destroys. *Doryphora* (*Chrysomela*)
10 lineata. or Colorado potato beetle. Ag. Rep. 1874, p. 128. SS. 1/4. (Col)
Harpalus. herbivorous (Say) (Col) (Rathvon) Ag. Rep. 1861, p. 592. said to be a vegetable.
 feeder. (Col)

Harpalus *myricornis*. (Europe) (Col.) said to eat grain. Ag. Rep. 1863, p. 465. (Col)

Useful grass hopper. see *Calopterus* species. SS. XIII/15. VIII/1. (Orth)

" " " " Ag. Rep. 1867, p. 65. 1874, p. 187. 9. Ent.

Hornet fly. (Horn) see Cicada. Ag. Rep. 1866. (Locust) carried off by *Stenus speciosus*. (Hym.)

Hornet moth. see Sphingidae. *Macrosila*. &c. ex. *Macrosila* SS. 1/2. (Lep)

Head maggot of sheep. see *Cephalomyia*. ous. Ag. Rep. 1872, p. 129. see *Cephalomyia*. VII/36. (Lep)

Local worm of cabbage. (Lep) *Pieris Rapae*. , injures also Cabbages. Cauliflower. Mustard. turnip &
 other cruciferae. (European) but now imported & naturalized. Ag. Rep. 1870, p. 74, fig. 36.
 SS. 1/2. 18. 7. or 133/2. & 134/14.

Heliothis *immaculata*. (Col) L. in Walnut wood. Ag. Rep. 1867, p. 72. — 1874, p. 73. fig. 26.

see *Molochus* SS. XVII/21.

Heliothis phloxiphaga Lep. I. destroys phlox plants. Ag. Rep. SS. LXVII/18. (Lep) Ag. Rep. 1867, p. 74

Heliothis armigera. (umbrosus) Corn worm of maize. & boll worm of cotton. Ag. Rep. 1854, p. 64. IX. III. IV.
 { Lep. injures Cotton bolls. makes when growing on the cob. green feed. pumpkins & —
 fruit of the Tomato. (*Heliothis* error of D. JB) should be *Trinia gravella* 1855, p. 98 p. 111, fig. 3.
 { see *Trinia* — 1864, p. 534. remedies. — 1865, p. 43 — 1866, p. 30 — 1870. remedies. Habits &c. (p. 34)
 { SS. I. P. J. XIX/51. 17/12 (Lep) .
 { 1871. p. 34 —

Helleborus. *Veratrum album*. powder, &c. used to poison native & imported currant worms.

{ see *Proctophora grossulomiae* & *Nematus ventricosus*. (Hym)

Hemiphaea *unicans*. (Col) Ins. found in cavities under bark of Oak wood, in Md. in winter & spring.

{ Ag. Rep. 1868, p. 101 fig. 147. see *Platydoma* SS. XXVI/16. (Col)

Homorobius. Lace wing. fly. (Ours) I. destroys cotton aphid. Ag. Rep. 1854, p. 63, fig. 8. —

{ 1855, p. 115. fig. 10. 187. — 1863, p. 10 — example *Sc. hyalinus* SS. 1/3. New

Hemiptera. or half winged insects includes *Helioptera* or plant bugs & *Homoptera*. (cicada

{ plant louse &c. 1864, p. 172 Ag. Rep. — 1862, p. 387. — 1864, p. 274. — 1866, p. 40 — 1867, p. 207 — 1874, p. 124
 { 1875, p. 115 &c.

Hem. lce. (see in *Mallophaga*) (Orth). Biting bird lice, remedies. Ag. Rep. 1874, p. 146. (Orth)

Hesperidae. Lep. Ag. Rep. 1868, p. 314. (S. Hesperia). example *Hesperia cernis*. SS. XXV/14. (Lep)

Hessian. fly. (Lep) see *Cecidomyia destructor*. L. injures wheat, &c. Ag. Rep. 1865, p. 562. &c. &c.

{ see *Cecidomyia destructor* SS. 1/8. 9. (Lep)

Heteroceridae. (Col) *mea monitum*. Ag. Rep. 1863, p. 85. (Col)

Heteroptera. or plant bugs. Ag. Rep. 1863, p. 563. — remedies. 1866, p. 557. — 1866, p. 43. 1868, p. 315.

{ 1875 long antile with figures p. 116 to 140.

Hickory boxer. (Col) see *Chion cinchus*. (*garganicum*) SS. X/8. (Col)

Hippodamia *convergens*. (Col) (*convergens*) I. destroys plant lice, &c. Ag. Rep. 1874, p. 129 SS. XXV/23. 32. (Col)

{ &c. also destroys — the Colorado potato beetle. *Doryphora*. (*Chrysomela*) 10 punctata.

Hippodamia. *decem punctata*. *Brachyacantha* 10 punctata. destroys plant lice, &c. &c.

{ the Colorado potato beetle. Ag. Rep. 1874, p. 128. *Brachyacantha*. SS. XXV/21. (Col)

Hippodamia. (*Megilla*) *maculata*. Col. Ag. Rep. 1866, p. 141. is destroyed by an *Schneumon* fly.

{ which emerges from under its body. & forms a cocoon there. — it also destroys the

{ Colorado potato beetle. plant lice & other small insects 1874, p. 9. *Megilla* SS. XXV/65. (Col)

Hippodamia. *quindecim punctata*. (Col) destroys the potato beetle. Ag. Rep. 1874, p. 13. —

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- Hippoboscidae*. house flies. Ag. rept. 1872, p. 133.
Hippobosca equina. (Lw) (Dip.) House louse fly. Ag. Rept. 1872. 133, fig. 25. In. torment horses
 { D.G. VII/30 (Dip.)
Histeridae & *Histerini*. (Col.) feed on vegetable and animal substances. Excrement of cattle.
 { some live under bark of trees & others in ants nests. Ag. Rept. 1868 p. 33. 104.
 { example *Hister unicolor*. D.G. V/19. 22. (Col.)
 * *Hispidae*. (Col.) 1863 p. 275. Example. *Hister* (*Microhister*) *terreus* D.G. XXXIII/10. Col.
 { vegetable feeders.
Hives. Dierons. bee hives. with figures & other notes explained. Ag. Rept. 1860 p. 294 &c.
Holotrichus crenulatus. (Col.) Ag. Rept. 1865 p. 82. 104. 113. L. feeds on roots of grass &c. In. feeds on
 { foliage of fruit & forest trees. see *Phylloxera*. D.G. VII/15 (Col.)
Hormora. Ag. Rept. 1864 p. 534. — 1862 p. 337. — 1863 p. 563, 1868 p. 315.
 { 18" long article with figures.
 * *Hornes* Dr. article on Birds. Ag. Rept. 1856. p. 111. to 116.
Honey. Curious mode of taking honey. Furnigation with dry stony of Artemesia. Hornwood
 { Ag. Rept. 1860 p. 91. Honey see also *Dia. Apis*. Honey produced by bees. see
 { *Myrmecocystus mexicanus* (Hym) Ag. Rept. 1866 p. 63. D.G. IX/34 (Hym)
Hoplia debilis. (Col.) has frequent flangers of Pear & other small trees in spring. found also on
 { foliage. Ag. Rept. 1868 p. 87. fig. 59. D.G. IX/27 (Col.)
Hoplocophala lucorum. (Col.) found under bark of trees. in 1862 &c. Ag. Rept. 1868 p. 100. fig. 165.
 { D.G. XXV/4. (Col.)
Hoplophora quadrivittata (Toms) Ag. Rept. 1876. fig. 12. found on Oak. D.G. II/19 (Hym)
Horiadae. Ag. Rept. 1868 p. 106. Col.
Horia maculata. (Col.) I saw destroys the larvae of a wood bee, (*Dylecopa* Hym) by feeding
 { upon the food stored up for the progeny of the bee (*Dylecopa*) itself.
 { Ag. Rept. 1868 p. 103. (Col.)
Horia. (see *Thyranis*) *sanguinicornis*. L. probably parasitic on some other insect.
 { Ag. rept. 1868. p. 103. fig. 178. fig. 178. D.G. XXVII/17. (Col.)
Horn bug. (Col.) see. *Lucanus dama*. L. in decaying wood of Oak. Willow. Apple. cherry.
 { I feed on sap of trees. Honey dew. & sometimes on soft bodied insects.
 { Ag. Rept. I. *capreolus*. syn. *L. dama* 1860 p. 320 — 1868 p. 86. fig. 51. *Lucanus dama*
D.G. X/16. (Col.)
 * " " *Lucanus capreolus*. Uhler. Ag. Rept. 1860. p. 320. see *L. dama* D.G. X/16 (Col.)
Hornets. (Hym.) Vespa. &c. feed on fruit of pear (Uhler.) Ag. Rept. 1860. p. 316. — eat.
 { young tobacco worms. (*Macrosila Carolina* (Lp) 1872 p. 123. (Hym.)
Hornets hard to destroy. & remedies. Ag. Rept. 1864. p. 547. (Hym.)
Horn tail. Hood mark. see *Urocera*. in *Urocerae*. Ag. rept. 1863 p. 276. example *Urocerus*
 { *tripicornis*. D.G. VIII/36. 38. (Hym.)
Horses. worms in. *Oscarides* in the large intestines. Remedies. Ag. Rept. 1860 p. 85.
Horse fly. see *Tabanus*. & *Tabanidae* Ag. Rept. 1863 p. 276. — 1868 p. 317. — 1872 p. 129. (Dip.)
Horse fly. see *Musca domestica*. Dip. Ag. Rept. 1864 p. 563. — 1872 p. 131. Habits, remedies &c.
 { D.G. IV/23 (Dip.)
 * *Horse fly*. small or stable fly. (Dip.) very troublesome to Horses. Bites man & animal severely
 { especially just before rain. Ag. Rept. 1872. p. 132. fig. 19. *Stomoxys calcitrans*, D.G. IV/10 (Dip.)
Horse louse fly. (Dip.) *Hippobosca equina* Ag. Rept. 1872 p. 133. fig. 25. Sements horses sheltering
 { themselves under the hair. when disturbed. D.G. VII/30 (Dip.)
 How to collect & preserve insects. C.R. Lodge. Ag. Rept. 1868 p. 305.
Hulls *cunealis* catchers. old machine. American Ent. 1 p. 220 — new machine Ag. Rept. 1872 p. 31.
Hunter weevil. (Col.) resembles *Sphenophorus crenatus*. Bill bug, or corn borer which
 { also injures maize by puncturing the stem &c. Ag. Rept. 1863 p. 573. D.G. XII/16. (Col.)

- Hydra terminalis* (Orth) said to be destroyed by *Galgulus* (Col) Ag Rep. 1875, p. 152, SS v/2, 116
 { *Hydra* see *Tridactylus*, SS III/6 (Orth)
Hydrocora (Clerid) *humeralis* (Col) never mentioned 1868, p. 97, fig 141, Ag Rep. SS XII/30 (Col)
Hydrocoris (Holt) water bugs. Ag Rep. 1875, p. 132.
Hydroscaphidae Water measurers. (Col) from running on surface of water. Ag Rep. 1868, p. 315.
Hydrophilidae (Col) Ag Rep. (Rathvon) 1861 p. 593. — L. predaceous. Insects feed on decaying
 { vegetables. Ag Rep. 1868, p. 81, 307. (Col)
Hydrophilus picus (Col) (Eu) feeds on plants & aquatic mollusks. Ag Rep. 1868 p. 51. (Col.)
Hydrophilus trianguicaris (Col) Ag Rep. 1868, p. 81 fig 14. aquatic in habits. SS III/18
Hydrophilus & water beetles in aquaria. Ag Rep. 1864 p. 459. (Col)
Hydrous picus (Col) is a harmless beetle & suited for an aquarium. Ag Rep. 1864 p. 459 (Col)
Hydrous aculeatus (Col) a wood boring beetle. The larva of which is destroyed by *Thanasimus*
 { *nigricollis*. SS XII/10 see *Thanasimus aculeatus* Ag Rep. 1868, p. 97. SS XXXVII/17 (Col.)
 * *Hydroctes americanus* (Col) L. wood of Oak & forest trees. Ag Rep. 1868 p. 98. ex *Hydroctes*
 { *lugubris*. SS XLIII/14 (Col.)
Hylobius piceus (Col) (Rathvon) Ag Rep. 1861, p. 605. fig 48-49, 50. L. eat wood of pitch pine. SS XIV/10
Hylobius piceivorus (Col) eat under bark of wood of pine. Remedies. Ag Rep. 1863 p. 573.
 { SS. XVI/14
Hydrophilus vagans (Col) eats through lead & zinc, food prob. pine. *Callidium* & incorrectly.
 { *Cuculus* of Rathvon. 1861 p. 616. *Hydrophilus vagans*. SS. XVII/3 (Col.)
 * *Hyphantus* (Arctid) tent. Fall web worm. However, it forms colored web nests on ends
 { of large limbs. of Persimmon, apple, cherry, elm, plum. 9-9° live in society as
 { caterpillars. SS. S. VIII/5, 8, 16 SS LIV/13, 18 (Lep.)
Hymenoptera. nematodes. Ag Rep. 1862 p. 338. — 1864 p. 530. — 1866 p. 40. — 1868 p. 309.
Hyposiderma (Clerid) *bours* (Wp) skin bot fly of the ox — normal. hairs made by larvae
 { Ag Rep. 1872 p. 129, fig 15. habit. nematodes. SS. I. VII/35 SS. VIII/21 (Wp)
Hyphophloeus bicolor (Eu) (Col) L said to destroy the larvae of wood eating insects?
 { Ag Rep. 1865, p. 91. (Col)
Hyphophloeus (Corticid) *hamulatus* (Col) L in wood of junie (Col) Ag Rep. 1868, p. 100, fig 166.
 { *Corticid*. SS. XXVI/3 (Col)
Hyphophyllum. a spider destroying young caterpillars. of *Pieris Rapae*. or the European
 { cabbage butterfly. Ag Rep. 1871, p. 82. 83.
Hypophygea (Humphries) (Lep.) see *Asopia costalis*, or the clover worm. SS LPI. LXIII/25 (Lep.)
Schnemon fly (Hym) destroys aphides. (Plant lice) & other insects Ag Rep. 1854 p. 84 pl. 8 (Hym)
Schnemon fly? (Hym) destroys cotton plant lice & other insects. Ag Rep. 1855, p. 112. pl. X, fig 4.
 — 1857 p. 125. — P Rathvon Ag Rep. 1862 p. 576 destroys eggs of Cockroaches —
 { parasitic in caterpillars & other insects Ag Rep. 1864 p. 347. — destroys *Hippodamia*
Macgilla maculata (Col). SS XXX/65 Ag Rep. 1866, p. 41. — *Cerostoma brassicella* *Pistella*
lunipennella (Lep) on Cabbage. SS XX/28. SS XVIII/30, 31 — *Pyrarchia* (Arctid) *isabella*
 { (Lep) 1866 p. 41 SS VIII/9, 10 SS VII/7 (Lep.)
 " destroys *Pissodes strobi*. Col. SS. XVI/11.
 " in eggs of plant lice Aphides. Ag Rep. 1866 p. 42. — destroys *Acronycta* (Lep). SS LXIX/28
Schnemon fly (Hym) destroys aphides. (Plant lice) & other insects. Ag Rep. 1855, p. 112. pl. X, fig 4.
 { *Agrilus variabilis* (Lep.) SS XXX/63. & *Anisota senatoria*. SS. VI/56. SS. VII/15. 18. (Lep.)
 " (Europe) Hym destroys *Cephus pygmaeus* in stems of wheat. SS. IX/8.
 " flies making cocoons agglutinated together like a honeycomb. destroy L of *Ceratomia*
quadricornis (Lep) cocoons. SS. V/4 (Hym)
Schnemon forming a large mass of loose woolly cocoons. from *Macrosila quinque-maculata*.
 { SS. VI/15 (Hym) Ag Rep. 1873 p. 159
Schnemon fly, destroying Aphides. Plant lice. Ag Rep. 1858 p. 262. (Hym)
Schthyura inclusa (Clerid) *americana* poplar spinner. injures foliage of Poplars, willows
 { & remedies. SS. LVI/13. In SS VII/3. (Lep.)

41.

Indian. *Cetonia*. *Euryomyia* (*Cetonia*: *Euphorbia*) *inde*. see *Euryomyia inde*. IS. IX/29
 Indian. Corn. see *Maise*.

Indian. East-West. Indian be. see *Aphis acraemica*. & *laboriosa*. Ag. Rep. 1866. p. 32. (Hym)

Infericomes. (Holt) Ag. Rep. 1875. fam. 3. p. 126. (Holt)

Inostemma (Hym) a parasite destroying *Ceonomyia destructor*, example *Inostemma inersens*
IS. IX/3. (Hym.) Ag. Rep. 1872. p. 126.

Insect destroyed by means of the so called persian insect powder. made from the flowers of
Pyrethrum *Wittmoldi*. *P. roseum*. & *P. rigidum* (Paris exposition) Ag. Rep. 1862. p. 92.
 1861 p. 223.

Insects destroyed by *temine*. Ag. Rep. 1861. p. 332. — poisoned by *Cebait*. Ag. Rep. 1855. p. 65

" destroyed by *Melia* *urederach*. on *Prude* of China tree Ag. rep. 1855. p. 67.

" to be destroyed by concussion from exposure of powder. Ag. Rep. 1872 p. 88.. P. 111

" trap or lantern to allure by light & entraps. description. Ag. Rep. 1855. p. 68.

Insect. double. scoop net to catch insects, with fig. Ag. Rep. 1874. p. 140, fig. 11.

Insects. destroyed by *Melyas* *cinatus*. (Holt) (*Homiofacto* Syn.) on *Melyas* IS. III/12.

Insects. Loss by insects \$100,000,000. per annum. — best allies to destroy them are birds.

{(by *Haring*) Ag. Rep. 1871. p. 421..

Insects Amount of losses by depredations of insects. Ag. Rep. 1868. p. 505. — losses by. 1873 p. 9.

" " " " of cotton insects. Ag. Rep. 1873 p. 164.

Insects at the Paris exposition of 1868. p. 88..

Insects frequenting the cotton plant, Ag. Rep. 1855. p. 65; (Note many of the names in this
 { years report are wrong especially the Angicered names, having been invented
 by a former chief clerk. Mr D. J. Knower, for the occasion without consulting any
 Entomologist. The first part of Ag. Rep. 1857. p. 125. was also written entirely by
 D. J. B. & not by J. Knower, whilst the blight & figures' are by J. P. aethio signed by J. B.

Insects injurious to cotton, Ag. Rep. 1858. p. 271. Insects injurious to vegetation 1858. 286. & 271.

Insects injurious and beneficial to the Orange tree, Ag. Rep. 1865. p. 115..

Insects injurious to vegetation Paul trees &c by P. D. Weber. Ag. Rep. 1860. p. 312

" " " " as Rep. on Entomology by E. S. Rathvon, 1st Rep. 1861. p. 535 2nd Rep. 1862. p. 372

Insects short articles on. Families Hobits, by E. A. Samuel. Ag. Rep. 1863. p. 274.

Insects articles in Ag. Rep. 1865. p. 33 Rep. of Entomologist. p. 88 Paris Exposition. p. 204 m m &
 { 283 on *Onio* fly. &c.

" how to send specimens. Ag. Rep. 1872. p. 123..

Insects noxious. Riley, Ag. Rep. 1871. p. 374. — 6th Rep. No 1874. p. 441. word insecticide, criticised

Insect anatomy for beginners Coleop. figure Ag. Rep. 1864. p. 58. (more sketch)

Insects & their uses (guins, gulls, bees, & honey, blister flies) &c. Ag. Rep. 1866. p. 29. - 31.

Sodine & tarach used for attracting slugs. Ag. Rep. 1861. p. 332.

Ips *quadrisignatus*. (probably *quadriguttatus*?) (see *Pityophagus*.) (col.) burrows in sweet corn

{(Maise) Ag. Rep. 1868. p. 83. fig. 34. see *Pityophagus quadriguttatus*. IS. IV/14 XXXIV/5?
 { XIV/2. (Col)

Ipsini. — Ag. Rep. 1868. p. 105 Col

Isosoma *holdei*. Joint worm in Wheat. (Syn *Eurytoma*) Ag. Rep. 1874. p. 76. pl. 5. — 1863. p. 42.

{ injures Barley. Rye. Wheat. & causing a swelling & enlargement of joints of stalk.

{ 1864. p. 57. Rem — 1866. p. 42. it is destroyed by a parasite *Peromelus* or *Phygaster* (Hym)

Isosoma *hurdei* IS. I/26 Hym

Italian Bees (by Parsons) Ag. Rep. 1859. p. 543. *Apis* *lingustica* 1866. p. 32 IS. IV/24 Hym

Itch insect. *Acanus* *scabiei*. Ag. Rep. 1864. p. 564 remedy. & 1871. p. 426.

Itthyocerus *curculionoides* *novaeboracensis* (*Nova Eboracensis*) Miller. Ag. Rep. 1860. p. 321.

eats buds & twigs of Apple. gnaws into buds at their base (Rathvon) Ag. Rep. 1861

p. 604 fig. 45. injures buds of Apple Cherry Pear &c. — New York weed.

Also, injures buds & twigs of Pear, plum, cherry, maple, Oak. &c. Remedies &c. 1863. p. 574

Itthyocerus *novaeboracensis* IS. VIII/17. (Col) 39 lever.

42.

- Jackson L^t Chemical researches on coloring matter of *Pyrrhocoris* (*Dysdercus*, *suturillus*.)
 { on Cotton stainer, (Hb.) Ag. Rep. 1858, p. 271. *Dysdercus suturillus* 39, 1/11. (Col.)
- Jassus. (Coleidea) subfasciata. (Horn). I. frequent Black alder, & Blackberry. Ag. Rep. 1876, p. 31.
39, 1/36. (Horn)
- Jenequa, or Sidal hemp, an insect called maax, borrows through the central portion of the
 { plant. & two other insects called cochol, & Rux lach, prey on young leaves. &c
 { see remedies. Ag. Rep. 1869, p. 264.
- Japanese earth worm, see Megacolex. Ag. Rep. 1871, p. 82.
- Jigger. (also Chigee) see *Sarcophylla pentrans*. Ag. Rep. 1872, p. 136. (Dip.) a small flea like
 { insect that buries itself in the flesh of mankind. (Frequently under the toe nails)
 { where it lays its eggs in the wound. These when hatched out into little fleas. & then
 { cause a dangerous sore, sometimes even necessitating the amputation of the limb affected.
 { This term Jigger? (Bete rouge of La) in the south & mid. states, is also applied to a
 { small mite, or acarus, known also as the "red bug" which buries itself in the flesh
 { of mankind, causing an intolerable itching, & a small water blister which when
 { burst, becomes a sore. Salt water is recommended as a remedy, rubbed over the
 { places affected as soon as possible after being in the fields.
- Joint worm. *Joosoma* (*Eurytoma*) *hordei*. L. causes hard knotty distorted swellings in the
 { joints of wheat. Rep. &c Ag. Rep. 1854, 76, p. 5. — 1861, p. 42. — 1864, p. 547. &c 39, 1/26. (Horn)
- Julidor. *Julus*, miscalled wire worm, eats by man's. (Birds) & said to be destructive to
 { ripening fruit, lying on the ground. (Myriapod.) Ag. Rep. 1864, p. 354.
- June bug or more properly beetle see *Gymnetis*. *Allorhina nitida* Ag. Rep. 1868 p. 94, fig. 82
 { (*Cetinis* Syn) (*Urhina* 39, 1/110. (Col)
- Katydid. *Microcentrum retinervis*, & *Phylloptera oblongifolia*. (Orth.) & in Florida injure the
 { foliage of the orange trees. 39, 1/5 & 4. (Orth)
- Katydid, see also *Platyphylum*, *Cyrtophyllus*?, *perspicillatum*? (Orth.) & *Phylloptera*.
 { Ag. Rep. Rathvon. 1862 p. 350.
- Katydid, (Orth.) *Halictus* food &c. Ag. Rep. 1874 p. 141, fig. 12..
- Kennicott. Animals, & birds, with plates. Ag. Rep. 1856, p. 52, to 110..
- Kestuck. an insect attacking Sidal hemp. Ag. Rep. 1869, p. 264..
- Labia. (sawwig) Ag. Rep. Rathvon 1862, p. 573. m.m. ex *Labia minuta* 39, 1/10. (Orth)
- Lacidaria Ewing (Orth.) m.m. Rathvon Ag. Rep. 1862, p. 378. (Orth)
- Lac insect, making shell lac. Sticks, lac. &c see *Coccus Lacca*. Ag. Rep. 1866, p. 34. (Horn)
- Lace wing fly. See *Hemerobius*, & *Chrysopa*. (Neur) Ag. Rep. 1866 p. 40 1868 p. 309, 1854 p. 36.
 { p. 8. *Hemerobius*. — 1853, p. 115. p. x. fig. 7. 1866, p. 40. *Hemerobius hyalinus* 39, 1/13. (Neur)
 { *Chrysopa* L feeds on aphides Ag. Rep. 1864 p. 545. — 1866 p. 40 — 1872 p. 133. *Chrysopa*
 { *oculata* 39, 1/3. (Neur.)
- Lachnosterna. see also *Phyllophaga*, (Col) Ag. Rep. 1865 p. 39. — 1866 p. 3a. 8: 8. (Col)
- Lachnosterna see *Phyllophaga* (p. 9) generally known as May bugs or beetles, m.m. Ag. Rep. 1873, p. 132.
- Lachnosterna (*Phyllophaga*) *fusca* (Syn *Phyllophaga quercina* of Horn) May beetle. The
 { larvae are generally known by farmers as "white grubs" The larvae feed on subter-
 {anean roots of grass &c. The insects feed on the foliage of Apple, Elm, Maple, Oak.
 { Cherry, plum, & forest or fruit trees in general. Ag. Rep. 1868, p. 88, fig. 67. 1872, p. 122.
 { 182. 1874 &c. — Localities injured. 1872, p. 122. — 170 of the larvae (white grubs)
 { were counted in a single hill in Grayson Co. Va. Ag. Rep. 1874, p. 129. *Phylloptera*
 { *fusca*, 39, 1/11. XLV, 1/40. MC/10. Larva or white grub. (Col.)
- Lachnosterna *hirticula* see *Phyllophaga fusca* L. eats roots of grass &c. I foliage of fruit &
 { forest trees. see *P. fusca*. Ag. Rep. 1868, p. 88. (Col)
- Lachnosterna, *Phyllophaga quercina*. Ag. Rep. 1868 p. 88, (Col.) food & habits like *P. fusca*. &c.
 { probably *Phyllophaga olivis*? 39, XLV, 1/30. (Col)
- Lachnosterna *quercina* — Ag. Rep. 1864 p. 363. — 1868, p. 104. see *Phyllophaga fusca*, 39 as above
 { 39, 1/11. (Col)

Lachnus caryae. (Hom.) Ag. Rep. 1876, fig 40. frequent Basswood, Hickory, Oak, & Walnut. JS. 1/60 (Hom)
Lachnus strobil. (Hom.) Ag. Rep. 1876. frequent White Pine. (Hom)

Lachry moth. (American) Lep. *Chlorocampa americana*. *disipens*. or Tent caterpillars. of the orchards.
 { form large colored like nests in forks of Apple, & cherry trees. 1858, p 389. — 1860. 321.
 1864 p 551. — 1866 p 29, 92. 1870. p 33. fig 15. It is destroyed by an Ichneumon fly
Chlorocampa americana. 1866 p 42. *Chlorocampa americana*. JS. eggs C/19. L xv/9. Lxv/9. C/19 (Lxv/9)

Lady bird, or Lady bug. see Coccinellidae. (Col)

Laemophloeus. (Cicady) *medialis*. (Col.) I found eating interior of hemp seed. Ag. Rep. 1868 p 84. fig 13.

{ *Laemophloeus*. JS. vi/32 (Col)

Lagria. hirta. (Col) Cic. feeds on dead Oak leaves. Ag. Rep. 1868 p 101. JS. In A. 501 (Col)

Lagriidae. Ag. Rep. 1868 p 101. (Col.)

Lamellicornia. (Col) Ag. Rep. 1861 p 57. — 1863, p 566. — 1868 p 307. see (Col)

Lamprocytis. (Cic.) (Col) ♀ glaucous feeds on Snails. Zone snails see 1868 p 95.

Lamprocytis. & Lamprocytidae. Ag. Rep. 1868. 98 Lightning bugs. See figs. Ag. Rep. 1868, p 93. 166 & 307.

Lamprocytis. notulicola. Fire fly of West Indies Ag. Rep. 1868 p 115 said to eat roots & of Sugar cane. (Col)

Lathrygma. frugiperda. (Corn bud worm) injures corn, wheat, & grain (*Phaenocarpa* Syn S & Q)
 { JS. 6/4 Lxvii/11 (Col)

Lathrygma. macra. Georgia or Southern Grass worm Lep. probably *Prodenia autumnalis* (viii/15)

{ (Pily) is only a more northern var. (Fall army worm of the north west. Eats grass
 & weeds. in Cotton fields. JS. L. 30 XVIII/5. XIX/18. Sep.

Lathrygma. macra. Lep. is destroyed by *Tachina. archipervora* (Lep.) & *Exorista. leucocera* (Lep.)

+ *Lonch.* Cotton by free labor, Ag. Rep. 1864 p 90.

Larva. Charator. (Lep.) *Solype larici*. feed on Larva, or Tamarisk. Ag. Rep. 1866 p 41. It is self destroys
 { by *Phryganea. larici*. (Hom) Solype JS. Lxv/7.

Large green tree bug, of S. Ind. see *Podisus cynicus*. (*Urmagrandis*) injures foliage Oak. *Alph. &*

I also destroy the 10 lined potato bug. *Doryphora Chrysomela*. 10 lineata. Ag. rep.
 { 1873 fig 8 p. 118. *Podisus cynicus*. JS. 11/29. (Het)

Large green tree bug. S. Ind. *Rhaphigaster pennsylvanicus*. *Nuxara. helaris*. sucks sap of grape.

{ & Hickory foliage. Forest trees, & Ag. Rep. 1875 p 117. fig 5. *Nuxara helaris*. JS. 18/4 (Het)

Largus. succulentis. (Het) Inod. a vegetable feeder. Ag. Rep. 1875 p 124. fig 28. JS. 1/12 (Het)

Larva. argentata. (Hym) carries off Crickets. to its nest, to form food for its young JS. 1/16 VI/29. (Het)
 { Ag. Rep. 1866 p. 43.

Lasioptera. (Lep) 1 m. Ag. Rep. 1872. p 124. ex. JS. xii/4 (Dij)

Latitudiae. or *Latitudiae* (Col) feeds on fungi under bark of trees Ag. Rep. 1868 p 84. ex *Latitudiae*

{ *comitashia brata* JS. xxxv/13. (Col)

Lead, bored through by *Hyleborus* (*calidum*) *bagulus*. Ag. Rep. (Rathoon) 1861. p 616 JS. xvi/3. Col.

" " " *Chion* (*gorganeum*) *anchus* Ag. Rep. 1861/614. *Chion endus* JS. x/8 (Col)

Lebia. grandis (Col) destroys *Doryphora Chrysomela* 10 lineata. the ten lined spearmen, or Colorado

{ potato beetle. Ag. Rep. 1867 p 63. — 1868 p 79. fig 6. — 1868 p 80. — 1871 p 74.

{ 1874 p 123. (Col)

Lebia. (Col) Ag. Rep. 1868 p 80. 108. ex. *Lebia ornata* JS. 11/4 (Col)

Lecanium. aciculis. (Coccus) *aciculis*, *maculosa*? frequent maple, & said to be the same as

{ the coccus infesting the Orange Orange. *Maculosa*? Ag. Rep. 1876, fig 53. JS. 1/13. (Hom)

Lecanium. (Coccus) *respiration* (Hom.) injures foliage & of Orange. *Hemion was*, Ag. Rep. 1876 p 52.

{ JS. pl. vi. (Hom)

Lecanium. pyre. (Hom) (Uhlen) Ag. Rep. 1869 injures limbs of Pear trees. (Hom)

Leoprus. xanthoxyl. (Col) I undermines bark of prickly ash. Ag. Rep. 1874 p 73. ex *Stenoides xanthoxyl*

{ JS. xiii/13. (Col)

Lema. trilineata (Col) three lined potato beetle. I carries a shield of feces over its back & feet

{ voraciously on foliage of Potato, Ag. Rep. 1871. p 75. fig 6. JS. xxviii/10 (Col)

Lepidoptera. an order containing Butterflies. Sphingidae. Moths or meller v. l. Ag. Rep. 1868 p 553.

{ 1862 p 274. — 1864 p 348. — 1866 p 43. — 1867 p 472. 1868 p 46. 310 & 545.

JS. lower.

- Lepisma sacchararia* (affinis), "Silver fish" said to eat holes in Cases & covers of books & on
 {clothes Ag Rep 1868 p 309. — 1876 p 186, fig. 20 JS. VI/6. (Orth)
- Lepismatidea* (Orth) fish formed insects, of a silvery brightness (hence name) & having long hair
 {like antennae or tails, habits nocturnal. Found behind wall paper. Ag Rep 1874.
 p 186. (Orth)
- Leptoglossus phyllophorus*, *Omsicels albicinctus* (Hbst) Ins found in cotton fields Ag Rep.
 {1855, p 94. fig VIII. & destroys the Hartweg cabbage bug. *Strachia* (Morgentha) has been
 {killed. Ag Rep 1875 p 119, fig 12. JS. I/21. (Hbst)
- Leptostylus oculicinctus* (Col) injures Apple trees between bark & wood. Ag Rep. 1860. p 319.
 {1863 p 576 Localities JS. X/11. (Col)
- Leptura vittata* (Col) Woodborer. of (Rathvon) Ag Rep 1861 p 620, not recognized but resembles
 {*Rhagium stenosomus lineatus*. JS. XVI/9. XII/27. (Col)
- Leucania unpuncta* (Fabrica) army worm of the north west destroys grass, grain &
 {other crops. Ag Rep 1861 p 552 remedies &. — 1868 p 79. destroyed by *Calosoma*
 {*calidum* (Col) — 1870 p 83 fig 46. — Localities injured Ag Rep 1872 p 122. 1863 p 275.
 {*Leucania unipuncta* JS L. xcvi/22 LXI/16. LXVII/7. (Col)
- Libellula* (Neuropt) Dragon fly. Larva slaying needle. Horse doctor (Ind) *Leimosella* (Fr)
 {destroys other insects. Ag Rep 1866 p 40. & 1868 p 309. Ex *Libellula venusta*
 {JS. I/4. (Neur)
- Lice*. on head of mankind see *Pediculus humanus, capitis* (Forn.) Ag Rep. 1876. fig 5.
 {JS. (Forn) II/46. ~
- Lice*, on Plants, see *Aphides*, *Aphis*, &
Le. Biting bird lice, see *Mallophaga*.
- Lightening*. bugs, common name for fire fly. *Lampyrus*, *Ellechna*, *Photinus*, &c JS (Col)
 {Ag Rep 1868 p 95 &c.
- Lilac*, measuring worm. *Lep* see *Procycla armatoria*. Ag Rep 1871. p 83 (Lep) JS. LXII/11
- Linear fork claw*, *Dichelomycha linearis* (Col) injures fol. of Hahles Ag Rep. 1865 p 57. JS. IX/13.
- Linden*. borer. (Col) *Saperda vestita*. I feed in wood of Linden. (Rathvon) Ag Rep.
 {see *Eupaganius* JS. xviii/18. (Col)
- Little land plant bug*. see *Lygus kneolarius*. or *Capsus oblineatus* see *Lygus lineolaris*
 {JS. VI/5
- Lixus angustatus* (Ca) (Col) in pith of beans. Ag Rep 1865 p 90. (Col)
- Lixus concavus* (Col) Ins found burrowing in stalks of Rhubarb. Ag Rep 1865 p 90.
 {1870 p 71. fig 17. JS. XXXIII/2. (Col)
- Lixus paraptecticus* (Cw) (Col) Larvae reside in stems of Sium or Water parsnips. Ag. Report
 {1870. p 71. (Col)
- Lobesia botrana*. (*Panthusia ulivorana*) (Lep) Grape berry moth. I feed in fruit & seeds,
 {Ag. Rep 1870 p 86 fig 32. *Lobesia botrana* JS. xcvi/3. CIV/2. (Lep)
- Locusts*. & Grasshoppers see *Locusts* & for *Locusts* improperly so called or Harvest flies 1867 p 67
 {1866 p 43. see *Cicadidae*. — *Locustidae* contains. Katydid & Ag Rep. 1874. p 140. (Orth)
- Locusta*, *gryllus migratoria*. (Rathvon) Ag Rep 1862 p 384 see *Pachygaster migratorius*
 {JS. xiv/10 Orth
- Locusta*. (Orth) 1855 p 69. — 1862 p 384. — *Locustanae*. Ag Rep. 1868 p 303. — *Locustidae*.
 {Ag Rep. 1874 p 140 Contains Katydid &.
- Locusta*, of JS Browne, probably is *Caloptenus femur rubrum*. destroys Cotton. Ag. Rep.
 {1865 p 69. p. VI. fig 3. JS. V/2. VIII/2. (Orth)
- Locusta*, *carolina* (Orth) (Rathvon) Ag Rep. 1862 p 386. fig 26. see *Edipoda*, JS. V/3. (Orth)
- Locusta*, *sulphurea* (Orth) (Rathvon) Ag Rep. 1862 p 386. fig 27. " " JS. V/6. (Orth)
- Locusta*, *curtipennis* Orth Rathvon Ag Rep 1862 p 386 fig 28. *Chlocallis* R. see *Stenobothrus*
 {JS. X/4. XII/18. (Orth)
- Locusts*. as food for Man. Ag Rep. 1866 p 38. (Orth) JS. house.

43.

- Locust, red-legged, (Orth.) *Carpocoris pennsylvanicus*, common grass-hopper of the eastern U.S.
 { Ag. Rep. 1867, p. 75, fig. 2. 1870, p. 76, fig. 32, 33. SS. V/22. VIII/2. (Orth.)
- Locust Wasp or Migratory (Orth.) *Chalcidius* *sp.* Ag. Rep. 1874, p. 137. Eggs in Egg sacks
 { destroyed by a species of *Pimpla* (Hym. 1874, p. 138. C. sp. SS. XII/15. VIII/1. (Orth.)
- Locust, a large grasshopper (Orth. not a Locust)
- Locust-borer *Arhopaerus*. *Clytus pictus* L. L. live in wood of Locust. *Clytus flexuosus* L.
 { Ag. Rep. 1863, p. 57. — 1870, p. 73, fig. 22. 60. *Cylindrus rostratus*. SS. I.C/16. 17. S. XXVI/25 (Lec)
- Locust tree: gall gnats, see *Acodomyia*, *Acodomyia*, & *C. pulchellus*. SS. XXVI/33. 34. (Lec)
- Longicornia. (Col.) (Orth.) 1861, p. 609. — 1863, p. 57. — 1868, p. 308. I live in wood. *Asa. Cypr.* n.
 { beetles. 1861, 600. (Lec)
- Long snouted, red, weevil. *Palanus nasus*. L. live in Chestnuts, harts nuts, acorns, chinquapin.
 { Ag. Rep. 1861, p. 605. Cy. 46. — 1870, p. 70, fig. 13. SS. XIV/10. (Col)
- Lophyrus, albidus (Hym.) Pine tree saw fly. *Chalcidius*. Ag. Rep. 1864, p. 546. SS. I/22. (Hym)
- Lophyrus, albicollis (Hym.) *Chalcidius* *sp.* Ag. Rep. 1867, p. 73 (Hym)
- Lophyrus, Deconlei (Hym.) injures Scotch and American pines. Ag. Rep. 1867, p. 73 (Hym)
- Invaded by insects. Ag. Rep. 1873, p. 4.
- Lots by Cotton insects. Ag. Rep. 1873, p. 164, \$ 25,000,000. (see also see in Davis' green in same article)
- Lous, little causing gall *Lactylidius* *sp.* on the underside of a leaf.
 { of grape vine of a small pear. Ag. Rep. 1867, p. 72. see in *Diptera* SS. II/26. (Hym)
- Loxotamia, or *Loxotamia roseana*, var. *gossypii*. Ag. Rep. 186. ?.. VII fig 3. *L. injures* ?
 { cotton foliage.
- Lubber grasshopper. (Orth.) *Scaphiopus microptera*, injures foliage of Orange trees, in Florida.
 { *Chalcidius*, eats vegetables, & Ag. Rep. 1863, p. 605. — 1862, p. 384. injures peaches, figs.
 { melons, & 1872, 116, fig. 6, 7. — *Scaphiopus* injured 1872, p. 118. — SS. IX/22. (Orth)
- Lucanus, *capreolus*. *Lama* (Col.) (Horn) Ag. Rep. 1860, p. 320. Horn bug, Stag beetle. L. in wood
 { of Apple. — 1861, p. 598, fig. 25, 29, 30. (Rathson) L. wood of various Oak. & has. Sap
 { of trees & honey dew. — 1868, p. 86 fig. 31. L. wood of Apple, Cherry, oak, hickory, & when
 { decayed. Ins. feeds on Sap of trees, & sometimes in soft bodied insects. *Lucanus*:
 { *Lama*, SS. XI/16. (Col)
- Lucanidae. (Col.) I feed in wood. Ag. Rep. 1861, p. 600. — 1863, p. 274. — 1868, p. 65. (Col)
- Lucilia caesar (Dipt.) meat fly. (Steel blue or green) destroy fresh meat. currier & (color metallic)
 { Ag. Rep. 1872, p. 132, fig. 21. SS. 4/20. (Dipt)
- Lunaticus, larva from S. Carolina. (Col.) see *Malinactes*. Ag. Rep. 1873, p. 162, fig. 10. (Col)
- Luminescent insects in Florida (Col.) see *Pyrophorus phryganeus*. Experiment with light &c
 { Ag. Rep. 1873, p. 155, fig. 4. SS. XI/21. (Col)
- Lumbricus, Earth worm. Said to form food of *Proctos pyralis*. SS. I.C/33. S. XII/6. (Col)
- Lygaeus, on Cotton: of D. J. B. is *Anthonomus insidiosus* (Het) Ag. Rep. 1873, p. 86, fig. 11, 12. SS. I/3. (Het)
- Lygaeus, of 1873 or Cotton Stainer, or Red bug of Florida (Het) Ag. Rep. 1850, p. 103. fig. 11, fig. 12 (Pyrophorus)
 { see *Lysitermus satulensis*. SS. I/10. (Het)
- Lycus cruentus (Col.) frequent. Flowers. Ag. Rep. 1868, p. 95, fig. 12. — SS. XXXIII/27. (Col)
- Lygaeus laevis (Het). Ins. found under bark. Ag. Rep. 1873, p. 122, fig. 22. SS. III/22. (Het)
- Lygaeus, fasciatus (Het) destroys caterpillars of *Eucalyptus egle* (Lec) caterpillars on *Asclepias* or on
 { *Asclepias*, Ag. Rep. 1873, p. 121, fig. 21. SS. III/11. S. VII/19. (Het)
- Lygaeus, fasciatus (Het) destroy caterpillars of *Eucalyptus egle*, on *Asclepias*, milk or suck used. Ag. Rep
 { 1875, p. 122, fig. 22. SS. I/6. (Het)
- Lygaeus, (Het) insects found on plants. on roots or ground some of them feed on other insects
 { Ag. Rep. 1875. (Het)
- Lygus, lineolaris (Het) *Lygus oblongatus*, or *lineolaris*. Little black plant bug. injures Peas, leeks.
 { Grape vines, Potatoes, strawberries, fruit trees, & frequent flowers of Cabbage &c —
 { and is said also to destroy the eggs of the 10 lined Colorado potato beetle, & other
 { insects. Ag. Rep. 1875, p. 126, fig. 34. Lygus lineolaris SS. VI/5. (Het) Lygus

Lygus lineatus (Fab) *Capsus*, & *Phytoecus*, quadrivittatus, injures fl. of Currants, Passions, mint.

{ *Megelia*, *Deutelia*, *Rictus* oval. Raspberry, Dahlia, &c. "Four striped plant bug".
Ag. Rep. 1875 p. 125, fig. 33. } *IS*, 1/9. (Holt)

Lymexylon navale (Ew) (Col.) injures naval ship timber. Ag. Rep. 1868, p. 98. (Col) *IS*, XXV, 9. (Col)
Lymexylon sericeum, (Col) Injures wood of Oak & other forest trees. Silky Timber Beetle Ag. Rep.
1868, p. 98. fig. 166. (Col) *IS*, XXX, 2a. (Col)

Lymexyloides? (Col) mere mention. Ag. Rep. 1868, p. 98. (Col)

Lytta aenea, Col. see *Pomphopæa* (Col) Ag. Rep. 1868, p. 103. fig. 184. (Col) *IS*, XXVIII, 1.

Lytta cinerea, atrata, marginata, vittata, & vittata, native species sometimes used instead of
{ European. *Cantharides* or blister flies. see *Epicausta*. &c. Ag. Rep. 1866 p. 34. (Col)

Lytta fulgipes (Col) see *L. pyrrivora*. (Uchler) Ag. Rep. 1860, p. 315. (brod. *Epicausta* (Col))

Lytta pyrrivora (Col) prob same as *Lytta fulgipes* (Uchler). Ag. Rep. 1860 p. 315. injures leaves
of Pear. prob *Epicausta* Col.

Lytta Epicausta, vittata, (Col) Blister flies. Eaten by Toads. Ag. Rep. 1870 p. 91. — 1866 p. 34.

{ 1869, p. 541. 1870, p. 90. *IS*, XXVIII, 12. (Col) see *Epicausta*.

Macrobasis albidus, (Col) injures potatoes & vegetables. Ag. Rep., *IS*, XXXVI, 5a. (Col)

Macr. *Bucator* an insect belonging to genus *Scarabeus*, which "is through the contrivance
of part of the Swale hemp, see *Penegron*. Ag. Rep. 1869, p. 264.

Macrobasis Fabricii, *Epicausta*, or *Cantharis cinerea* (Harris) (Col) Feeds on foliage of Honey
{ common Locusts, Wild Indigo, Potato, Bean, fruit of Apple. Ag. Rep. 1868, p. 103, fig. 179.
injures Beets potato. fol. It is said to destroy *Doryphora* *Chrysomela* & *lincolni* Ag. Rep.
1874 p. 123, see *Macrobasis unicolor* *IS*, XXVI, 9. (Col)

Macrobasis unicolor, (Col) see *M. cinerea*, *debilis*, & *micromis*, *Synonymus*. Ag. Rep. 1867, p. 64. —
IS, XXVIII, 9. (Col)

Macroderes subhirsutus, Ag. Rep. (Rathvon) 1861, p. 602. fig. 41, 42. L. feed on underground
roots, & destroy foliage Rose, Grape, blossoms Cherry, &c. — 1863, p. 567, Rose.
remedies, "Rose bug" — is poisoned by blossoms of *Ceanothus*. 1865, p. 89.
1866 p. 29. injures. — 1867, p. 74. mere mention — 1868 & 87 fig. 65. injures fruit &
foliage of Grape, apple, cherry, plum, Peach, Oak, rose, vegetables maize, grass.
frequent & causes, especially of Green daisy, Rose, Grape, in fact this insect is almost
omnivorous. — 1874, p. 125. in Kansas. *IS*, IX, 23. (Col)

Macroglanis (Hym) parasite in *Aedomyia* destructor, a fly infusing Wheat &c. Ag. Rep.
{ 1872, p. 126. Example *Macroglanis penetrans*. *IS*, IX, 2. (Hym)

Macrosia, *Carolina*, (Lep) L. infested with parasitic *Ichneumon* flies which spin small oval
cocoon, on its body. (*Microgaster congregata* (Hym) Ag. Rep. 1866, p. 42. — 1870, p. 67.
Larvae or young caterpillars destroyed by wasps, Ichneumon, 1872, 123.

common names, Tobacco worm, or moth, horn blower, Ag. Rep. 1870, p. 153. figs. 5, 6, 7.

L. injures fol. of Tobacco, Potato, Tomato, Red pepper &c. The caterpillars are
destroyed by a parasitic *Hymenoptera* insect, *Microgaster congregata*, which forms
a small egg like white cocoon, on the outer skin of the caterpillar many of
these egg like cocoons emerging from one caterpillar & form a very singular appearance
as they adhere to the dying caterpillar. *Macrosia*, *Carolina*, *IS*, III, 6. *IS*, 2. (Lep.)
(Syn. also *Sphinx*) mere mention 1874 p. 124. (Lep.)

Macrosia (*Sphinx*) *quinquemaculata*, (Claus. & H.) Tomato, or potato worm. Ag. Rep. 1870, p. 180.

L. feeds on Tobacco potato & tomato fol. habits same as above common in
the Northern States, whilst in Carolina, & more common in the South, both however
are found in Maryland. in the tobacco fields 1870, p. 180 fig. 39. The popular fallacy
is their being able to inflict a severe wound with the horn on the hinder end.
of their body, or of poisoning persons, denied. L. probably destroyed by *Microgaster*,
congregata, mentioned above. & by a parasitic *Hymenoptera* which forms a
larva out of loose woolly cocoons. (*IS*, 1/16 Hym) Ag. Rep. 1873, p. 159. — 1874, p. 84.

Macrosia quinquemaculata, (Claus.) *IS*, 1/16 Hym Ag. Rep. IV, 5. *IS*, XVI, 6. (Lep.) *IS*, 1/16 Hym

- Malachidae*. (Col) frequent flowers, & feed on other insects. Ag. Rep. 1862 p. 96. (Col)
Malachius acutus. (Col) (Cw) destroys grubs in the stems of plants. Ag. Rep. 1865, p. 91. (Col)
Mallodon. ? (Col) Ag. Rep. (Rathvon, 1861 p. 613. mere mention. Example. "Mallodon dasysternus." ISG. XVII/10, (Col)
Maire. plate, showing the oil starch. gluten &c Ag. Rep. 1863. p. 100.
Mallophaga. (Orth) Biting Bird lice (miscalled by some "Dicks") on various Birds and animals.
 { feed on feathers, hair, skin, scales, &c. unmedic'd, &c. Ag. Rep. 1874 p. 146. 130, &c.
 { example *Ninus argulus*. ISG. XII/1, (Orth).
Mammology, & ornithology of New England, &c. E. Samuels. Ag. Rep. 1863. p. 265.
Manna, produced by the punctures of a cicada² on the flowering ash. Ag. Rep. 1866 p. 38. (Horn.)
Mantidae. (Orth) *Camel crickets*, praying Mantids. feed entirely on other insects.
 { Ag. Rep. 1863, p. 275. — 1874 p. 130.
Mantis carolina (Orth). Ag. Rep. 1854 p. 58 p. 8. "Bear horse" "Boothsayer" &c. destroys other
 { insects Ag. Rep. 1854 p. 58 p. 8. — (Rathvon) Ag. Rep. 1862 p. 376, figs 8, 9, 10 prey
 { upon each other when young — 1864 p. 534. — 1866 p. 40. & 1874 p. 188. habits nat. Hist.
ISG. XLII (Orth) (see also 1863 p. 275)
May Beetle (US Col) see *Phyllophaga*, *Lachnosterna*, *Diplosaris*. (Col)
 " " (Eu Col) or cockchafer. (Hannet French) see *Melolontha* (Col) Ag. Rep. 1865 p. 89.
 " " (Rathvon) Ag. Rep. *Phyllophaga querana* Zusca. ISG. VII/6 n. & XLV/100 (Col.)
May fly *Ephemera* (Neur) *Palingenia*, (*Ephemera*). *limbata*. appear in Washington, D. C.
 { about May & June, sometimes in great numbers, & represent a miscalled shad flies.
 { by the fishermen. ISG. V/5. (Neur) (Ag. Rep. 1868 p. 309.)
Meal worms. The larvae of *Tenebrio*, *Tenebrionellus*, *molitor*, &c. destroy meal, flour, &c.
 { but form a very good food for soft billed birds, such as Mocking birds, &c. remedies 1863.
ISG. 13/3 Larva & ISG. XXV/15. (Col) 569.
Measuring worms. (New York) (Neur) *Exonorms*, *subsignaria*. Ag. Rep. 1864 p. 554. injures foliage of
 { Elm, poplar, Linden, & other trees. ISG. XVIII/16 (Sep.)
Medal gold, at Ent. Exhibition in Paris, awarded to ISG. 1865. p. 101. Ag. Rep..
Megacphala carolina. Tiger beetle. (Col) destroys other insects the larvae live in holes in.
 { the ground. (*Cicindela*) Ag. Rep. 1854. p. 87, pl. 8. — 1855. p. 109. pl. X fig. 1. — 1870. p. 65.
 { fig. 1. see *Nictacha*. ISG. 124. (Col)
Megacolex. (*Periclistus*) *diffingens*. Japanese earth worm imported with some Japanese
 { plants. Ag. Rep. 1871 p. 52.
Melanactes. ? (Col) Larva luminous (From So. Car.) Ag. Rep. 1873. p. 162. fig. 10. example
 { *Melanactes morio*. ISG. XI/20. (Col)
Melanogrydus. Ag. Rep. 1863. p. 103 (Col) *Melanogryini*. (Col) L under bark. Ag. Rep. 1863 p. 101. (Col)
Melanogry umbrosa. (Col) in rotten Oak stumps. Ag. Rep. 1863 p. 101. (Col)
Melanolestes. (*Pirater*) *fucipes*. (Beet) destroys other insects. Ag. Rep. 1875 p. 13a fig. 42. *Melanolestes*
ISG. IX/1. (Beet)
Melanotus (*Cratychus*) *communis*. (Col) L in rotten wood, also feeds on vegetable roots. Ag. Rep.
 { 1868 p. 94. fig. 114. ISG. X/4 (Col)
Melanophilus. (*Chrysobothris*) *fulvipes*. (Col) L probably feeds on white pine. Ag. Rep. 1868.
 { p. 91 fig. 96. *Melanophilus*. ISG. XI/9. (Col)
Melia azedarach. (Tree) *Spide* of India, or China — the berries are mentioned as a cure
 { for bots in horses, & to destroy insects. Ag. Rep. 1872. p. 131.
Melidacae phaeon. (Sep.) L feeds on Arrow wood. (*Viburnum*) "Baltimore fritillary"
 { Ag. Rep. 1867. p. 72. ISG. LXXII/6. ISG. LXXII/6 (Sep.)
Meloe angusticollis. (Col) L. feeds on Buttercups & potato the larvae are parasitic in the
 { bodies of hawks, was. flies (Syrphidae & Muscidae) Ag. Rep. 1868 p. 102. fig. 17.
ISG. LXXVII/22 (Col)
Meloidae. *Blister flies* ? (Col) mere mention. Ag. Rep. 1863 p. 103. (Col)

- Melolontha*. (Col.) Ag^t Report 1861, p. 590. (Rathvon) destructive to roots, in the larva state.
 { to Fruit & foliage as perfect insect. Larvae destroyed by *Cicindellidae*. larvae.
 Ag Rep. 1861, p. 590. (Col) *variososa* (Col) see below.
- * *Melolontha variolosus* (Polyphylla) (scarred melolontha) I destroy; foliage of Elm maple
 { Oak apple plum & other Fruit Forest trees. Ag Rep. 1868 p. 88 see *Macronoxia*
 JG VII/18 (Col)
- Melolontha vulgaris* (Sw) (Col) Cockchafer of Europe, I. feed on roots. Ins on foliage of trees.
 { Ashmole, Ag. Rep. 1868, p. 88. — damage done in Picardy 1869 p. 632. (Col);
Melolontha (Col) (Rathvon) Ag rep. 1861, p. 590. I destroyed by S of *Cicindella*. (Col)
- Melolonthidae* (Col) feed on vegetable matter. Ag Rep. 1868 p. 87. (Col)
- Melophagus ovinus* (alp) sheep tick, or louse fly. with remedies. Ag. Rep. 1872, p. 132, fig. 26.
 JG. VI/05 (alp)
- Membracidae*. (Hom) Ag. Rep. 1868, p. 315.
- Membracis* (Hom) (Rathvon) Ag Rep. 1862. p. 387. resembles *Tetonia* (Orth) when young. Sporns
 { a connecting link between Orth. & Homop? (Rathvon)
- Membracis benotata*. frequents Butternut, hop tree, Locust, Vines. Ag. Rep. 1876, fig. 11.
 see *Enchenopa*. JG. 1/22 (Hom)
- Membracis carinata*. (Hom) frequents the potato plants. Ag^t Rep 1876, fig. 11. see *Entilia*.
 JG. 1/26. (Hom)
- Membracis concava*. (Hom) frequents weeds. Ag^t Rep^t 1876, fig. 13. see *Entilia*. JG. 1/1. (Hom)
- Membracis innervata* (Hom) frequent Oak & Chestnut. Ag Rep 1876 fig 18 see *Smilia* JG. 11/26 (Hom)
- Membracis parallela* (Hom) frequents white pine & covers itself with a froth like liquid. by some
 { called frog spittle. Ag Rep. 1876, fig. 26. see *Aphrophora*. JG. 1/34. (Hom) in *Aphrophora*
Membracis quadrinotata (Hom) frequents white pine as above Ag Rep. 1876 p. 27. JG. 11/33 (Hom)
- * *Membracis rava*. (Hom) frequents Hickory, walnut Oak, Ag Rep. 1876 fig. 20. see *Smilia*. 11/31. Hom
- Metaphodus femoratus*. see *Acanthophaea*. (Hct) JG. 1/20. (Hct)
- Microgaster congregata* (Hym) a minute parasitic four winged fly, destroying the tobacco and
 { potato, caterpillars, the parent fly deposits a great number of eggs in or on the
 caterpillars of *Macrosia carolina*, or *M. quinquemaculata*, the larvae hatched from
 these eggs penetrate into the caterpillar & eat out the fatty parts without destroying
 its life, they then eat holes through the skin. Yform small egg shaped white
 cocoons, on the outside of the dying caterpillar & finally emerge as perfect minute
 flies, again to lay eggs in other caterpillars They are however themselves destroyed
 by another minute parasitic fly. *Pteromalus tabacum*. Ag Rep 1873 p. 158. *Microgaster*
 JG. 4/22. (Hym)
- Michener*. Ob. Ag^t Ornithology Ag Rep. 1863. p. 287. 307.
- Microcentrum retinervis* (Orth) Sta. injure the foliage of Orange trees. Ag. Rep. 1858, p. 275.
 JG. IV/3. 16. (Orth)
- Microphus*. *Phytocrochomus*. (Bliss) 'devastator'. *Leucopterus*. *Chinche lug.* (Hct) injures vegetables
 { grain. maize. grass. Wheat. Oats, potatoes, sorghum, buds of Pear &c? — Ag. Rep.
 1864, p. 532. remedies. — 1869 p. 537. — 1870, p. 57. 59. — 1874 p. 127, localities
 injured. — 1875 p. 122 fig. 26. substances injured. see *Bliss* *Microphus leucotus*.
 JG. 11/16. 17. (Hct)
- Midas*. *Platus* (Dip) feeds on other insects. Ag Rep. 1864, p. 44. ex. *Midas clavatus*. JG. 11/20 (Dip)
- Migratory Locusts*. of the US. see *Caloptenus spretus*, & ? *Edipoda atrox*. (Orth)
 { of Ea. Asia & Africa *Acridum peregrinum*. *A. tartaricum*. & *Edipoda*
migratoria. (Orth)
- Midges*. see *Simulidae*. Ag. Rep. 1872, p. 126. (Dip)
- Milyas* (Hemipter) *enclis*. (Hct) destroys other insects. *Doryphora* (*Chrysomela*) *decum*.
 { *enclis*. App. *Tortrix*. &c? —
 JG. *Milyas enclis*. 11/12. (Hct.)
- * *Microponis graminicola*. (Hym) destroys *Calandra* (*Sitophilus*) *oryzae*. Ag. Rep. 1849 p. 332. 1866
 JG.

Winks, business by Stratton, Tennessee. Ag Rep 1869 p 429.

Winks, Feasibility & profits of raising, by H. Desjardine. Ag Rep 1873 p 653.

Wite causing scab on Sheep. Ag Rep. 1864. p 563. remedies &c.

Wites, red, shides, on plants. (see *Acanus ruber* of Saunders report. Ag Rep. 1871 p 109. (on *Liguaria*)

{ — remedy. Ag Rep. 1864 p 564.

Wites on Grasshoppers — *Antenna Locustarum*. Ag Rep. 1867 p 67. — 1874 p 138. as *Acanus*

{ *Ralston* (Ag Rep. 1862. 389.

Wites on Necrophorus (Col) see *Gamasus*. (Coleopterorum?) Ag Rep. 1868 p 52.

Wite of the Pear, see *Typhlodromus pyri*. injures leaf & the pear. Ag Rep 1872 p 113, fig 2.

Wite infesting crane fly *Tipula clavacea* (Eu) see *Cecypte rubra*. Ag Rep. 1872 p 128.

" " common fly. *Asoma urachnidae*? Am Ent 1. 249. Ag Rep 0. — & *Uroprocta*

Mocha Stone moth, Std (Lep) see *Scathophora incusa* *Clastera americana*. L. feeds on Poplar.

{ *Agilus*. (Poplar Gummer) Ag Rep. 1864 p 532. *Scathophora incusa*. S.S. LVI/13 Ins. LVII/3 (Lep)

Worms, fine exhibition at the Paris exposition Ag Rep. 1865 p 92. (13 Cases)

Mole crickets, (Orth). see *Gryllotalpa*. Remedies. Ag Rep. 1864 p 543. Orth. S.S. VII/13. (Orth)

Molotrus, male, "apple worm or midge", see *Sciara* male (Dip) I found in apples, injured by

{ the codlin moth, *Carpocapsa pomonella*, Ag Rep. 1872. p 116.

Monochamus *dentator*, *tittillator* (Col) *Stablong*. beetle. (Rathvon) Ag Rep. 1861 p 613. L. feeds,

{ on wood of pine. S.S. XVI/1. (Col)

Monotomidae, (Col) mere mention. Ag Rep. 1868. p 53. (Col)

Mordellidae, (Col) m. m. Ag Rep. 1863. p 101. (Col)

Mordella, *setipunctata* (Col) frequents flowers. Ag Rep. 1868. p 101. fig. 174. S.S. XXX/14. (Col)

Mordella *fuscula* (Eu) (Col) found in stems of hawthorn, (*Marrubium vulgare*) Ag Rep. 1868. p 101 (Col)

→ Morris, Dr. J. G. Baltimore. *Acanthus* silk worm. *Samia cynthia*. (Lep) introduction

{ habits, culture, experiments. Ag Rep 1861. p 874, 382. additional observations &c

{ with figures 1862 p 390. *Samia cynthia*. S.S. APC. XXI/4 LXVI/5. (Lep). (Bombyx Syn)

x Mordellidae *Chalcis typhae* (Hdt) accused of feeding upon ears of wheat but probably feeds

{ on the wheat midge. (*Diplotis tritici*) *Chalcis* S.S. II/7. (Hdt)

Mosquito, or Mosquito, see *Culex*. *littatus*. &c. S.S. LXXIX. Ins. I/1 (sometimes *Mosquito*)

Mosquito hawk. (New). *Libellula*. or dragon fly. L. is predaceous. (New) Ag Rep. 1864 p 543.

→ Moth the chrysalis of a moth was destroyed by an Anthrax Ag Rep 1866 p 44 S.S. Ins III/11. (Lep)

Murmelidae (Col) one species said to live in old rice. Ag Rep 1868 p 53 (Col)

Murmelidae, *ovalis*, (Eu) found in grain (rice) Ag Rep. 1868 p 114. Col

Musca *caesar*. (Dip) Carnon & flesh. remedies. Ag Rep 1864. p 563. — found on stomach

{ of wood pewee, 1865. p 39. (Dip.) S.S. Lucilia IV/20. (Lep)

Musca *corvina* — (Dip) I feed on cheese &c Ag Rep. 1866 p 29.

Musca *domestica*. common house fly. Ag Rep 1864. p 563. — 1872 p 131 habits, remedies &c

{ S.S. IV/23. (Lep.)

x Murgantia. (*Strachia*) *histrionica*. injures cabbage, Turnips, & other cruciferae. & it itself

{ destroyed by *Leptoglossus phyllorhizus*. Cabbage bug. "Harlequin Cabbage bug". See also

{ *Strachia*. Ag. Rep. 1867 p 71. fig. 45. *Murgantia*. *Strachia histrionica*. S.S. II/22. (Hdt)

Muscidae Dip Ag Rep 1868 p 102. 307 fig &c. (Lep)

Museum, Agricultural. short list of plan &c Ag Rep. 1863. p 561.

" " Report of progress. &c Ag Rep. 1864. p 520.

" " Ag Report 1865 p 3. 33. 94. specimens. 1865 p 24

" " Plan. of Agricultural & Economic. Pers. Ag Rep. 1865. p 94.

" " of Department of Agricultural. 1866. 10. 27.

" " Short recapitulation. of plan. 1867. p 76.

" " contents &c & removal. 1868/10.

Mycetobia. *Mycetophila pensica* (Dip) Peach *Mycetobia*. I found in burrows filled with frass, &c

{ gum, made by *Algonia ciliata*. in the Peach tree. honor. Lep. Ag Rep. 1872 p 116. fig 4.

{ S.S. XI/13. (Lep.)

Silvius

Mycetobia, (Dip.) feed on fungi, one mentioned by Dr Packard. feed in prutiscent sap: under bark of Elm. Ag. Rep. 1872 p 115. (Dip.)

Mycetophagidae (Col) fungi, under bark, mere mention. Ag. Rep. 1868. 80. (Dip.)

Mycetophilus persici (Dip) see *Mycetobia*. Ag. Rep. 1872 p 115. fig. 4. (Dip.) SS. XI/13.

Mycephilidae. (Dip) 1868. p 87.

Mylabris. (Pictor. Est) latest name for *Bruchus pisi*. Ag. Rep. 1869 p 332. 1863 p 374. 45. 9°. for habit. remedies see *Bruchus*. *Mylabris pisi*. SS. XIV/6. (Col)

Mylabris sinuata (Col) Field bean. Ag. Rep. 1870. *Mylabris*, *Bruchus sinuatus* SS. XIV/7. (Col)

Mylabris granarius (Col) Destroyer peas, beans &c. Ag. Rep. 1849 p 340. 1870 p 71. *Mylabris*, *Bruchus granarius*. SS. XIV/12. (Col) (a field bean. Ag. Rep. 1870 p 72.)

Mylabris varicornis (Col) a field bean Ag. Rep. 1870 p 72. *Mylabris*, *Bruchus varicornis*. SS. XIV/11. (Col)

Myrmecidae (Col) mere mention. Ag. Rep. 1868 p 104. (Col.)

Myrmecom (Pleur) Ant. Lion. Ag. Rep. 1855 p 107. L dig pit falls to entrap other insects, on which they feed. — 1864 p 545. (New) ex. SS. V/16. 312. (New)

Myisia (Coccinella), 10, punctate. Ag. Rep. 1864 p 65. It destroys Cotton aphus. See *Anatis*. SS. XXV/3. (Col)

Nabis (Het.) feed on other insects. Ag. Rep. 1866 p 44.

Nabis parvis (Het.) destroys other insects. Ag. Rep. 1875. p 130. fig 47. See *Hammatocerus* SS. III/5. (Het)

Nacordes melanura. (*demera apicalis*?) (Col) Its frequent flowers. Ag. Rep. 1868 p 103. fig 187. SS. XXVII/12. (Col)

Nauconis. (Hem.) aquatic, & destroys insects. Ag. Rep. 1875 p 132. fig. 56. SS. V/5. 311/36. (Het)

Nasutibius (*Stenurus*) *dentatus* (Col) I found under bark of trees. & in sugar. Ag. Rep. 1868 p 84. SS. VI/23. (Col)

Naval ship timber beetle. (Col) *Synsylon navale*. L. injures wood. Ag. Rep. 1868 p 98. SS. XXVI/9. (Col)

Necrobis (Col) feed on animal matter, carrion &c. see also *Corynetes* (Col) Ag. Rep. 1868 p 97. (Col)

Necrobia, *villosa* (Col) predaceous eat dried meat carrion &c. Ag. Rep. 1868 p 97. fig 143. { see *Corynetes*. SS. XI/32. (Col)

Necrodes, *Surinamensis*. (Col) (Rathvon) Ag. Rep. 1861. p 595. fig 16. feed on Carrion putrid. Fungus &c. { see *Peltis* SS. IV/13. (Col)

Necrophila *pellata* (American) feeds on Carrion. Ag. Rep. 1866 p 82. fig. 19. (11 by error) as *Peltis*. Americanus SS. IV/11. (Col)

Necrophila (Col) see *Silpha* also Ag. Rep. (Rathvon) 1861 p 595 (Col)

Necrophorus tomentosus (Rathv) Ag. Rep. 1861 p 595. fig 13. 14. 15. eat small dead carcasses { Carrion &c. resembles *Silpha* (*Necrophorus*) velutinus of SS. IV/18. (Col)

Necrophorus ? (Col) burying beetle. (Rathvon) Ag. Rep. 1861 p 595? — 1862 p 380. (Col)

Necrophorus (Col) useful at removing Carrion Ag. Rep. 1866 p 39. Feeds as scavengers (Col)

Necrophorus americanus (Col) feeds on carrion, especially on dead snakes. Ag. Rep. 1868. p 52. 102. fig 10. { It is infested with a mite (Samaras) on *Silpha americana*. SS. IV/15. (Col)

Necrophorus marginalis (Col) feeds on carrion Ag. Rep. 1868. p 52. fig 17. SS. IV/10. (Col) see *Silpha*.

Neides (*Berytus*) *elegans* (Eul. Het.) found on Freshwater. "Ononis americana" Ag. Rep. 1875. p 121. (Het)

Neides (*Berytus*) *apularia* (Eul. Het.) Ag. Rep. 1875. p 121. common in sand at roots of trees. (Het)

Nematus unibalis Say. Black willow saw fly Ag. Rep. 1873. p 255. worms when young black. & with a row of 12 yellow spots on each side when adult. Belladone recommended to destroy them. (Hym)

Nematus unibalis (Hym) Imported Currant worm or Saw fly L. injure currant & gooseberry. { foliage. color of worm. green. spotted with black. habit. remedies &c. Ag. Rep. 1870. p 77. fig 83. (Hym)

Nemobius. (*Chelita*) *villosus*. Striped cricket. (Rathvon) Ag. Rep. 1862 p 881. Feeds on { vegetables. Carrion &c. SS. III/9. 10. (Orth)

Nemognatha, *atricornis* see *Zonitis* (Col) taken on flowers. Ag. Rep. 1868 p 100. fig 185. The larvae of certain species in Europe are said to inhabit ants nests, in spring. { Nemognatha lutea. SS. XXX/25. (Col) SS. 1869

Nepra articulata (Hbst.) water scorpion. I. carnivorous, & destroys other insects. "Ag Rep."
 {1875 p. 133, p. 57. SS. VI/10. (Hbst.)

Net. double insect net. for sweeping grass, bushes described. Ag Rep. 1863. p. 577. —
 {double scoop net & insect trap described. figured. 1867 p. 64. — double net 1874.
 p. 160. fig. 11. —

Neuroptera. Ag Rep 1864. 545. 1866. p. 40. net veined insects.

New York, measuring worm, see *Ennomis subsignarius*, Ag Rep. 1864. p. 554. L feed on Elm.
 {popular. & London. SS. L.P. XVII/6. (Lep.)

New York weevil. see *Ithycerus novaeboracensis*, *curculionoides* Ag Rep 1860. p. 321.
 {1861. p. 604. fig. 45. & 46: see *Ithycerus novaeboracensis*, SS. VII/13. (Col)

Nerara (*Rhaphigaster*) *pennsylvanica* (Hbst.) Green plant bug of S.W. on Cotton Ag Rep 1855
 {p. 93. p. 5. fig. 5. SS. VII/14. (Hbst.) (also later *Nerara hilensis*)

Nerara hilensis (*Rhaphigaster pennsylvanicus*) of Fitch. Ag Rep 1875. p. 117. fig. 5. *Nerara hilensis*.
 {SS. IX/1. (Fitch)

Nin. a grease produced by an insect. bearing the same generic name, from Yucatan.
 {Dr Arthur Schott. Ag Rep. 1868. p. 268.

Nitidulidae. *Nitidulini* (Col) feed on decomposing animal & vegetable substances. & found in
 {flowers. Jungi &c Ag Rep 1868. p. 83. Example *Nitidula lichustulata*. SS. VII/24. (Col)

Noctua Anomis xylenae Cotton caterpillar or moth. injures foliage of the Cotton plant Ag Rep
 {1855. p. 71. p. 11 fig. 6. 1856. p. 246. — in "article of cotton by free labor" by M. Delandson

the wood cut of *Anomis xylenae* is wrong, having been copied from another insect
 in the Report for 1855. p. 118 fig. 4. Landou's Report in Ag Rep 1864 p. 88. 90.

Noctua anomis xylenae is now *Alstia angyllacea*. SS. XXIII/4. (Lep.)

Noctuidae. Lep. Ag Rep 1862 p. 469. Lep.

Notonecta insulata (Hbst.) "water boatman" destroys insects. Ag Rep. 1875. p. 136. fig. 62.
 {SS. VI/4. (Hbst.) & *Notonectidae* 1868. p. 315.

Notonecta innata Hbst. "Water boatman" destroys insects Ag Rep 1875. p. 136. fig. 63

Notonecta monodon (Col) frequents Cotton flowers Ag Rep 1868 p. 101 fig. 172. SS. XXVII/23. (Col)

Notonecta Form 7. Hbst. Ag Rep. 1875. p. 127. Hbst

Nysius raphanus desbromator (Hbst.) sucks sap of Radishes, mustard, bellows, cabbage, cruciferous
 {plants, grapes, potatoes, &c Ag Rep. 1875. p. 132. fig. 25. SS. VIII/9. (Hbst)

Oak. small horn bug see *Platycorus quercus*. Ag Rep 1870. p. 66. SS. X/3. (Col)

Oak. horn bug. Large. Col. see *Lucanus darne*. Ag Rep 1861 p. 593 fig. 28. 29. 30. SS. X/16. (Col)

Oak powder. *Stenocorus pulator* (Lac) *Elaephidion villosum*. Ag rep 1863 p. 575 remedies &c

{cuts off twigs from the inside of Oak apple peach hickory chestnut &c

{*Elaephidion villosum*. SS. X/13. Col. (compared with *Oniscus virgatus*) which cuts off twigs
 of Pear Hickory &c from the outside hence called the Twig girdler see *Oniscus virgatus*.)

Olema lineare (Col) & (Cw) L feed in the pith of small branches of Hearn's & Filbert. Ag Rep.
 {1865 p. 89. (Col)

Olema trijunctata (Col) Raspberry borer. L. bores in pith of Raspberry. Blackberry, &c
 {Ag Rep 1865 p. 576. — 1865 p. 89. & 1870 69. SS. XIV/4. (Col)

Oblique-banded rose moth. or Tortrix. L. destroy the foliage of Roses. rolling themselves up in
 {a leaf or leaves, or tying them together to form a shelter. see *Exotanea rosaceana*.
 {SS. XII/13. SS. XVII/4. SS. XX/20. & XXIV/6. 8. 10. (Lep.)

Oxyptis. rubra, a mite infesting. *Tipula obscura* (Cw) crane fly, or Daddy long legs Ag Rep.
 {1872 p. 128.

Odontomyx (*Aspidius*) *trinitis* (Col) mere mention Ag Rep. 1868 p. 94 fig. 118. *Odontomyx*.
 {*trinitis* SS. XX/17. (Col)

Oebalus *typhaeus*, *pugnae* (Hbst) said to injure Wheat? Ag Rep 1867 p. 71. (Syn *Mormonella*)
 {figured. p. 71 SS. III/7. (Hbst) *Oebalus*.

Acanthius niveus, Orth. Ag. Rep. (Rathvon) 1862 p. 381, Fig. 17. 18. — White climbing. In. cricket. Ins. pierces holes & deposits eggs in Peach trees, & eats holes in foliage of grape, and Tobacco &c. — 1874 p. 153, Fig. 16. Femals. injure. & puncture branches. of Apples. Blackberry, cherry, currant. grape. peach, plum. pear raspberry. injure grapes &c but at the same time they are said to destroy plant lice & other insects. IS. VII/12 (Orth.)

Ascutus. (actatus) confusum (Lep.) injures foliage of Cotton, also. Anso vitæ, Larch, Linden, Hemlock. Maple. Negundo &c. — 1866 p. 552. Basket, or brook worm. injures Cedars. Remedies. — 1866 p. 41. ex *Sturidipteryx ephemerae* formis. IS. XII/1, 1865 (Lep.).

Ademeris. (Col.) frequent umbelliferous plants. Ag. Rep. 1866 p. 103. (Col.)

Ademeris aricalis, see *Nacental melanura*. (Col.) Ins. taken on flowers. Ag. Rep., 1868, p. 103.

IS. XXVII/19. Col.

Adipoda atrox (Orth.) Migratory locust (or grasshopper) of the Pacific coast. Ag. Rep. 1871 p. 77, fig. 10. Injures vegetation in Orchards, gardens, vineyards, grain fields &c. — 1874 p. 137, fig. 10. "Terrible grasshopper" of Calif. Oregon, west of Rocky Mts. Full account.

IS. VIII/3. (Orth.) "note from Thomas list of Orthoptera, in Tr. Leavenport Acad. nat. Sc. 1876. *Camula Adipoda pellucida* is said to be a syn of *Adipoda atrox*, I thought not to be the destructive migratory species of California." Leavenport list of Orthoptera, Thomas, p. 253.

→ *Adipoda*. (*Camula*) *pellucida*. Scud. (Orth.) resembles *A. atrox*, said to be the migratory locust of the Pacific coast. Ag. Rep. 1871 p. 78. *Adipoda*. *Camula pellucida* IS. XII/26 (Orth.)

Asivus *bovis* (Lep.) skin bot fly producing warbles or wormholes in the skin of cattle. I live in holes under the skin of cattle & feed upon the pus or matter produced in the tumor. remedies Ag. Rep. 1864 p. 563. see *Hypodermis bovis* IS. VIII/21, VII/86.

" ? Head fly of Texas VI/37. (Lep.) (see also 1872 p. 130 fig. 18) (*Asividae* 1866 p. 317.)

Cetonus (*Cephalomyia*) *ovis*. (Lep.) sheep head bot. L. in frontal sinus of sheep. remedy. Ag. Rep. 1864 p. 563. & 1872 p. 129. *Cephalomyia ovis*. IS. VII/36 Lep.

Diketicus. (*Cochilus*) *concolorum* (Lep.) Ag. Rep. 1868 p. 264. injure foliage of Orange. — 1869 p. 553 Ins. on Cotton. (Chambers) with a rough figure. see *Sturidipteryx ephemerae* formis IS. XII/1 to 5. Lep.

Oil beetle. see Meloe. example. IS. XXXVII/22. Ag. Rep. 1866 p. 102. Fig. 17. (Col.)

Olanius. ? n. sp. (Hom) frequents Blackberry bushes. Ag. Rep. 1876 Fig. 7. IS. II/9, 4, 18. (Hom)

Omaloplia, see *Seneca*. Col. ex. *Omaloplia seneca rediptrina*. IS. IX/17 (Col.)

Omascul. (Col. Ex.) Ag. Rep. 1865 p. 91 destroys other insects. (Col.)

Omphron. *labiatum*. (Col.) destroys young maize. Ag. Rep. 1866 p. 79. Fig. 2. IS. XXX/19 (Col.)

Oncideres. *circulatus* (Col.) Twig girdler. Ins. girdles twigs of Pear Denimmon. Hickory. Elm. walnut. & Apple trees. Ag. Rep. 1867 p. 72. 1871. 72. — girdles twig being depositing egg. 1873 p. 103. IS. XX/26 (Col.)

Onion flies. (Lep.) see *Anthomyia ceparum*, of the East, & *Ortalis flexa* of the western states. Ag. Rep.

IS. VII/33, VII/18. & VIII/23.

Onion fly. *Anthomyia ceparum*. Ag. Rep. 1869 p. 237. (Lep.) IS. VII/33, VIII/18. (Lep.) (see also 1867 p. 738 1869 227.)

" " *Ortalis flexa* Ag. Rep. 1864 p. 563. — 1872 p. 134 fig. 26. (Lep.) IS. VIII/28 Lep.

Oviogy. of some land birds of New England. & means of identifying injurious, & beneficial species.

Ag. Rep. 1864, p. 386.

→ *Ophion*. *macrurum* (Hym) an Schneumon fly. destroying *Artacus* (*Samia*) *Cecropia* (Hol.) Ag. Rep. 1866 p. 41. B. Rathvon XI/6. (Lep.)

Ophthalmicus. (Col.) prob a pear feeder. Ag. Rep. 1875 p. 122 Fig. 24. IS. Ophthalmicus pictus II/2 (Foot.)

Opilus molles (Col.) (Ex) destroys L. of wood eating insects. Ag. Rep. 1865 p. 91. Col.

Opiomata (*Opomata* Thomas) (Rathvon) Ag. Rep. 1862 p. 384 m. m. ex. *Opiomata bi-vittata*. IS. VI/24. (Orth.)

+ *Ophion bimaculatus* (Hym) Ag. Rep. 1866 p. 41. (Hym.)

x *Psilopoda migratoria*. (Orth.) see *Pachytus migratorius*. IS. XIV/10. Orth.

J. Glover.
D

- Orange Aphid. or Plant louse. (Hom.) Ag. Rep. 1858 p. 261. (Hom.)
- Orange Bark louse. or Scale insect. (Hom.) Coccus. Ag. Rep. 1855 p. 115, pl. X, fig. 8, injures bark & foliage of Orange trees. Ag. Rep. 1858 p. 256 — 1864 p. 561 remedy — 1865 p. 91
 { coccus destroyed by *Eucrochus gueri* (Coccinella) see *Aspidiotus Gueri* SS Feb IV. (Hom)
- Orange tree, basket worm, or tree worm. (Lep.) *Psyche confederata*, see also *Acraea*. *Platarchus*
 { *glauca* (Pack) Ag. Rep. 1858 p. 266. *Psyche confederata*, SS Feb XII/18, p. LXXXV/26 (Lep.)
- Orange insects, experiments on in Florida, & testimonials of success in destruction of Coccus
 { *Apidiotus glauca*. from Dr. H. Moragne & Judge Forward of Palatka Fla.
 { Ag. Rep. 1857, p. 551 to 554 & Moragne, 1859 p. 570. Judge Forward)
- Orange tree, remarks on the Orange tree, by J. J. Brown, taken principally from Michaux.
 { 1858 p. 266.
- Orange Wood Buprestis. (Col) see *Buprestis lineata*, I feed on tender shoots of pine, I probably
 { lives in wood. Ag. Rep. 1868 p. 91. *Buprestis lineata* SS XII/13. (Col)
- Orchidum. ? injures cotton by boring slits in stalk in which to deposit eggs. Ag. Rep. 1867 p. 61.
 { figured. (Orth-)
- Orchidum. gracile (Orth) Ag. Rep. (Rathvon) 1862 p. 382 fig. 22, eats grain, m.m. see; *Xyphodum*
 { *assatum* SS IV/10. (Orth)
- Orchidum. vulgare (Orth) (Rathvon) Ag. Rep. 1862 p. 382, feeds on grain, & damage. syn. *Stenophylus*
 { *agilis*. Slender meadow grasshopper. SS VIII/5 & 11/6. ♀ IV/11/6. (Orth)
- * *Orchidum vulgare* as fig. in Ag. Rep. 1874 p. 164 fig. 15, is wrong as it is the figure of *Acanthus bipunctatus*
 { see SS IV/16. (Orth) but in by mistake.
- Orchestis. (Hortic.) & *Phyllocolpa*, *stimulata*, Col. I saw young on cabbages & young vegetables. Cabbages, &c.
 { Ag. Rep. 1865 p. 280. see *Orchestis stimulata*. SS XXIV/8 (Col)
- Orgyia. (Lecostigma, Lep.) Tussock moth Ag. Rep. 1864 p. 552, for fruit & forest trees remedies —
 { is destroyed by a parasitic Hymenoptera. *Trichogramma orgyiae*, 1866 p. 42.
 { Orgyia. SS XI/5 to 10 & XII/9. LXI/596. (Lep.)
- Oriental, Cockroach. (Orth) or *Platanus*. (Rathvon) Ag. Rep. 1862 p. 374. *Stylogygus orientalis*, 1874.
 { p. 100, fig. 4 *Stylogygus* SS I/56. VII/2. Orth.
- Ormenis. (Pteroplera) *septentrionalis*, (Hom) found on grass, & *Podophyllum*. (May apple)
 { Ag. Rep. 1876 fig. 9. SS I/45. (Hom)
- Ornithology. Ag. cultural. by W. Michener, Esq. Ag. Rep. 1863 p. 257 to 307.
 { " " of New England by E. A. Samuels. Ag. Rep. 1863 p. 265.
- Ornithological report, notes of contents of stomachs, with insects named, but not catalogued.
 { Ag. Rep. 1865 p. 37.
- Osteidae. (Lep.) L. feed on fruit stems, & leaves of trees & plants, Ag. Rep. 1872 p. 134.
- Ostealis. (Lep.) *Trypeta arcuata* Western onion fly. (Lep.) Ag. Rep. 1864 p. 563. remedies —
 { 1872 p. 134 fig. 24. Habits & remedies. SS VIII/28 (Lep.) (for Eastern onion fly see
 { *Anthomyia ceporum* SS VII/33 & VIII/18)
- Othophora. *danicornis*, *Othophora thoracicum* (Col) Larva probably in word, Ag. Rep. 1868 p. 97/1942.
 { SS. XI/36. Col. *Othophora*
- Othoptera. Grasshoppers, Locusts &c. 1864 p. 543. — 1866 p. 40. — 1868 p. 308. — 1871 p. 77. 1872/127. 1874/129.
 { Rathvon Ag. Rep. 1862 p. 372. as food for man & remedies, 1862 p. 389. 1874 p. 276
 { Remedies, &c. 1864 p. 543. one of the principal orders. History & general article. 1874.
 { p. 129.
- Orthoptera. *ambulatoria*. (Orth) eaters, as Cockroaches & (Rathvon) 1862 p. 374.
- Orthoptera. *naptona*. (Orth) grasshoppers as *Manit* & " " 376.
- Orthoptera. *saltatoria* grasshoppers, as *Grasshoppers*, & " " 378.
- Orthostethus (Elater) *infusatus*, (Col) I feed on Chestnut wood. Ag. Rep. 1865 p. 94, fig. 11 SS XI/8. (Col)
- Osage orange (*Maclura aurantiaca*) as food for sick worms (*Donax mori*) with experiments
 { by Mr. Cornaby, Ag. Rep. 1870 p. 82.
- Oscoris. (Lep.) I feed on grain, & wheat barley. Cys. & Ag. Rep. 1872 p. 134 Example *Oscoris granarius* Europe
 { SS. XI X fig. 3. Lep. France.

- Osmoderma crenicollis* (Col.) smooth *Osmoderma*, (Uhler.) *Ag. Rep.* 1860 p. 320. Eats wood of
 { Apple trees. over like Russia leather. — 1868 p. 90. I feeds on Sap. of trees. Apple.
 { Cherry &c. IG. X/2. (Col)
- Osmoderma scabra* (Col.) Rough *Osmoderma*, (Uhler.) *Ag. Rep.* 1860 p. 391. Eat decayed wood of Apple.
 { As. feeds on foliage. of Apple, Oak, Fruit. Forest trees. Ins. emits a scent like Russia
 { leather. IG. X/3. (Col)
- Othniidae*. see fam 67. p. 109. *Crotch.* *Ag. Rep.* 1868, p. 94. (Col.)
- Otiocerus amyoti* (Corn.) 1876. no fig. I frequents Hickory, & Walnut. (Hom)
- Otiocerus coquebortii* (Hom.) *Ag. Rep.* 1876 p. 93. frequents wild grape, Beech, & oak. IG. 1/48 (Hom)
- Oyster shell bark louse, or Apple tree scale insect see *Aspidiotus conchiformis* (*Ag. Rep.* 1867 p. 74
 { 1870 p. 88 IG. 11/28 Hom)
- Pachylis gigas* (Bee) fm *Avispa*, *Ag. Rep.* 1875. p. 120. fig. 15. IG. VIII/36. VII/23. (Felt)
- Pachymenus calculator* (Hym.) destroys *Diplosis (Acadomyia) tritici*. the wheat midges. *Ag. Rep.*
 { 1866. p. 42. (Hym.) IG. IX/9. (Hym)
- Pachytelus migratorius* (Orth.) migratory Locust. of Europe, Asia, Sweden, Frankfort &c
 { *Edipoda migratoria* of Smith's bible dictionary p. 353. *Pachytelus*. IG. XIV/10. (Orth.)
- Pacific coast, migratory Locust. see *Edipoda atron*. *Ag. Rep.* 1874 p. 77 fig. 10. — 1874 p. 137 fig. 10
 { IG. VIII/3. (Orth)
- Palm weevil (Col.) *Rathvon*. *Ag. Rep.* 1861. p. 6p. *Calandra palmasonum* ? (Col)
- Palmeto pea, or cedar weevil. see *Coryphus arthureus*. *Ag. Rep.* 1870 p. 71. Eats out interior of
 { Seed. like the pea bug. IG. XXIX/4 (Col)
- Palmetto weevil* (Col.) L. fed on substance of trunk, near the top of tree, or when cut down.
 { see *Chrysophora (Lemmarmanni) orientalis* IG. XIII/21. (Col)
- Pangus*. *Harpalus caliginosus* (Col) *Ag. Rep.* 1868. Ins. injures wheat, & grass seeds. —
 { 1861 p. 592. *Rathvon* *Ag. Rep.* fig. 9. hides under stones, &c — 1863 p. 465 probably feeds
 { on wheat. — 1868 p. 80. *Harpalus caliginosus* IG. 1/9. (Col)
- Papilio asterias*. "Pansley worm." *Lep.* *Ag. Rep.* 1864 p. 548 I injures Celery, pansley, Parsnip.
 { carrots, & umbelliferae in general. — remedies. — & is destroyed by *Schneumon* *Fig.*.
 { *Trogus exosius*. IG. 1/18 (Hym) — 1868 p. 314. — 1868 p. 119 p. 11. & is also destroyed
 by *Stethus fimbriatus* (IG. 11/30. *Det.*) *Papilio asterias* IG. 3R/1/ Ins. XXVI/58. (*Lep.*)
- Papilio Thos* *cresphonas* (*Lep.*) *Ag. Rep.* 1858 p. 264 Eats foliage of Orange & Prickly Ash
 { see *Papilio cresphonas* IG. 2R/3 p. 24. (*Lep.*)
- Parasitic insects destroying, *Chrysomela (Doryphora) 10 lineata*. full Est see *Ag. Rep.* 1874. p. 123.
- Papilionidae*. *Ag. Rep.* 1868 p. 314.
- Parsnips. on Italian bees. *Ag. Rep.* 1857 p. 543.
- * Patent office. *Ag. Reports*. end at 1861. (*Rep.* of Commissioner of Patents *Reports* of the
 { Commissioner of Agriculture, commences 1862. (very few insects mentioned until
 { 1854).
- Paris green (Cresonite of Aspher) substitutes & effects. *Ag. Rep.* 1871. p. 76. — efficacy - injurious
 { effects, mode of mixing, &c for cotton. 1873. p. 168
- Pans. entomological exhibition. *Ag. Rep.* 1865. Aug. p. 88.
- Parnidae (Col) I frequent near water. *Ag. Rep.* 1868. p. 80.
- Parsley or Celery worm (*Lep.*) see *Papilio asterias*. IG. 3R/1/ Ins. XXVI/58. (*Lep.*)
- Passalus cornutus* Col (*Rathvon*) *Ag. Rep.* 1861 p. 599. fig. 31. 32 Eats wood of old stumps especially
 { of black Oak — Oak wood 1868 p. 86 fig. 53 IG. 2D/9. IG. XXI/10 Col
- Pasymachus elongatus* (Col.) destroys *Chrysomela (Doryphora) 10 lineata*. or the Colorado
 { potato beetle IG. Pasymachus. XI/16. (Col)
- Patent office. *Ag. Reports*. see above * but place here.
- Pea bug. see *Bruchus Mylabris pisi*. IG. XIV/6. (Col)
- See green Caterpillar. ? of *IG. 3* *Ag. Rep.* 1855. p. 85. fig. 3 on Cotton is probably *Loxotaenia* *Loxotaenia*
 { *gossypii* - *Lep.* see in Cotton plates IG. IX/4. *Lep. S. n. racana* (var) & Glover.
 { *Loxotaenia gossypiana* Pack is in Cotton plates XI/3. (*Lep.*)

Peach araeocerus. (Col) *Araeocerus coffea* (Col) found under the bark of diseased peach trees
 { in the rotted & shrunken fruit. Ag⁶ Rep. 1873. p. 114. fig 3. - see *A. p. circulator*.
IS. XXXIX/21. (Col)

Peach tree borer. *Algonia (Stochilum) exitiosa*. I. injures bark, wood, or root, of Peach, injures
 { also Apricot, Cherry, nectarine, & plum. (Lep) Ag. Rep. 1864. p. 550. Remedies. &c.
IS. L. P. D. XLVII/2. (Lep)

Peach bud worm. (Lep.) I. enters in the centre of Twigs of Peach, hiding the ends of the twigs.
 { in early summer. *Anarsia prunella*. or *A. lineatella* Kellor. Ag Rep 1872 p. 112 fig 1.
IS. 18. CVIII/3. (Lep.)

Peach Mycetobius (Lep.) *Mycetobius (Mycetophila) persicae*. I. lives in the burrows & frass or gum made
 { by the peach borer. *Algonia exitiosa* Ag. Rep. 1872 p. 115. fig 4. *IS. XI/13 (Lep.)*

Pear fire. blight. Ag Rep. 1863. p. 574.

" " " produced, by punctures made by leaf hoppers, *Erythronura ulis. basilaris*
 { Ag Rep 1863 p. 575. *E. basilaris IS. II/53. 38. (Homopt)*

Pear. blight, beetle. (Col) see *Scaphisoma pyri*. Ag Rep 1863 p. 574. (Col)

Pear mite. injures leaves see *Tiphodromus pyri*. Ag Rep. 1872. p. 112. fig 2.

Pear psylla. (Hom.) I. I suck sap from twigs. &c see *Psylla pyri*. Ag. Rep. 1864. p. 560. (Hom)
 { *IS. 11/10 11/30. 40. (Hom)*

Pear slug. (Hym) *Selandria. cerasi. consurans* parenchyma of leaves. of Pear, cherry &c
 { Remedies &c. Ag. Rep. 1864. p. 547. *IS. IX/29. (Hym)*

Pear woolly root, aphid. see *Pemphigus (Eriosoma) pyri*. Ag. Rep. 1870. p. 86 fig 54. fig 54. (Hom)
Pediculus. Ag Rep 1851. p. 58 & 1868. p. 316. (Hom)

Pediculus. humanus. capitis. Hom Human head louse. Ag. Rep. 1876. fig 57.

Pediculus. vestimentorum. " " clothes & bare skin. " " fig 58.

Pediculus. pubis. " " body louse. — " " fig 59.

Pedivapt. Bugs having raptorial. fore feet for seizing & holding their prey. Living on water.
 { ex. *Belostomat. americana*. Ag. Rep 1875. p. 132. 134. *IS. V/6. (Het)*

Pedivomis. water bugs, having no fore raptorial feet. & hind tarsi like oars turned for
 { swimming. Ag. Rep. 1875. p. 136. Example. *Notonecta. novaeis.* *IS. V/4. (Het)*

P. - lar. *Plata limbata*. Ag. Rep. 1851 p. 57. (Hom)

Pelidnota. punctata (Col) Ag⁶ Rep. 1854. p. 72. pl. 6. I. injures Grape fruit. &c - 1861. p. 602. - Remedies: 1863.
 { p. 566. — I. eat rotten wood. I. injures foliage, & bunches of grapes. 1868. p. 88.
IS. IX/18. (Col)

Pemphigus. pyri. (Hom) (Uhl.) Ag⁶ Rep. 1864. p. 316. I. injures Apple. pear. & roots. the upper
 { surface of the abdomen & head are covered by a dense mass of cottony like substance.

{ *Pemphigus Eriosoma pyri* (Hom) Woolly root aphid Ag Rep 1870 p. 86 fig 54.

Pemphigus (Dactylophaera. Shiner) *vitisolae* (Hom) I. from hollow or baglike galls. open at
 { the mouth. on the underside of grape leaves, containing gall lice, or seen by
 Riley to be one state of the much dreaded *Phylloxera vastatrix* of Europe.
 { Ag Rep. 1872 p. 87. 88. fig 56. (see also under head of *Dactylophaera*) 1871 p. 87. fig 23.
 { I. was said to be identical with *Phylloxera vastatrix*. or Grape root gall louse of
 France. 1871. p. 67. fig 28. — 1872. p. 116. & W. Campbell, of Louisiana, thinks the two insects
 { are the same. & Experimentally at the Dept. to the contrary. — 1874. p. 127. Experiments
 { in department to prove or disprove Riley's theory of the identity of the two insects.
 { 1876. fig. 45. grape leaf gall. *Pemphigus. vitisolae*. *IS. see in Dilepta p. X/26. (Hom)*

Pentatom. (Het) Ag Rep⁶ 1854. on Cotton (Het)

Pentatom., or "Gray Plant bug" of D. B. suck sap of Cotton. (Het) Ag. Rep⁶ 1853. p. 98. pl. VIII. fig 6.
 { probably is *Daschus hirsutus* *IS. 11/12. (Het)*

Pentatom. a ♀ or Green Plant bug of D. B. suck sap of Cotton plants (Het) Ag. Rep⁶ 1853 p. 93. pl. VIII. fig 5.

{ probably is *Meraxa hilaris*. *Rhaphigaster pennsylvanicus* *IS. 11/23. (Het.)*

Pentatom. a (Het) some find on other insects (Het)

Pentatomidae. Ag Rep 1868 p. 316. (Het)

IS. lower

- Pontania punctipes*. (Hbst.) frequents Murkins. Thistles & weeds, lives on Sap of plant
 { Ag. Rep. 1875 p. 118 fig. 7. see *Eucosmatus*. IS. 11/2. (Hbst)
- Pontania*?. sometimes destroy caterpillars Ag. Rep. 1875 p. 118. (Hbst)
- Pentonia*. syn. of *Carpocapsa pomonella* Codon moth see *Carpocapsa* IS. 255. X/8. LXVIII/28 (Sep)
- Pentonia vitivora* (Lep) see *Polistes botrana* grape berry moth. Isobea XCVII/3. & CIV/2 (Sep)
- Pentacheta diffingens*. Japanese earth worm. imported with some plants from Japan.
 { Ag. Rep. 1871. p. 81. see *Megascotus*.
- Phaenocarpa nitidula* (Lep) cucumber moth. injures melons, cucumbers, squashes, &c.
 { 1870. p. 84. fig. 47. IS. LVI/12. (Lep)
- Phalacridae* (Col) mere mention. Ag. Rep. 1868. p. 83.
- Phalangium* (Spider) (Daddy Long legs) p. 215. Ag. Rep. 1872. p. 128.
- Phalaena* see *Lachrygma misera*. IS. 278. X/11/15 IS. XIX/18 (Sep)
- Phanaeus*, *carnifex* (Col) color metallic green & Gold, in moisture & excrement. Ag. Rep. 1868.
 { p. 88. fig. 55. makes balls of dung. IS. VIII/14. (Col)
- Phanoptera*, *curvicauda* (Orth) (Rathvon) p. 352. fig. 21. IS. V/10. X/11/29.3. V/16 (*angusticornis* S. n.)
- Phasma*. see *Diapheromera*. Ag. Rep. 1871. p. 135. ex *Diapheromera femorata*. IS. 1/7 (Orth)
- Phasmodae* (Orth) "Spectre insect" or "Walking sticks" feed on leaves, twigs & buds of
 { trees & shrubs. & resemble dead twigs & sticks. (Orth)
- Phengodes plumosa* (Col) antennae wormy felt moss. Ag. Rep. 1868 p. 98. fig. 128. IS. XXX/27 (Col)
- Phorinus* (Col) see also *Ellichrus*. *Ellichrus* p. 95 & 96 Ag. Rep. 1868 p. 95-1872 p. 155. &c
- Phorinus* (*Ellichrus*) *pyralis*. "lightening bug". In phosphorescent at night. mere mention
 { 1873. p. 155. Ag. Rep. *Phorinus* IS. XII/6. (Col)
- Phryganeon planoides* (Hym) destroys *Solyte*. *Parvici*. "Larch chester" or "Samarack"
 { leaflet moth" Ag. Rep. 1868. p. 41. *Solyte*. IS. III/7. (Lep)
- Phryganica* (New) "Water fly" caddice on case fly? I live in cases in water. & as flies
 { form good food for fish. — example L. IS. VI/6 & IS. VI/8. (New)
- Phryganidae* (New) Ag. Rep. 1868 p. 309. (New)
- Phycita*, *nebulo* (Lep) *Nephopterix undulata* L. lives in small crooked horn like cases
 { feeding on fol. of Apples, Crab. plum. & thorn, see *Nephopterix undulata* IS. L.P.3.
XVI/1. LXX/2. (Lep)
- Phyllium*, *sythe* (Orth) Leaf insect of the east indies. Rathvon. Ag. Rep. 1862 p. 377.
- Phyllobius*, *argenteus* (Col) 6u) green. injure foliage & fruit of fruit trees Ag. Rep. 1865 p. 90 (Col)
- Phyllobius*, *betulae* (Eu. Col) injures Pear. Ag. Rep. 1865 p. 90 (Col)
- Phyllobius*, *oblongus* (Col Eu) destroys grafts of pear & plum Ag. Rep. 1865 p. 90 (Col)
- Phyllobius*, *pyr* (Col Eu) injures fol & fruit of fruit trees. Ag. Rep. 1865 p. 90 (Col)
- Phyllophaga*. see also *Tachnosterna*. May beetle Ag. Rep. 1863. p. 167. (Col)
- Phyllophaga georgiana* Georgian leaf eater (Col)
- Phyllophaga quercina* (Col) May beetle. Rathvon Ag. Rep. 1861 p. 501. fig. 35. 36. destroys
 { foliage of Forest & fruit trees. — 1868. p. 88. 1872 p. 524. see *Phyllophaga fasco*.
IS. VII/5. 7. 11. & XIV/40. (Col)
- Phylloptera*, *oblongipolia* (Orth) Volutid. injures foliage of Orange trees. Ag. Rep. 1858. p. 265.
 { foliage of forest & fruit trees — Rathvon Ag. Rep. 1862 p. 382 — 1874 p. 181 fig. 13.
- x *Phylloscelus*, *atra* (Hom) frequents weeds & ramblers (Hom) 1876. IS. 1/38. (Hom)
- " " var *pallida* " " " IS. 1/53. (")
- x *Phyllosceta striolata* see *Chechenis vittata* IS. L.P. 27. IS. XXVIII/8 (Col)
- Phylloxera vastatrix* (Hom) grape root gall louse Ag. Rep. 1870. p. 87. fig. 35. — said to be the same
 { as *Pemphigus vitifoliae* or grape leaf gall louse habits, nat. hist. remedies & varieties
 of grapes attacked. 1871. p. 88 fig. 22. — habits, remedies, mode of propagation &c.
 Riley 1873. p. 387 — Remedy. Sulphur of carbon. 1873 p. 16a — 2000 francs. reward
 offered for discovery of the manner in which it is propagated from stock to stock.
 1873 p. 289. Remedy. Sulphur of carbon. — experiments with root at the Dept. 1874.
 p. 127. — value of Ag. Ent. by Riley. 1874. 462 — 1876 fig. 46. (L. Horn) 33 lower.

- Phylloxera vitifolia vastatrix* (Hom) grape root gall cause, produces bunches of knots, or bulbs, on the fibrous side roots, perhaps the identical insect which produces the galls on the underside of the leaves. Ag Rep 1872 p. 504 W. Campbell Ohio Hom
- Phymata* { *Syrphus* ensea. (664) destroys other insects. Butterflies, Bees, Wasps, plant lice, &c.
Ag. Rep. 1875, p. 126, fig 35. *Phymata*. 33, III/13. (Holt)
- Phytococcus*, *ephippium* (Col) (86) minus channels in roots of Carrots & resembles our *Oberca* Ag. Rep. 1865, p. 89. (Col)
- Phytobius* { *apinis* (Be) I cut out blister like spots on the leaves of the Salsp (see) pupae formed in little cocoons in the blister Ag Rep 1870 p. 68 fig 11. see *Cauter-hymus*.
33, XVI/8. (Col)
- Phytocoris*, *quadricollis*, *P. lineatus*, *Carsus* - *lineatus* ? injures foliage of Currants, Parsneps, mint, Hesperia, Alfalfa, Bittersweet, Rasperry, Dahlia, &c. Hec. see *Urgus lineatus* 33, II/9. (Holt) ? (Ag. Rep. 1865 p. 94 1875 fig 33.) ?
- Phytolacca*, decandra, like root, used to poison Cockroaches, Ag. Rep. 1873, p. 15.
- Phytomyza* (Lef) leaf miners, producing blister like spots, & winding passages on the leaves. remedies, &c. Ag. Rep. 1872 p. 135 example, *Phytomyza nigricornis*, Euro p 33, XI/12 (Lef)
- x *Pieris rapae*. Lep. European cabbage butterfly Introduction *Pieris rapae* &c. injures Cabbage Cauliflower mustard Turnips Mignonette Nasturtium yellow &c. &c. Ag. 100/15, 2. & CVI/30 Ins I/14 & N.2 Lep (see Ag. Rep. 1870, p. 79, fig 36.)
- x *Pieris rapae*. (Lep) remedies. Hollibone, discussed. 1871, 82, fig 15 Larvae destroyed by 2 Spiders. *Theridion brassicae* & *hydropyllum*.
- Pieris brassicae* (Lep) Pot herb Pontic worm. I feed on Cabbage Pot herbs &c. Ag. Rep. 1870 p. 79 fig 37. While better fly or Northern Cabbage worm. feed on Cabbage mustard Turnips 33, XXXVII/7, XXXI/2. Lep., XCIX/15. & CVI/28. Lep.
- Pieris brassicae*. Lep. Southern Cabbage worm injures Turnips also Ag. Rep. 1870 p. 79 fig 37 33, Lep. II/6. Ins XXXII/12 (Lep)
- Pigeon Tremex*. see *Tremex* *sinx columba* Ag. Rep. 1866 p. 41 I. bur into wood of Pear &c & is destroyed by *Pimpla atrata* & *lunator* (Hym *Tremex coccinea* 33, III/12, 13. Hym.
- Pill beetle. *Byrrhus*. so called from feigning death when disturbed & drawing up its limbs & antennae so as to appear somewhat like a round pill like ball, example, *Byrrhus californicus*. 33, VII (Coe)
- Pimpla atrata* *lunator*. Hymenoptera, the females of which have extremely long bristle like ovipositors, by means of which they deposit their eggs in the burrow of *Tremex sinx columba*, or the *pigeon Tremex*, another Hymenopterous insect, the larvae of which live in deep burrows in the wood of Pear, & other trees. see *Rhyssa atrata*. 33, III/8. *Rhyssa*, *lunator*, III/4. (Hym.)
- Pimpla* ? sp (Hym) destroy eggs in the egg cases of *Coleopterus speciosus*, or the migratory locusts of the western states, Ag. Rep. 1874, p. 185. (Hym.)
- Pine white* *juniperis* (Col) see *pisodes strobis*. Ag. Rep. 1870 p. 71. — 1866 p. 41. & is destroyed by *Ichneumon* fly *Pistole* 33, C/27. Ins LVI/11. (Col) (1863 p. 573)
- Pine Saw*, fly. *Lophyrus*, *albatus*. (Hym) Habits *Homocidus* &c. Ag. Rep. 1864 p. 546. 33, I/22. (Hym.)
- Pine bark* beetle. (Col) *Hylurgus* *imbrians* eats under bark. see *Dendroctonus* 33, XV/5 XXXVII/12 (Col)
- " " (Col) *Tomicus* *pinus*, twigs under the bark of pine. 33, XIX/6. (Col)
- Prophila* { *casei* Cheese fly or maggot I live in Cheese & sometimes called skippers, as they are able to spring to a considerable distance Ag. Rep. 1856 p. 29. 33, V/34. (Lep.)
- Pirates* (Holt) feed on other insects Ag. Rep. 1866 p. 44. Holt
- Pirates*, *biguttatus* (Holt) sometimes called the spotted corsair, & is said to destroy bed bugs. { *Acanthia leucocoma*, (Holt) Ag. Rep. 1875, p. 127, fig 37. 33, IV/22. (Holt)
- Pirates*, (*melanolestes*) *picipes*. (Holt) found under stones, moss, logs of wood &c. & feed on subterranean insects, & is capable of inflicting a severe sting. Ag. Rep. 1875, p. 132, fig 42. { *melanolestes picipes*. 33, IX/1. (Holt). *Stenom.*

- Pissodes strobi*. (Col) White pine weevil (Col) L. bore into the leading shoot of pine.
 { Hemlock. Spruce. &c - remedies - Ag. Rep. 1863. p. 573. - destroyed by an ic.
 { numon fly. 1866 p. 11. - 1870 p. 71. fig 16. Not lost food. IS. XVI/11. (Col)
- Pitch eating weevil*. (Col) *Hesperius piceatorius*, eats wood of pine, under the bark. remedies?
 { Ag. Rep. 1863. p. 573. IS. XVII/16. (Col)
- Plant loose on grape. (Horn) Ag. Rep. 1874. p. 24. p. 60. see Aphis.
- Plant bugs, see *Heteroptera*. Remedies Ag. Rep. 1866 p. 53? (Hel)
- Platoceticus*. *Flower*. (Pik) *Pygea confederata*. Bark et. or drop worm. on the orange.
 { Ag. Rep. 1858 p. 264. *Pygea confederata*. IS. LIX/18. IS. LXXX/20. (Lep.)
- Platamodes*. (Rhalla) *pusywanica*. (Pennsylvania) Cockroach? fig see IS. I/1.3 (Orth)
- Platycorus quercus*. (Col) L. feed in Oak wood. (small horn bug) Ag. Rep. 1868 p. 66. fig 62.
 { 1870. p. 66. fig 5. IS. X/9. (Col)
- Platygyaster*. (Stomatoma) parasitic Hymen. in *Acidomyia destructor*. Ag. Rep. 1872. p. 126.
 { *Platygyaster comestitus*. (Hym.)
- Platygyaster*? Hym. Parasit. in *Diptosis trilei* or the wheat midge. (Lep) *Platygyaster*
 { typical example IS. IX/4. (Hym.)
- Platygyaster* (Hym) destroys the joint worm in wheat. (*Eurytoma Isosoma hordei*)
 { *Isosoma hordei* IS. V/26. (Hym.) Ag. Rep. 1866 p. 42
- Flat pygidium *perthicellatus* (Orth) (Ratona) Ag. Rep. 1862. p. 331. p. 4. 20. eggs deposited
 { in two rows, overlapping each other. (Orth)
- Polydromus*. *Ullacus* *zamus* cocoon. cocoons naked. Ag. Rep. 1864 p. 74. see also *Semie* & *Ullacus*
 { Ag. Rep. 1866 p. 563. - 1865 p. 90. - 1866 p. 36. Silk 1867 cocoons naked
 { destroyed by *Schneemon* *Ophiomacrum*. 1866 p. 41 food Apple Cherry. Elm plum &c.
 { *Platygonia* *caropiea* IS. L. Co. VIII/2. L. young. XVI/15 IS. XLVI/12
- Pluvius*. *vagabundus*. (Eu) Hel. probably feeds on insects. Ag. Rep. 1870. p. 130. p. 74. IS. IX/13. Hel
- Plateros* Hel. (Linn 8 Hel. 2. flowers. example. *Gerris coniformis*. Ag. Rep. 1874 p. 132. fig 53.
 { IS. V/6 (Fet)
- Plum Curculio*. (Col) said to be destroyed by *Diplodus luridus* L. L. Ag. Rep. 1870. p. 131. fig 60.
 { *Eragnus aridis* *Dipodus*. IS. IX/19. for *Conotrachelus nematus* or Plum weevil see IS. IX/5
- Plum Tanager*. (Col) *Anthonomus prunicidus*. (Col) Ag. Rep. 1870. p. 71. fig 15. fig 17. see *Anthonomus*
 { *scutellatus*. IS. XXXVI/23 & XIV/23. (Col)
- Purr. Knot*. a disease of the plum tree caused by a fungus "Sphaeria morbosa" Ag. Rep.
 { 1863. p. 573. 1870. p. 178.
- Plum weevil* or *Curculio*. see *Conotrachelus nematus*. (*Rhynchaenus* Syn) Ag. Rep.
 { 1863 p. 572. & 59. see *Conotrachelus* IS. XIV/5 (Col)
- Plusia*? (Lep) on Cotton. Ag. Rep. 1854 p. 61. (Lep)
- Plusia*? (Lep) " " Ag. Rep. 1855 p. 41. Pl. VIII fig 2. (Lep)
- Plutella*. *ambipennella*. see *Carostoma brassicella*. (*Exolytella* Linn Cu) L. injures cabbages
 { & is destroyed by an *Schneemon* fly & was spiders *Isotidea brassicae* & *hyphogryll*
 { sum. Ag. Rep. 1871. p. 63. fig 16. *Carostoma brassicella* IS. XXX/28 LXIII/31 XCV/9. (Lep)
- Podius*. (Col) (Eu) Ag. Rep. 1866. p. 91. destroys other insects. Ex. *Podius chalcidus*. IS. II/30. (Col)
- Podus cynicus*. (*Arma grandis*) (Hel) injures foliage of Apple, Oak &c & destroys *Goryphina*
 { *Chrysomela* 10 lineata. Ag. Rep. 1875 fig 6. p. 113. (Hel) *Podus cynicus* IS. II/29. (Hel)
- Podus spinosus* (Hel) see in article *Anasa*. Ag. Rep. 1875.
- Podus spinosus* (Hel) live on Sap of locs. Apple &c & destroys *Goryphina* (*Chrysomela*
 { *decumbens*. " " & other insects. Ag. Rep. 1875. p. 116. fig 9. IS. II/28 (Hel)
- Podura*. (Orth) more mention. Ag. Rep. 1866 p. 102.
- Poduridae* (Orth) "Shagtails" "Beetle tail". 1876. p. 130. 145. by some called "Garden Fleas"
- Podura villosa* (Orth) end of abdomen furnished with a forked tail. feed on vegetable
 { matter. p. 101. fig. 8. "one species feeds on pulp of Potato leaves. & is supposed to
 { have on the s. s. Curis. remedies. (Eu) Ag. Rep. 1874. p. 140. fig 19. example
 { *Podura villosa*. IS. VI/7. (Orth)

- Pachyloptera* *pinusosa*. see *Osmia*. Ag. Rep. 1876. fig 10. frequents *Rhus* sp. Goodberry, plum, prunot.
gras 4. (Horn) (Syn. Flata) *Osmia* 33. 116. (Horn)
- Pachyloptera* (*Osmia*) *septentrionalis* Ag. Rep. 1876. fig 8 frequents grass may apple (*Polephyllum*)
Osmia. 1145. 33. Horn.)
- Pachilus* Ag. Rep. 1865 p. 41. Co.
- Poisoning insects with cobalt Ag. Rep. 1865 p. 65.
- Poisoning flowers of Jamestown weed (*Datura*) & Tobacco with blue cone. for the Tobacco
 moth (*Macrosila carolina*). (Lep.) Ag. Rep. 1867. p. 160. *Macrosila carolina*.
 33. Ser. III. 6. 3. 14. 2. (see also Ag. Rep. 1873. p. 159.)
- Poison. for flies. see Fly poison.
- * *Ponctus*. (Hym.) found in stomach of a red bellied Woodpecker. Ag. Rep. 1865. p. 38.
- Ponctus*. *nubilosus*. (Hym.) carries off young larvae of *Doryphora* (*Chrysomelae*) *decori*.
 = *lineatus*. as food for its young. Ag. Rep. 1874. p. 123. 33. II. 39. (Hym)
- Poke root. *Phytolacca*. *decandra* used for poisoning Cockroaches. Ag. Rep. 1873. p. 137.
- Polycaon* *Stoutii* (Col.) mere mention. Ag. Rep. 1868. p. 100. fig 158. 33. VII. 16 (Col)
- Polydorus* *micans* (Co.) copper colored (new!) injures Huckle & beech. Ag. Rep. 1865. p. 90 (Co)
- Polydorus* *plagiatus* (Col) "Charangon du Grosseller" France. destroys Goodberries.
 Ag. Rep. 1865. p. 90. (Col)
- Polydorus*. *sericeus*. "Charangon argente" France. destroy Solings fruits & grafts.
 Ag. Rep. 1865. p. 90. (Col)
- Polygonum*. *hydropiper* (Smut weed) used as a wash for horses. to keep away flies.
- Polygramma*. *Doryphora* *decimmacata* (Col.) 10 lined sparsman. or Colorado potato beetle.
 Ag. Rep. 1867. p. 63. 4. 5. 2. see *Chrysomela* *decimmacata*. 33. XXIX. 32 (Col)
- Polyphylla*. (*Melolontha*) *elaeonoxia* *varicosa*. (Col) Ag. Rep. 1868. p. 89. fig 72. I feed on
 roots. I feed on fol. of fruit. & forest trees. see *Macronema*. 33. VIII. 18 (Col)
- Polyphemus*. moth. see *Atticus*. *Teles* *Polyphemus*. 33. L. VII. 5. 3. 14. 14 (Lep)
- Polyphaga*. (*Lytta*) *cinerea* (Co.) mere mention. Ag. Rep. 1868. p. 103. fig 184 33. XXVII. 1.
- Ponis*. *brassicae*. (Lep.) (*Pastorini*) Cabbage butterfly. (pro? *Pieris rapae*) destroyed by
Carabus *upatus*. Ag. Rep. 1861. p. 392. fig 7. 3. *Pieris rapae*. 33. L. 100. 18. CVI. 30. 3. 14. 14. 2. Lep
- Potter spinner. *Schithyura* *inclusa*. (*Costera americana*) (Lep.) Ag. Rep. 1864. p. 532. injures foliage
 of Willow, *Pot. Car. Asp. 4. 2. nemodes 4. 2. Schithyura inclusa* 33. L. VI. 13. 3. 14. 14. 3 (Lep)
- Potter. white *sheddena* twigs without any sign of being injured by insects Ag. Rep. 1871. p. 78.
- Potteron *constracheli* (Hym.) parasite destroying *Conotrachelus* underneath its *staphylin* weevil
 Ag. Rep. 1871. p. 78. see ring *Potteron moderator* Co. 33. XI. 3. (Hym)
- Potato beetle. (incorrectly) bug or *Doryphora* *Chrysomela*. *decimmacata*. 33. XXIX. 32 (Col)
- Potato fly. see *Epicauta*. *Cantharis*. *Lytta*. 4. 5. 2.
- Potato worm. or caterpillar. L. of *Macrosila* *quinguemaculata* (*caesus* Syn) I feeds on Tobacco
 (potato). *Tornate*. 4. 2. & is attacked by Hym parasite. *Risogaster* *congregata* (33. VI. 22)
 which eats out a body of worm. makes egg shaped cocoon on the outside of the skin &
 the caterpillar. Ag. Rep. 1864. p. 549. - 1870. p. 160. fig 39. - 1873. p. 150. *Macrosila*
 33. II. 6. 3. 14. 2. (Lep)
- Potato stalk weevil. (Col) *Banania* *trivittata*. (Col) see *Boris* 33. X. 32 (Col)
- Potter wasp. (Hym) *Eumenes* *fraterna* forms a vase like nest of earth. Stores it with caterpillars
 to form the food of its larvae. It is destroyed by a parasite (Lep). *Tenopora*
Eumenes *fraterna* 33. II. 27. 28. nest. VIII. 2. (Hym) (Ag. Rep. 1866. 1874. 1870. p. 78. fig 35)
- Poultry vermin 7. Ag. Rep. 1869. p. 424. 4.
- Practical Entomology for Farmers sons or "How to collect & preserve insects" by C. B. Dodge
 Ag. Rep. 1868. p. 305. with figures.
- Praying mantis. see *Mantis* *carolina*. 33. XI. 1 to 16 (Col)
- Prickly *Leptostylus* (20) *Leptostylus* *aculeifer*. injures. Apple trees under the bark. Ag. Rep.
 1860. p. 319. 33. XI. 1. (Co.) (11/1863. p. 576) 33. 11. 1

Pride of China, or India, see *Melia azedarach*.

Procyclus amaturia (Lep.) lilac measuring worm Agt. Rep. Aug 4 Sep feeds on lilac
 { 33. LXII/9. (Lep.)

Prionidae. (Col.) *Prithoon* Agt. Rep. 1861 p. 610. (Col.)

Prionocypdon (Cephon) *discoloris*. (Col.) L. feeds on rotten wood of Oak. Agt. Rep. 1868 p. 94.
 { fig. 121. 33. XX/32. (Col.)

Prionotus cristatus, *Pedunculus novenarius*. (Hm.) destroy other insects, & also sting mankind.
 { severely, destroy aphids, or plant lice, when young, and caterpillars with almost
 all other insects they can overcome when adult, Agt. Rep. 1854. p. 88. pl. 8.
 common name: "Wheel bug" from the form of its back. "Devil's horse" &c. 1864. p. 559.
 1875. p. 129. fig. 41. *Prionotus cristatus*. 33. III/14. (Hb.)

Prionus. (Col.) Agt. Rep. 1861 p. 613-16. fig. 150. (Col.)

Prionus brevicornis (Col.) 1870. p. 72. see *P. laticollis* 33. Lar. D 24. 33. XI/5. (Col.)

Prionus californicus (Col.) (Rathvon) Agt. Rep. 1861 p. 611. length over 2 1/2 inches. (Col.)

Prionus cylindricus (Col.) Rathvon Agt. Rep. 1861 p. 611. fig. 6. 62 L. eat wood of pine, *Orthosoma*.
 { 33. XVI/2. (Col.)

Prionus imbricornis (Col.) injures the roots of wood of grape, orange, laurel, &c. Agt. Rep.
 { 1870. p. 72. 33. XXI/2. 3. (Col.)

Prionus laticollis brevicornis. Agt. Rep. (Rathvon) 1861 p. 613 fig. 63. 64. L. in wood of decayed
 { poplar. — 1870. p. 72. fig. 22. L. injures hood &c of apple, poplar, Oak, pear, orange
 { orange, roots of &c. *Prionus laticollis*. 33. D 34. 33. XI/5. (Col.)

Pristiphora grossulariae. (Hym.) Native currant or gooseberry worm, or saw fly. habits & remedies &c.
 { Agt. Rep. 1870. p. 77. — 1873. p. 118. & is destroyed by *Podusus spinosus*. (Hb. 33. II/26)

Pristiphora identidem. (Hym.) Cranberry saw fly. of Fish. Agt. Rep. 1869. p. 207. (Hym.)

Proconia undata (Hom.) frequents grape vines, & blackberry bushes. 33. I/22. (Hom.)

Procus americanus (Lep.) L. feed on foliage of grape vines, & virginian creeper. Agt. Rep. 1867. p. 72.
 { fig. 6. — 1870. p. 81. *Acanthodes americanus*. 33. L. XVII/3. (Lep.)

Procrustes (Col.) (Cu.) destroy other insects. Agt. Rep. 1865. p. 91. (Col.)

Prodenia autumnalis. (Fall or autumn army worm) (Lep.) L. destroys wheat, oats, &c. Sorustos.
 { Jurniss. &c. Agt. Rep. 1871 p. 376. & 1872 p. 112. 33. CVIII/15. (Lep.)

Prodenia comeliniae (Lep.) 1854. p. 61. in cotton, holly. Agt. Rep. 1855. p. 102 p. 11. fig. 5. injures cotton
 { holly & more in their ear. feeds also on wild comfrey, Commelina, Tomato, beet
 { cabbage, &c. 33. LXIV/5. XIX/19. L. XIV/5. (Lep.)

Promethopia scamaulata. (Col.) a small brownish beetle found under tree bark &c. probably
 { mistaken for the bed bug. *Acanthia lectularia*. Agt. Rep. 1875. p. 127. *Promethopia*
 { *scamaulata*. 33. IV/25. (Col.)

Psilaphidae. (Col.) found in ants nests, & under moss, bark, or stones, Agt. Rep. 1868 p. 82. Specimen
 { 33. XXI/3. (Col.) (Psilaphus Ericksoni)

Pseudocorys chinuomoneus. (Col.) hybernates under bark of red oak. Agt. Rep. 1868 p. 108. 105-57. fig. 140.
 { see *Thanasimus* 33. XVI/22. (Col.)

Pseudocorys. *Thanasimus nigripes*. (Col.) said to prey on the L. of a beetle. *Hydrotus aculeatus*
 { a wood boring beetle. Agt. Rep. 1868 p. 97. fig. 139 *Thanasimus*. 33. XII/19

Psila rosea (Cu) (Lep.) cannot fly. injures carrots, Hm. & remedies. Agt. Rep. 1872 p. 133. fig. 33. 33. X/10. (Lep.)

Psocidae (New) Agt. Rep. 1868 p. 263 live on orange trees. *P. venosus* is found in clusters on
 { the trunk, & branches of orange trees in Florida, &c. *venosus*. 33. III/2. (New)

Psorini. (Col.) mere mention Agt. Rep. 1868 p. 99.

Psyche confederata, see also *Platycoccus Foveoli* Pack. injures orange foliage, 33. L. XII/18. LXXXV/26

Psylla pyri, Pear thornworm. (Hom.) (Uklor) Agt. Rep. 1860. p. 314. punctures twigs, & small branches
 { or pear & apple, & sucks the sap. Agt. Rep. 1864. p. 560. Remedies &c. — 1876. fig. 26.
 { 33. I/10. 11/30. 10. (Hom)

Psylla rhois. (Hom.) frequents Sumach. Agt. Rep. 1876. fig. 35. (Hom.) 33. V/67. (Hom)

- Steromalus* (Hym) destroys Chlorops, a dipterous insect injuring wheat. &c.
 { See Ag Rep 1866 p 41.
- Steromalus* (Hym) destroys the joint worm, *Isosoma* (Eurytoma) *hordii* (Hym) an insect which forms sublongs on the stalks of Wheat. Ag. Rep 1866 p 42 (Hym)
- Pteromalus tuberosus* (Hym) deposits eggs in the cocoons of *Microgaster congregatus* a parasitic hymenopterous insect that destroys the Tobacco & potato worm. *Macrosila carolina* & *M. quinque maculata* Ag Rep 1873 p 158. (Hym)
- Pterostichini* (Col) some species in Europe are said to injure grain Ag Rep 1868 p 86
 { ex. *Pterostichus chalcites* see *Proctus* SG. x/3. (Col.)
- Ptilinus pectinicornis* (German Book worm) Linjure books, & wood of Oak, beech maple & hawthorn. Ag Rep 1868 p 99. (Col) example *Ptilinus pectinicornis*. SG. xxxiii/16.
- Ptilinus ruficornis* (Col) under mention Ag Rep 1868 p 99. SG. xxxiii/16 (Col)
- Ptilodactyla* (Cyphon) *elaterina* (Col.) food probably Oak. Ag Rep 1868 p 94 fig 120. SG. xxxii/29. (Col)
- Plinidae* (Col) I. counterfeit death when disturbed inhabit old wood, trees, &c. I feed on grain, skins, collections of natural history &c. Ag Rep 1868 p 98. 11. fig 150. SG. xxxiii/21 (Col)
- Pinus fur* (*humeralis*) (Col) destroy woolen cloth, grains, collections of dried plants, &c insects stuffed animals, birds, &c. furs, meat, &c. Ag Rep 1868 p 93, 117. fig 150 SG. xxxiii/11. (Col)
- Pinus humeralis* see *Pinus fur*. (Col)
- Pulex irritans* I feed on decaying vegetable & animal matter, Insect feeds on blood of man & animals, birds, dogs, cats, &c. Ag Rep 1872 p 135.
 { *pulex irritans*. SG. vii/17. (Lep)
- Punblond snapping bug, or beetle, see *Alaus myops* 1868 p 92. SG. x/17. (Col)
- Pupalis olinalis* (Lep) see *Asopia costalis*. The clover worm. SG. lxxxiii/25. (Lep)
- Pupalidae* Ag Rep 1868 p 319. (Lep)
- Pyrrhnum carneum*, *Proscum*, *P. purpurinum*, basis of the celebrated Persian insect powder, used to destroy cockroaches, ants, & other insects. Ag Rep 1873 p 129.
 { *Pyrrhnum roseum*, powder used to drive away fleas. Ag Rep 1873 p 36. used also for killing cockroaches. Ag Rep 1874 p 133 fig 4. see *Stylopsa orientalis* (Griff)
- Pyrrhnum*, *Willemitte*, &c used for the destruction of insects, a long article Ag Rep 1861 p 223.
- Pyrrhnum*, powder to destroy insects Ag Rep 1865 p 92.
- Pyrochroa coccinea* (Eu) (Col) found under Birch & Oak bark Ag Rep 1868 p 101. (Col)
- Pyrochroa dendroides* *Dendroides canadensis*, taken under bark of maple. Ag Rep 1868 p 101, fig 171. *Dendroides canadensis*. SG. xxxvi/4. (Col)
- Pyrochroa flabellata* (Col) Insects frequent flowers. Ag Rep 1868 p 101. (Col)
- Pyrochroidae* (Col) found under bark & in rotten wood Ag Rep 1868 p 101. (Col)
- Pyrophorus noctilucus*, feed on Sugar cane, Ag Rep 1868 p 93. in Spanish "Cucuyo"
 { English "Fire fly" of the Indies and South America, Insect abundant in South America. (Col)
- Pyrophorus phryganeus* (Col) Fire fly or beetle of Florida. Long description of habits flight, & experiments. Ag Rep 1873 p 155. fig 3. SG. i/24 (Col)
- Pyrractia isabella* (Orctid sp) (Lep). I feeds on Clover, Mistle Dandelion, Plantain, &c. &c. &c. I is destroyed by an ichneumon fly. Ag Rep 1866 p 99 SG. viii/9, 10. Insects lvi/7. (Lep)
- Pyrrhocoris*, *Dysdercus suturalis* (Holt) Red bug or Cotton stainer history injury to cotton fruit experiments of its application as a dipterous material by Dr Jackson Ag Rep 1858 p 271 fig 189. *Dysdercus suturalis* SG. i/11 (Holt)
- Pytho americanus* (Col) found in empty nests or cocoons of *Stenomacrus Rhagium lineatus* (SG. xii/9. xlii/67 Col) where the larva or pupa had been destroyed by it, under pine bark. in Spring. Ag Rep 1868 p 104 fig 189. *Pytho americanus*. SG. xxxvi/26 (Col)
- Pytho depressus* (Eu Col) found under pine bark Ag Rep 1868 p 104. SG. lxxv

Quadrupeds of Illinois. see also Animals. Agt. Rep. p. 52, to 110.

Quails, destroying Chinche bugs. *Microtus. Blanford leucopneus*. SS. II/16/17. (Hct.)

Radish fly. see *Anthomyia raphani*. Ag. Rep. 1867. p. 73. (Dip.)

Radish fly. see *Anthomyia raphani*. & *A. radicum*. Ag. Rep. 1872. p. 134 & 141. *Anthomyia radicum*. SS. XI/2. (Dip.)

Ranatra quadridenticulata.? (Hct.) Ag. Rep. 1875. p. 133. fig. 38. water bug. destroys insects.

{ Small fish. & *Ranatra quadridenticulata* SS. VI/3. (Hct.)

Rentonius. Ag. Rep. 1863. p. 376.

Raphanus pita lower. (Col.) *Oberca. triuncinata*. Larvae, bore into pith; & destroy the canes. Ag. Rep. 1863. p. 576. & 1870. p. 67. SS. XII/1. (Col.)

Raspberry worm. (Col.) *Agrius nuficollis*. L. bore into the pith. Ag. Rep. 1870. p. 67. SS. XI/4. XII/8.

Rathoon. SS. Report 1. Entomology. & its relations to vegetable productions. of the soil.

{ with destructive & beneficial insects. Ag. Rep. 1861. p. 585.

{ " " Report 2. Ag. Rep. 1862. p. 372. SS Rathoon Lancaster Pa.

Rat. poisons, traps, &c. Ag. Rep. 1863. p. 272.

Rear horse. common name of *Mantis carolina*. Ag. Rep. 1854. p. 88. pl. VIII. & 1870. p. 133.

{ SS. II/1 to 16. (Orth.)

"Red bug" of S. C. Geo. &c. "Petes noir" of La. "seed Jack" of Va. a small red acarus or mite which buries itself under the skin of man &c. & frequently producing malarial fevers, & an insupportable itching. This must not be confounded with the following

Red bug of Florida or Cotton stainer *Syrphocoris Dysdercus suturalis* Drs stains the fibre of the cotton. with its excrement. & the excrement sap. of the only seeds rendering it of much less value to manufacturer. Ag. Rep. 1858. p. 272.

SS. I/11. (Hct.) *Dysdercus suturalis*

" " Chemical researches on the red bugs, as cotton producing insects. by Dr Jackson of Boston. Ag. Rep. 1858. p. 272..

Red legged grasshopper, or Locust, see *Calopterus femur rubrum*. parasiten red mites

{ *Asoma locustarum* a parasitic fly *Sachina* 12. Ag. Rep. 1867. p. 65. fig 66. 1870. p. 76. fig 32.

{ see *Calopterus femur rubrum*. SS. VI/11. & VIII/2. (Orth.)

Red pepper recommended to destroy plant lice. (Aphis) Ag. Rep. 1873. p. 289.

Red shouldered Apter *Apter Synonylon basilaris* A. Rep. 1867. p. 71. requires wood of hickory. & elm. See *Synonylon basilaris*. (Col) SS. XI/1. (Col.)

Red spider. *Acarus telarius*? of Saunders. report. a mite doing much injury to greenhouse plants. & vegetation in gardens &c. remedies. Ag. Rep. 1864. p. 564.

Red wheel of Ohio & some eastern states. see *Diploids. Crotomyia tritici*.

{ SS. I/10. (Dip.)

Reduviidae. Ag. Rep. 1868. p. 316. (Hct.)

Reduvius. Ag. Rep. 1854. p. 58. — 1868. p. 311. (Hct.)

Reduvius red edged. *Reduvius* sp. 273. Ag. Rep. 1855. p. 74. p. VIII. fig 7 in cotton fields.

{ is *Largus succineus*. SS. I/12. (Hct.)

Reduvius *noveboracensis* (Hct.) *Proconotus erostatus* destroys other insects & is capable of

inflicting a severe wound on mankind with its piercer or proboscis. it is commonly known as the "Wheel bug" from the form of its crested thorax.

Ag. Rep. 1864. p. 558. — 1866. p. 53. — 1867. p. 67. — 1875. p. 129. fig 45. 1854. p. 110. fig 3

p. X. found on cotton & destroys caterpillars &c. *Proconotus cristatus* SS. III/14. (Hct.)

Reduvius personatus. (Hct.) said to destroy bed bugs *Ucanthus lectularius* Ag. Rep. 1875. p. 123. fig 40

{ SS. VII/9. (Hct.)

Reduvius *reptatorius*. see *Sinea multipinosa*. destroys other insects SS. VIII/3. (Hct.) *Sinea*

Reduvius *spissipes*. (Hct.) see *Apimorus*. destroys other insects & is said to kill honey bees. Ag. Rep. 1875. p. 130. fig 43. *Apimorus* *spissipes* SS. VI/26. (Hct.) SS. lower

- J. G. L. van
K. J. -

- Achrophorus paradoxus* (Col) Eu Probably parasitic on Haps. Ag Rep 1865 p 101. (Col.)
- Rhinophoridae* (Col) probably parasitic in habits. Ag Rep 1863 p 101.
- Rhizolius* (Hom). Root plant loose. on verbenas, in flower garden Ag Rep 1876 fig 44 38 III/30 (Hom)
- Rhizophanthus pusilla* (Col) found in wheat by Dr Leconte. 1863 p 99, fig 137. 38 XXII III/19 (Col)
- Rhizophagus dennessus* (Col) Eu. Ag 2. Rep. 1866. p 91. destroy. *Botanichidae* (Col)
- Rhopales lateralis* (Hct). I. suck saps of plants, & probably injure pear buds. Ag Rep 1875 p 121, fig 19.
33. IX/18 (Hct.)
- Rhynchonurus nemophar* (Col) Curculio, or Plum weevil. Ag Rep 1854 p 81. pl. 7. 1855. p 311.
- see Conobracheles nemophar. 33. XIV/5. & 30 C/30. (Col)
- Rhynchites alliana* (Col) (Eu) color blue. cuts off. twigs & young branches of fruit trees.
- Ag Rep. 1865 p 90. (Col)
- Rhynchites bacchus* (Col) (Eu) (Beomax, French) pierces young fruit, of apple. I. color, copper red
- Ag Rep. 1865 p 90. (Col)
- Rhynchites betulae* (Su) Col. (Cypr leurgéon, French) Rolls up leaves, & destroys foliage of
- Grass trees. Ag Rep 1865 p 87. (Col)
- Rhynchites cinicus* (Col) (Eu) color steel blue. injures buds of fruit trees Ag Rep 1863 p 90 (Col)
- Rhynchites cuneus* (Col) (Eu) injures stems Ag Rep 1865 p 80 (Col)
- Rhynchophoridae* (Col) Ag Rep. 1863. p 274 (Col)
- Rhynchophorus lunummanari* (Col) Ag Rep. 1861. p 504, fig 44 "Palmetto weevil" 1861. p 604, fig 44.
- I eat in wood of Palmetto. see Rhynchophorus crenatellus. 33. XIII/21. (Col) (V. med)
- & the Calandra palmarum of Rathvon, 1861 p 21 P.)
- Rhyparochromus micropus*. *Blissus*. *clavator*. *leucopertus*. Chinch bug, Ag Rep. 1864 p 553.
- Remedies. — destroys grass, grain, Maine potatoes vegetables &c. Remedies. habits, &c
- 1870 p 89, fig 59. remedy salt. 1871 p 84 fig 17. — 1873 p 122, fig 26.
- Blissus (Rhyparochromus) leucopertus. 33. II/15. 17. (Hct)
- Rhyssodidae* (Col). mere mention. Ag Rep. 1866. p 86. (Col)
- * *Rhyssa atrata*. *fluator*. (*Pimpla* syn) (Hymen) destroy Larvae of *Hemex Columbia*, or the
- hedgeon Tremex. in wood of pear &c. see also Pimpla. Rhyssa atrata 33. III/8
- Rhyssa fluator 1/29. III/4 (Hym.)
- Ribrod Rhagum* (Col) see *Stenocras Rhagum lineatus* 33. XVI/9. XVII/47. (Col)
- Ricci weevil*. see *Sitophilus*. *Calandra*. *oryzae*. Ag Rep 1861. p 603. (Rathvon) & 1863 p 573. (Calandra)
33. XIV/1. (Col)
- Roaches, vulgar name for Cockroaches. *Blattæ*. *Ectabia*. *periplaneta*. &c
- Roberts Dr Eugene. recommending dactylization of trees & to destroy bark & wood boring
- insects. Ag Rep 1865. p 92.
- Robin American. food & growth. Prof Inadwell, Mass^{ts} an article. Ag. Rep 1860 p 88.
- Rocky mountain locust. *Caloptenus spretus*. Ag Rep 1870 p 76 fig 31. — 1874 p 137. &c &c
- see Caloptenus spretus. 33. XIII/15. VIII/1. Orth.
- * Robin Red breast. Europe. should be imported Ag Rep 1870 p 90
- Romaia. (Orth) (Rathvon) Ag Rep 1862 p 384. mer. mention.
- Romaia *monotona* (Orth) Rubber grasshopper Ag Rep 1858 p 265 injures foliage of Orange trees
- vegetables &c. — Injures peaches, figs, melons, vegetables, &c Ag Rep. 1872. p 116, fig 67.
- Localities injured 1872 p 118. 33.
33. III/15 (Orth)
- Rose beetle (vul Rose bug). *Rosa chaffer* see *Macrodactylus subrimosus*, injures Rose, Grape &c
- see Macrodactylus. 33. IX/23. (Col)
- Rose saw. (Hym) see *Helandria*. *torae*. remedies. Ag Rep. 1870. p 78. 33. XI/8. (Hym)
- Rove beetles (Col) see *Staphylinidae*. Ag Rep. 1870. p 66. destroy other insects. ss. *Crepophilus villosus*.
33. XXIX/27. (Col)
- Rough *Osmoderma* (Col) see *Osmoderma scabra*. Ag Rep 1860 p 320. — 1865 p 90. 33. X/3. (Col)
- Rutelidae Col) mere mention. Ag Rep 1868 p 88 Col. 33. 1868.

Sacred beetle of the Egyptians. Scarabaeus. (Col.) 1868, p. 86. or *Atta chrysaeus* 1868, p. 86.
Salt for wire worms. (Lar of Elater) Cuckshills to the acre is recommended by Mr Mechi.

{ Ag. Rep. 1869, p. 442. (Europe). (Coe)

Saltatoria (Orth.) Lar. leucis. as Grasshoppers. Ag. Rep. 1874, p. 130, 136. 1882, p. 384. (L. Hw)

Samia. Cecropia. Attacus. Platy Samia. Ag. Rep. 1864, p. 523. 1865, p. 93. 1866, p. 36. 1867, p. 74. 1868, p. 311.
{ food. apple. Cherry. Elm. Plum. &c. see *Platy Samia cecropia*. J. S. Soc. VII/2. J. Youngs XII/15.
{ J. XVI/12. (Lep.)

Samia Attacus cyathia. (Lep.) not a success as a silk producing caterpillar. Ag. Rep. 1867, p. 74.

{ not yet much utilized. Ag. Rep. 1870, p. 81. Japanese or Ailanthus silk worm.

{ J. T. Harrows attempts to introduce it. food. Ailanthus & castor oil bean. *Samia*

Cynthia J. S. XX/4. XVI/50. (Lep.) (see also Attacus)

Samuelis G. article on mammology & ornithology. Ag. Rep. 1863, p. 265.

" " " " " " Oology 1864, p. 356.

" " " " " " value of birds on the farm 1867, p. 201.

Sand flies see Simuliidae. Ag. Rep. 1872, p. 128. (Lep.)

Sandarius (Col.) apicatus cariens. Ag. Rep. 1868, p. 94. (See class 2)

Sandalus (see also Tenoa) picea. Ag. Rep. 1868, p. 94. murea mention. *Tenoa picea*. J. S. XX/3. (Coe)

Sandalus niger Ag. Rep. 1868, p. 94. J. S. XX/13. (Coe)

Saperda (*boristata*) *candida*. (Col.) Ag. Rep. 1868, p. 387. 1869, p. 317. Others Rept. apple tree

{ borer. I live in wood of thorn. (Crataegus) mountain ash. shade bush. &

{ Apple. see remedies. — 1861, p. 618, fig 77, 78, 83. I. live in wood of Apple Hawthorn.

{ &c. remedy plant Hawthorn hedges around orchards. (Rathvon) *Saperda*.

candida J. S. p. X, fig 7. Sur C/21. (Col.) (1863, p. 575 also)

"*aperta* *usula* (Col.) Rathvon. Ag. Rep. 1861, p. 618, fig 77, 80. Larva feed in wood of

{ Linden, see Eucalyptus. *usula*. J. S. XVIII/18. (Coe)

capsuckera (of 2 J. S.) Hb. Ag. Rep. 1855, p. 87. Hw. fig 5 & 6. on cotton see *Calceonis*

capidea J. S. 1/2, 2, 8. Hw & *Canconis* *vimaculata*. J. S. 1/10 (1865)

Sarcophaga (Dipter.) I feed in other insects. Ag. Rep. 1866, p. 44. (Lep.)

Sarcophaga (or *Tachina*) *nitens* *Culiciterus*. Ag. Rep. 1867, p. 66. (Lep.)

Sarcophaga carnaria (Lep.) flesh fly. Habits sometimes 32 Ag. Rep. 1872, p. 132, the insect
is voracious, producing its larva or maggot alive & not in the eggs which are
hatched in the body of the parent fly. J. S. IV/22. (Lep.)

Sarcophaga punctans (Lep.) "Chique" or "Viggar". Dipt. a small fly like insect. which lays

{ its eggs in the flesh of mankind. &c. generally in the foot or toe, these eggs hatching,

{ produce larvae which eat up the flesh sometimes causing dreadful sores. if not

{ carefully extracted. Ag. Report. 1872, p. 136. remedy remedy *Sarcophaga*

J. S. VIII/48. (Lep.)

Salurnia. (Coe) 1854, p. 60 Ag. Rep. "Corn Emperor" Ag. Rep. 1855, p. 81 fig 9 p. VI.

{ Caterpillars feed on foliage of Cotton corn (Murea) *Heliois* *Balam* *Poplar*

{ Dogwood &c. in *Sarcophaga* *varia*. J. S. 2/46 J. S. XVI/12, 13. (Lep.)

Satyrus Ag. Rep. 1868, p. 314. (Lep.) Example *Satyrus* *alpinus*. J. S. 2/123. J. S. XXXV/1. (Lep.)

Sato flies (Hym.) Lar destroyed by *Delichorus* *lucius* & *lucius*. *Tragonycha melanura* (Lep.)

{ Ag. Rep. 1868, p. 91. (Coe) *Sato* flies (Hym.)

Saw flies (Hym.) see *Empyridae* *Phryganea* *Lophyrus*. *Nematul*. &c.

Saw fly native currant saw fly *Phryganea* *grossulariae* 1870, p. 77. &c.

{ Foreign currant saw fly. *Nematul* *ventricosus* 1870, p. 77. &c.

Scale in potatoes (in Europe) supposed to be caused by insects. *Scara* *fucata* & *Scinquemaculata*.

{ J. S. Ag. Rep. 1872, p. 116. (probably not the cause but simply the effect) — J. S. X/3. (Lep.)

Scab e. *Scab* e. said to be caused by an acarus or mite. Ag. Rep. 1864, p. 563. & 1869, p. 356.

{ with remedies.

Scale insects, see *Coccus*, *Aspidiotus* &c.

Sciron

Scaphidiidae (Col) mere mention. *Alg. Rep.* 1868. p 83.

Scaphinotus (Col) Ag Rep. Rathvon 1861. p. 592

Scarabaeidae (Col) eggs enclosed in round balls of excrement. Ug. rep. 1868, p. 86. The sacred balls
for the Egyptians 1861/600 --- 1863 p. 274 1869, p. 264. Col. Ex Canthron laevis JSvms/2 Col

Scanned ^{11/11} Metolonthus Pygmylla variolar, Macrodonia variolosa, 39.XII/20, (2c)

Scenopodidae Col. only one species in Arizona. Ag. Rep. 1865, p. 94. (Col.)

Sciara lucata. & *S. quinque maculata* Europe. (L'Y.) Turnip midges. I feed in pasture & decaying
 { Turnip, & potatoes. & supposed to cause the disease called the scab. Ex. Ag. Rep. 1872, p. 116.
Sciara lucata. L. S. X. B. (L'Y.)

Sciara (Molobrus) mali. Apple midge L. found in Apples injured by the codling moth.

{ *Campocapsa pomonella*. Ag Rep 1872 p 116. (Lep)

Sciara *pyri* (L.) "Pear midge" destroys young & undeveloped fruit, causing them to wither, and
 { Fall to the ground. Cf. Rev. 1872, p. 116. (L.)

Scara quinqueasulata. Turn. or Polats midge. Aug Sep. 1872 p. 116. See also *S. lucas*. *Id.*

Sciara (Larv. mis. Thoms.) W. (Larv.) forms an elongated mass like a rope or snake, of hundreds of the larvae banded together. I were seen coming from fungi on which they probably feed, usually known as the Snake worms from their peculiar hairs. Pg. No. 79.

Sciara Thunbergii (Lep.) snake, or army worm, & Germany. habits as above.

Sciara (resembls *Thomas*) feeding on fungus. *Umanita muscarius*. Aug. 21. 1892 p 116.

Scolop. (Fulgora) sulcipis (Horn), Ag. Rep. 1876, fig. 6. frequently brambles & vines. Scolop. 22/30 (Horn)

Scorpius, Canga Col Hickory bark lover, L'ingums bark & Hickory & Birch.

Scolytus { 1867 p. 74. 4. 1870. p. 68. see *Scolytus quadripinosus* 28 x 11/2 (Ces)
 { var. (Ces) Agric. 1861, p. 314 320. (Wells) Eats wood under bark of apple "Pear borer".
 { beetle " 1863. p. 574, remedies, &c.

Scolytus...? the larvae are said to be destroyed by *H. wiles pinnatus* (Ew.) *Adoma. cronata* Eu.

Silvanus tridentatus Egas shown in the Paris Exhibition. 1865/6 91. (Col.)

Scorpionw. water. see *Nepa apiculata*. ♂ feeds on water insects. ♂ Ag. Rep. 1875 / pg 57. S.S. 1/2a Hb.

Scydmenidae (Col) taken in ants nests Ag Rep 1868 p. 82-104 (Cic) Ex. *Scydmenus luvipes* J5xxx/10

Seed Tick of Md. & Va. &c. see Red bug, or "Beetle wing", of Louisiana

Sclandria cerasi. Error *Calandria* Ag 1866. p 315. (Hym)

S. undaria "cerasi (Hym) Cherry slug." Ag. Rep. (Uhler) 1860. p. 315. L. consumes, the parenchyma of the leaves, leaving the tree apparently scalded or scorched, unobj. — 1864. p. 347.
Cherry, or Pear slug, with remedies. — 1870. p. 78. Ag. R. 39. 1x34 (Hym.)

Selandria, *vetis*. (Hym) Grape vine saw fly. Injury foliage of grape, unnoticed. Aug. 24, 1864 p. 546.
{ 33 IX/36. (Hym)

Selandria, rosae. 1894. Rose slug. Aq. Rep 1870 p 78. remedies Tongue, etc. of Rose bushes.

{ Aug. 1876 h 78. nematodes 8°. TS. VI/6 { form

Semasiu, *junivora* Lep. *L. habet*. *Curculio injura* Plums. *Ag. Rep.* 1867 p. 73. *TS. XC VII* (2) (Lep.)

Senecio, varicolor (Col.) I feed on foliage of Apple pear &c. frequent Whortle berry bushes.

(Aug. Ref. 1868 p 87. (Col) 351x/21.

Senecio (Omalotheca) senecio (Poe.) I feed on foliage of Sweet birch. 4 Nov. Ag. Rep. 1868. p. 8^m

See Comptosina 39. 18/26. 19. (Col)

Sinea vespertina. Ag. Rep. 1868. p. 85 & 115. Ins. feeds on foliage of sweet brar. & rose (Cov.)

Syn Comptosia & *Omalotheca* *Semra vespertina* 29. 1x/17. (Col)

Encarsia. { Bombyx } mori, Chinese silk worm. See Bombyx mori. D.S. Dec XXI/12.4.16.
XLVI/1, (See)

Serphus (*Zaitia*) *delatatus* (Hcl.) feed on insects fish eggs & young fish & are aquatic in habits

Syn Laitha Stollii *Scenophus dilatatus*. IG. v/11. (Hart)

Seventeen Year Locust. (or Harvest Fly.) see Cicada, septendecim. Ag. Rep. 1862, p. 385: 1864, p. 559.

1915 (Oct)

+ *Sornicornia* Col. Ag. Rep. 1861/606. (Rathvon.) (Col.) Beetles having saw like antennae. (Glover)

- Sheep bot., head bot. or maggot. *Estus Cephalomyia*. *ous*. Larva live in the prostate sinus
 { *Homocidus*, *Hemiteles*, *Ag. Rep.* 1866, p. 573. 1872, 1874, p. 17. *Cephalomyia*, 33 VII 36. (24.)
- Sheep scab. see *Ucares*: & scab. *Ag. Rep.* 1869, p. 386.
- Sheep tick. or Louse fig. (tick) see *Melophagus ovinus*. *Ag. Rep.* 1872, p. 133 fig. 26 33 VII 16. VII 3. *Ag. Rep.*
Sigalphus curculionis (Hym.) destroying the fourths of the plant curculion. *Conotrachelus rosaphor*.
 { in 1869 see 1871, p. 375. & 77. (see also *Ponera conotrachelus* a *Curculio* *debringer* Col. p. 77.)
- Silk in Bra. more mention *Ag. Rep.* 1855, p. 40. Silk vbs. manufactures, import. &c. 1855, p. 224.
 { Silk culture by El Constant Texas. 1839, p. 248. Silk culture in the Pacific states.
 1864, p. 483. Silk culture at the Paris exhibition. 1865, p. 92. Silk culture 1868.
 1862. to 304. — 1870, p. 235 to 241. silk from *Allacia Seia polyphemus*. 1866, p. 37
 { from *Thyridosteryx*. *Ephemera* forms. 1866, p. 37. Silk from *Bombyx madrona* Sam.
 1866, p. 37. Silk from *Bombyx* (*Trachetaria*) *baubionis* of Senegal. *Bryama mai*, Japan (Cal)
Bombyx Perini. China). V. B. *mylitta* (Bengal). 1866, p. 38.
- Silk producing spider in S. Car by M. W. Hildey *Ag. Rep.* 1866, p. 37. *Rephila plumifera*. Esser Ina Vol. 5
 " " " " in S. Car by M. W. Hildey 1866, p. 37.
- Silk, from a mid silk worm. making a large bag, 2 feet in depth resembling a huge
 matted cobweb. in Central America. 1866, p. 37. (Cal)
- Silk, in a nest or covering. consisting of a mass of cocoons. from Panama (in Museum) 1866, p. 37
- Silk from "nests of a dense texture & shining white" Color. "Hornbott" on *Arbutus*, and other
 { trees. made by *Bombyx madrona*. 1866, p. 37 (see also above).
- Silk, from oval nests, of caterpillars, on *Psidium*, in So. Am. (Kirby & Spence) 1866, p. 37.
- Silk, successful cultivation in California by M. Prevost. 1859, p. 22. Silk commission Lyons 1868. 300.
- Silk, worm silk *Bombyx mori*. *Ag. Rep.* 1865. 35. 42. 1870, p. 82. & c.
- Silky. *Omaloplia* *Omaloplia sericea* Col see *Serica sericea*. 33, 1X 19. 1 Col.
- Silky timber beetle. see *Amexylon sonceum*. *Ag. Rep.* 1868, p. 98. *Leat* wood of oak, & other
 { forest trees. 33, XX 30. (Col)
- Silpha (*Neocphila*) *americana*. (Col) *Ag. Rep.* (Rathbun), 1861, p. 595, fig. 17, 18. *Silpha*, 33, V 15. (Col)
- Silpha atrata*, (Eu) (Col) injures the shoots & leaves of beets. 1865, p. 90. (Col)
- " *laevigata* (Eu Col) injures the shoots & leaves of Beets, 1865, p. 90, & is said to feed on *uni*
 { snails. *Ag. Rep.* 1868, p. 81. (Col)
- " ? Col said to destroy insects. *Ag. Rep.* 1866, p. 34. (Col)
- Silpha*, *quadrimaculata*. (Col) Eu Lar destroys caterpillars. *Ag. Rep.* 1865, p. 91. (Col)
- Silphidus* (Col) feed on dead fish, carrion. snails, some European species are said to frequent trees
 { & destroy caterpillars, other injure beets. &c. *Ag. Rep.* 1868, p. 81.
- Silvanus*. *Croches* bit, not *Silvanus*. as formerly spelt. .
- Silvanus*. *Ag. Rep.* 1869, p. 153 (Col).
- Silvanus bicoloratus* (Col) found under Bark of Walnut. *Ag. Rep.* 1868, p. 80, fig. 40 33, V 16. (Col)
- Silvanus*. *dentatus*, see *Nauschius*. Found under bark in sugar. &c. *Ag. Rep.* 1866, p. 84 33, VII 23. Col
- Silvanus*. *quadricollis*. square necked *Silvanus* (W.B.) found in ears of Maize (Col) *Ag. Rep.* 1864, p. 66, fig. 4.
 { Larva also in injured cotton. bolls. 1855, p. 97. — 1866, p. 84, fig. 41 in injured cotton seed
- Silvanus*. *surinamensis*. (Col) in cotton, Maize, Tobacco, Sugar, &c. *Ag. Rep.* 1860, p. 156. 332.
- 1865, p. 84, fig. 30. — injure, & eat the rye Apple seeds &c. 1870, p. 66, fig. 4 33, IX 19. Col
- Silvanus*. *bicoloratus*, (Eu Col) said to destroy *Scolytus* & *Boschnus* on Europe &c. Col.
- Sinea*. (*Tremex*) *columba* (Hym) *Pigeon*. *Tremex*. destroyed by *Pemiza atrata*
 { & *Rhyssa lanator*. *Tremex*. 33, I, 12, 13. (Col). (*Ag. Rep.* 1866, p. 41)
- Silver Ash, common name for *T. reima*. *Ag. Rep.* 1874, p. 146, fig. 20. 33, VI 6. Ond.
- Simuliidae* (Dip) Sand flies. midges. among mankind, & animals by their poisonous bites or
 { punctures. *Ag. Rep.* 1872, p. 128. ex *Simulium molestum*. 33, VIII 8 & 29. (Dip.)
- Simulium*. *columbascensis*. (Dip), sometimes kill cattle, horses &c. in Hungary, by their
 { numbers & poisonous bites. *Ag. Rep.* 1872, p. 128. 33, X 36. XII 5. (Dip.)
- Sinea*, *multispinosa*. *Reduvius rapinator* Hal destroys *aspid.*. *Chrysomela*. 10 *Enata* &
 { other insects. *Ag. Rep.* 1875, p. 130, fig. 42. 33, XVIII 3. (Holt) 33, VIII 3.

Sorex. see *Demex*. *Columba* see *Demex*.

Scal hemp Tongue. Cultivation & insects injuring it. Ag. Rep. 1864. p. 266.

Sitotropha Anobium. *panicea* (Col.) fed on bread, old ships biscuit, Spoken not first, ginger.

{ *brachyot.* red or Cayenne pepper, *Cariboniles*. wheat, &c. Ag. Rep. 1866. p. 99. fig. 132.
{ syn *Anobium obelium* *Sitotropha panicea*. IS. XIV/3. (Col.)

Sitotropha panicea. Col. almost omnivorous Spanish fly Tobacco &c. Ag. Rep. 1870 p. 66. IS. XIV/3. (Col.)

Sitophilus see also *Calandra*. Ag. Rep. 1869 p. 335. - 1854 p. 71. - 1858 p. 23. (Col)

Sitophilus (*Calandra*) *granarius* Ag. Rep. (Rathvon) 1861 p. 603. Grain, Merio. mere mention.

{ 1863. p. 573. injures grain. Wheat, maize. &c. see *Calandra remotus* IS. XIV/2. (Col.)

Sitophilus oryza. Rice weevil. Ag. Rep. 1849. 1854. 334. - 1854 p. 71. injures Rice, Wheat, & other grains. more plentiful in the southern states. 1861. p. 603. - 1863. p. 573. remedies &c.

see *Calandra oryzae* IS. XIV/1. (Col.)

x *Staph. jacks*. common name of some of the *Elateridae*. from their habit of springing suddenly in the air when laid upon their backs. (Col)

Skirt coat's see *dermestes lardarius*. Ag. Rep. (Rathvon) 1861. p. 595. fig. 24. IS. V. (Col.)

Skirt coat flies, see *Hypodermis lousi*. Ag. Rep. 1872. p. 128. (Slip) IS. VIII/21. 45

Slender meadow grasshopper. see *Orchelimum vulgare*. Ag. Rep. 1874 p. 161. fig. 15 among &c.

{ is *Acanthus*. instead of *Orchelimum*. (Orbit)

Slugs attracted by emanation of *Sodium & Starch* & then killed Ag. Rep. 1861 p. 332.

" destroyed by *Staphylinidae* (Col.) Ag. Rep. 1865. p. 91.

" destroyed by *Smilis flavescens*. (Col.) Ag. Rep. 1865. p. 91. (Col)

Smilis auriculata, see *Aschasia galeata*. Horn. Ag. Rep. 1876. fig. 21. frequent *Eupatorium* on.

{ *praries*, & *vervona hastata*. IS. I/1. (Horn.)

Smilis inermis see *Stictoliteria* (Horn) Ag. Rep. 1876. fig. 19. frequent meads. grass, & *Samolus*. &

{ is found on Grape & *Chrysanthemum*. *Stictoliteria*. IS. II/34. (Horn.)

x *Smilis (Membrata) vau*. (Horn) Ag. Rep. 1876. fig. 20. frequent Hickory, Walnut, & Oak.

{ *Smilis vau* IS. II/12. 31. (Horn.)

Smilis (Membrata) normata (Horn) Ag. Rep. 1876. fig. 18. frequent. Oak & Chestnut. *Smilis*. IS. II/26. (Horn.)

Smith Prof. Dr. Application of Entomological science to Ag. Rep. 1872 p. 448.

Smooth *Osmoderma*. see *Osmoderma nemecola*. (Col. Ag. Rep. (Usher) 1860. p. 320. - 1868. p. 90.

{ Has seeds on Sap of Apple cherry & other trees. & smaller like Russian leather IS. x/2. (Col.)

Smyntanthus (Ort.) said to feed on pulp of plants. one species in Nova Scotia destroys young

{ cabbages & turnips (Ort.) Ag. Rep. 1874. p. 185. (Col) some called garden fleas)

IS. VII/2. (Ort.)

Snails & Slugs. destroyed by *Arctis flavescens* (Col. Ew. Ag. Rep. 1865. p. 91.

Snails (*Lonicis* &c.) form food of *Lampyrus*. Ag. Rep. 1865. p. 95.

Snake worm. see *Secura* (apini) Thomas. Ag. Rep. 1872. p. 115. IS. I/19. (Slip.)

Snapping beetles (but bugs) (Col.) see *Elateridae*. *Alaus oculatus*. &c. IS. X/5. (Col.)

" " *punctatus*. see *Alaus myops*. IS. X/17. (Col.)

" " big eyed. see *Alaus oculatus* IS. X/5. (Col.)

Soothsayer, or praying Mantis. see *Mantis carolina*. so called from the position it frequently

{ assumes, although preying would much more applicable from its predatory habits

{ Ag. Rep. 1854. p. 88. p. VII. &c. see *Mantis carolina*. IS. II/11. (Ort.)

Solanum carolinensis. natural food of the *Doryphora Chrysomela*. 10 articles. Ag. Rep.

{ 1867. p. 63.

Soldier bugs. see *Stirenus*. (Horn.)

Span worm. small cotton. (L.B.) Slip. Ag. Rep. 1855. p. 91. p. VII. fig. 3. caterpillars. injure foliage.

{ is probably *Eupithecia miserulata* IS. I. XIV/10. & 20. & 21. & 22. & 23. & 24. & 25. & 26. & 27. & 28. & 29. & 30. & 31. & 32. & 33. & 34. & 35. & 36. & 37. & 38. & 39. & 40. & 41. & 42. & 43. & 44. & 45. & 46. & 47. & 48. & 49. & 50. & 51. & 52. & 53. & 54. & 55. & 56. & 57. & 58. & 59. & 60. & 61. & 62. & 63. & 64. & 65. & 66. & 67. & 68. & 69. & 70. & 71. & 72. & 73. & 74. & 75. & 76. & 77. & 78. & 79. & 80. & 81. & 82. & 83. & 84. & 85. & 86. & 87. & 88. & 89. & 90. & 91. & 92. & 93. & 94. & 95. & 96. & 97. & 98. & 99. & 100. & 101. & 102. & 103. & 104. & 105. & 106. & 107. & 108. & 109. & 110. & 111. & 112. & 113. & 114. & 115. & 116. & 117. & 118. & 119. & 120. & 121. & 122. & 123. & 124. & 125. & 126. & 127. & 128. & 129. & 130. & 131. & 132. & 133. & 134. & 135. & 136. & 137. & 138. & 139. & 140. & 141. & 142. & 143. & 144. & 145. & 146. & 147. & 148. & 149. & 150. & 151. & 152. & 153. & 154. & 155. & 156. & 157. & 158. & 159. & 160. & 161. & 162. & 163. & 164. & 165. & 166. & 167. & 168. & 169. & 170. & 171. & 172. & 173. & 174. & 175. & 176. & 177. & 178. & 179. & 180. & 181. & 182. & 183. & 184. & 185. & 186. & 187. & 188. & 189. & 190. & 191. & 192. & 193. & 194. & 195. & 196. & 197. & 198. & 199. & 200. & 201. & 202. & 203. & 204. & 205. & 206. & 207. & 208. & 209. & 210. & 211. & 212. & 213. & 214. & 215. & 216. & 217. & 218. & 219. & 220. & 221. & 222. & 223. & 224. & 225. & 226. & 227. & 228. & 229. & 230. & 231. & 232. & 233. & 234. & 235. & 236. & 237. & 238. & 239. & 240. & 241. & 242. & 243. & 244. & 245. & 246. & 247. & 248. & 249. & 250. & 251. & 252. & 253. & 254. & 255. & 256. & 257. & 258. & 259. & 260. & 261. & 262. & 263. & 264. & 265. & 266. & 267. & 268. & 269. & 270. & 271. & 272. & 273. & 274. & 275. & 276. & 277. & 278. & 279. & 280. & 281. & 282. & 283. & 284. & 285. & 286. & 287. & 288. & 289. & 290. & 291. & 292. & 293. & 294. & 295. & 296. & 297. & 298. & 299. & 300. & 301. & 302. & 303. & 304. & 305. & 306. & 307. & 308. & 309. & 310. & 311. & 312. & 313. & 314. & 315. & 316. & 317. & 318. & 319. & 320. & 321. & 322. & 323. & 324. & 325. & 326. & 327. & 328. & 329. & 330. & 331. & 332. & 333. & 334. & 335. & 336. & 337. & 338. & 339. & 340. & 341. & 342. & 343. & 344. & 345. & 346. & 347. & 348. & 349. & 350. & 351. & 352. & 353. & 354. & 355. & 356. & 357. & 358. & 359. & 360. & 361. & 362. & 363. & 364. & 365. & 366. & 367. & 368. & 369. & 370. & 371. & 372. & 373. & 374. & 375. & 376. & 377. & 378. & 379. & 380. & 381. & 382. & 383. & 384. & 385. & 386. & 387. & 388. & 389. & 390. & 391. & 392. & 393. & 394. & 395. & 396. & 397. & 398. & 399. & 400. & 401. & 402. & 403. & 404. & 405. & 406. & 407. & 408. & 409. & 410. & 411. & 412. & 413. & 414. & 415. & 416. & 417. & 418. & 419. & 420. & 421. & 422. & 423. & 424. & 425. & 426. & 427. & 428. & 429. & 430. & 431. & 432. & 433. & 434. & 435. & 436. & 437. & 438. & 439. & 440. & 441. & 442. & 443. & 444. & 445. & 446. & 447. & 448. & 449. & 450. & 451. & 452. & 453. & 454. & 455. & 456. & 457. & 458. & 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602. & 603. & 604. & 605. & 606. & 607. & 608. & 609. & 610. & 611. & 612. & 613. & 614. & 615. & 616. & 617. & 618. & 619. & 620. & 621. & 622. & 623. & 624. & 625. & 626. & 627. & 628. & 629. & 630. & 631. & 632. & 633. & 634. & 635. & 636. & 637. & 638. & 639. & 640. & 641. & 642. & 643. & 644. & 645. & 646. & 647. & 648. & 649. & 650. & 651. & 652. & 653. & 654. & 655. & 656. & 657. & 658. & 659. & 660. & 661. & 662. & 663. & 664. & 665. & 666. & 667. & 668. & 669. & 670. & 671. & 672. & 673. & 674. & 675. & 676. & 677. & 678. & 679. & 680. & 681. & 682. & 683. & 684. & 685. & 686. & 687. & 688. & 689. & 690. & 691. & 692. & 693. & 694. & 695. & 696. & 697. & 698. & 699. & 700. & 701. & 702. & 703. & 704. & 705. & 706. & 707. & 708. & 709. & 710. & 711. & 712. & 713. & 714. & 715. & 716. & 717. & 718. & 719. & 720. & 721. & 722. & 723. & 724. & 725. & 726. & 727. & 728. & 729. & 730. & 731. & 732. & 733. & 734. & 735. & 736. & 737. & 738. & 739. & 740. & 741. & 742. & 743. & 744. & 745. & 746. & 747. & 748. & 749. & 750. & 751. & 752. & 753. & 754. & 755. & 756. & 757. & 758. & 759. & 760. & 761. & 762. & 763. & 764. & 765. & 766. & 767. & 768. & 769. & 770. & 771. & 772. & 773. & 774. & 775. & 776. & 777. & 778. & 779. & 780. & 781. & 782. & 783. & 784. & 785. & 786. & 787. & 788. & 789. & 790. & 791. & 792. & 793. & 794. & 795. & 796. & 797. & 798. & 799. & 800. & 801. & 802. & 803. & 804. & 805. & 806. & 807. & 808. & 809. & 810. & 811. & 812. & 813. & 814. & 815. & 816. & 817. & 818. & 819. & 820. & 821. & 822. & 823. & 824. & 825. & 826. & 827. & 828. & 829. & 830. & 831. & 832. & 833. & 834. & 835. & 836. & 837. & 838. & 839. & 840. & 841. & 842. & 843. & 844. & 845. & 846. & 847. & 848. & 849. & 850. & 851. & 852. & 853. & 854. & 855. & 856. & 857. & 858. & 859. & 860. & 861. & 862. & 863. & 864. & 865. & 866. & 867. & 868. & 869. & 870. & 871. & 872. & 873. & 874. & 875. & 876. & 877. & 878. & 879. & 880. & 881. & 882. & 883. & 884. & 885. & 886. & 887. & 888. & 889. & 890. & 891. & 892. & 893. & 894. & 895. & 896. & 897. & 898. & 899. & 900. & 901. & 902. & 903. & 904. & 905. & 906. & 907. & 908. & 909. & 910. & 911. & 912. & 913. & 914. & 915. & 916. & 917. & 918. & 919. & 920. & 921. & 922. & 923. & 924. & 925. & 926. & 927. & 928. & 929. & 930. & 931. & 932. & 933. & 934. & 935. & 936. & 937. & 938. & 939. & 940. & 941. & 942. & 943. & 944. & 945. & 946. & 947. & 948. & 949. & 950. & 951. & 952. & 953. & 954. & 955. & 956. & 957. & 958. & 959. & 960. & 961. & 962. & 963. & 964. & 965. & 966. & 967. & 968. & 969. & 970. & 971. & 972. & 973. & 974. & 975. & 976. & 977. & 978. & 979. & 980. & 981. & 982. & 983. & 984. & 985. & 986. & 987. & 988. & 989. & 990. & 991. & 992. & 993. & 994. & 995. & 996. & 997. & 998. & 999. & 1000. & 1001. & 1002. & 1003. & 1004. & 1005. & 1006. & 1007. & 1008. & 1009. & 1010. & 1011. & 1012. & 1013. & 1014. & 1015. & 1016. & 1017. & 1018. & 1019. & 1020. & 1021. & 1022. & 1023. & 1024. & 1025. & 1026. & 1027. & 1028. & 1029. & 1030. & 1031. & 1032. & 1033. & 1034. & 1035. & 1036. & 1037. & 1038. & 1039. & 1040. & 1041. & 1042. & 1043. & 1044. & 1045. & 1046. & 1047. & 1048. & 1049. & 1050. & 1051. & 1052. & 1053. & 1054. & 1055. & 1056. & 1057. & 1058. & 1059. & 1060. & 1061. & 1062. & 1063. & 1064. & 1065. & 1066. & 1067. & 1068. & 1069. & 1070. & 1071. & 1072. & 1073. & 1074. & 1075. & 1076. & 1077. & 1078. & 1079. & 1080. & 1081. & 1082. & 1083. & 1084. & 1085. & 1086. & 1087. & 1088. & 1089. & 1090. & 1091. & 1092. & 1093. & 1094. & 1095. & 1096. & 1097. & 1098. & 1099. & 1100. & 1101. & 1102. & 1103. & 1104. & 1105. & 1106. & 1107. & 1108. & 1109. & 1110. & 1111. & 1112. & 1113. & 1114. & 1115. & 1116. & 1117. & 1118. & 1119. & 1

Spectra. insects. see Phasmidae. (Orth.) Ag. Rep. 1874, p. 90.

Spectrum hiridatum (Orth.) I found in Florida, the males much smaller than the females, feed on twigs & buds. Ag. Rep. 1862, p. 377. see Anisomorphus luprestoides. IS. 1/8 (Orth.)

Spectrum femoratum (Orth.) Sheath insect Walking stick. Ag. Rep. (Rathvon) 1862, p. 377, fig. 11. Its feet on buds & leaves of Sassafras & other plants 1874, p. 135, fig. 6. { see Diaphoromera femorata IS. 1/4 (Orth.)

Sphaeria morbosa. Plum tree knot. a fungoid growth on branches or trunk of Plum, Cherry, & other trees, generally known as the "Black Knot" remedy. Ag. Rep. 1863, p. 575. { The curculio & other insects are frequently found in these swellings, but by no means cause them.

Sphaerulidae (Col.) feed upon vegetable excrementitious matters. Ag. Rep. 1868, p. 81, 108.

{ Example Sphaeridium, scarabaeoides. IS. XXXVII/3. (Col.)

Sphaeroderus (Col.) (Rathvon) Ag. Rep. 1861, p. 572. more mention. Ex. Sphaeroderus stenostomus. IS. 11/20 (Col.)

Sphenophorus. ? (Col.) Bill bug. on corn (Maize) borers. found in stalk of maize. Ag. Rep. 1854, p. 67, pl. 4. — 1870, p. 68. (Col.)

Sphenophorus caryosus (Col.) injures Maize by piercing sam. Ag. Rep. 1870, p. 68, fig. 10. { IS. XIII/6. (Col.)

Sphenophorus 13 punctatus (Col.) (Rathvon) Ag. Rep. 1861, p. 603, fig. 42. Its feet on the foliage, & of wild cotton (w. Asclepias) IS. XIV/28 (Col.)

Sphenophorus zoeae (Col.) pierces blades or leaves of Maize, making six or eight holes, or if the { size of a pin or larger. Ag. Rep. 1870, p. 68.

Sphen. (Hym.) provisions its nest with cockroaches. (Rathvon) Ag. Rep. 1862, p. 576. example. { Sphen. Flavipes. IS. III/24 (Hym.)

Sphingidae. Ag. Rep. 1868, p. 314. (Lep.)

Sphinx caroliniana. Macrosila. Tobacco worm. Fly. (Lep.) poisoning with Cobalt. Ag. Rep. 1855, p. 66. see Macrosila IS. III/6, IS. XL/2. (Lep.)

Sphinx quinguemaculata (Claus) Potato worm. Fly, see Macrosila. IS. LIII/45. IS. XL/6. (Lep.)

Sphinx eremita, cordida. I found on mountain mint. Spear mint. & Apple, wild { bergamot &c. Ag. Rep. 1870, p. 80, fig. 40. S. eremita. IS. LXXX/10. IS. XLII/3. IS. Sep

Sphinx cordidus see S. eremita above.

* Sphinx excavatus Smorinthus (Lep.) I feed on Apple oak cherry plum (hol in Rep. { IS. LII/14. IS. XXXIX/4.

* Spittle insect. see Aphrophora (Hom.) IS. I/11. (Hom.) & Ag. Rep. 1864, p. 539.)

Spider Trap door Spider. Clenira nidulans. Ag. Rep. 1873, p. 164, fig. 4.

Spiders. Theridion, & Hydrophyllum. destroy young caterpillars of Paris rapae, & Plutella { limbicolletta. Ag. Rep. 1871, p. 82.

Spider. Silk producing, of S. Car. Wilder. Ag. Rep. 1866, p. 37. see under head of Silk.

Spilota. Anomala lucicola (Col.) Its injures foliage of Grape. Ag. Rep. 1865, p. 88, fig. 74. { Anomala. IS. XXXIV/28 (Col.)

Spilota. Anomala pusilla injures pine Ag. Rep. 1868, p. 88.

Spindle worm see Gortyna nitens. It bores into stalk or fruit of Lahica potato. Wheat { Jonato. maize. &c. IS. XCVIII/24. IS. XCV/13. IS. CIV/14. (Lep.)

Spondylid (Col.) Ag. Rep. 1861/63 more mention

Sporononema (Embeuse) muscae. a fungoid growth killing flies. Ag. Rep. 1872, p. 132. (Embeuse)

Spotted coniar (Holt) destroys other insects, & amongst the rest. kills bed bugs. Ag. Rep. 1875, p. 12, fig. 30. IS. IV/32. (Holt)

Spotted. Heliodora (Col.) Heliodora punctata. Its injures Grape vines. IS. IX/19. (Col.)

Spring beetle (Blater), from the holes of springing up suddenly when laid upon the back. { Ag. Rep. 1861, p. 608. see also snapping beetle. Ex. Claus oculatus. big eyed { snapping beetle. IS. XL5. (Col.) IS. Spring

- Squash bug, *Anasa*, *Gonocerus*, *Coreus*, *tristes*, (Horn) *Ag. Rep.* 1866, p. 557. Remedies. 1870. 897.
Use Anasa tristis, *SS. II/14* (Holt.)
- Squash lady bird, or beetle, (Col.) injures foliage of Squash, *Ag. Rep.* 1862, p. 579. remedies. 9^o 1866/63.
 { 1875/116. destroyed by *Stenobius diama*. *Hol.* *Epilachna borealis* *SS. XXXIX/25* (Col.)
- Stag beetle, see *Lucanus dama*, (Col.) *SS. X/16* (Col.)
- Staphylinidae, (Col.) *Ag. Rep.* (Rathvon) 1861, p. 596, fig 20^o eat fungi, flowers, &c. some of them are
 { parasitic in the nests of other insects. (Col.) destroy worms, slugs, snails, caterpillars,
 (Col.) 1865 p. 91. — destroy other insects, 1866/39. — eat decaying animal, & vegetable
 substances, fungi, flowers, &c. 1868, p. 82. — 1870, p. 66. (Col.) Example *Cryptus ater* *SS. 29/2*
- Staphylini. *Ag. Rep.* 1862, p. 372 — 1865, p. 116. ex *Crochilus villosus*, *SS. XXIX/27* example.
- Staphylinus, maculosus, (Col) *Ag. Rep.* (Rathvon, *Ag. Rep.* 1861, p. 596 fig 19. feeds on
 { decaying animal & vegetable matters, fungi, manure, &c. *SS. XXIX/22* (Col)
- Staphyre
 { see *Artisanomacra cinerea*. *Ag. Rep.* 1868 p. 181. (Col) *SS. XXVII/16* (Col.)
- Steel blue gray flea beetle. *Graptera* (Rathvon) *Chalcid*, injures foliage of *Grapa*, plum, Elm.
 { Black Alder, &c. *Ag. Rep.* 1863, p. 576. remedies, see *Graptodera, Chalcid*, *SS. XXV/9* (Col)
- Stelidola geminata, (Col.) feed on decaying vegetable & animal substances, & breeds in grapes
 { previously injured by *Caliodes inaequalis*, *Ag. Rep.* 1863 p. 83. *SS. XXXV/28* (Col)
- Stenocorus putator, *Elaphidion villosum*. Oak puner, I. cuts off wings of Oak, apple,
 { peach, hickory, walnut from the inside *Ag. Rep.* 1871, p. 72, fig 2. *Elaphidion villosum*,
SS. X/13 (Col)
- Stenohelmatus, (Orth.) (Rathvon) *Ag. Rep.* 1862, p. 379, fig 16. *Enthom.* (Orth)
- Stenurus, (Col) Rathvon *Ag. Rep.* 1861, p. 607. see *Diceraea*, (Col)
- Stictoptera (Smilia) inermis, (Horn) frequents woods, grass, Brambles. is found on Oak &
 { chinquapin. *Ag. Rep.* 1876, fig 9. *Stictoptera inermis*, *SS. III/34* (Horn)
- Stingless bee of South America. *Apis Virginii*. *Ag. Rep.* 1866 p. 32. honey comb waste
- Stictus diama, (Holt) destroys *Epilachna borealis*, or the squash Lady beetle. *Ag. Rep.* 1875.
 { p. 115, fig 10. — beneficial. (Syn 3 anchorago Sal.) *SS. VI/29*, 11/25, & 14/20 (Holt.)
- Sticturus immixtus, (Holt) destroy *Lophura caryocenta* 10 lineate. *Ag. Rep.* 1874 p. 123.
 { common name "Bordeaux Soldier, bug" destroys *Pachio asterius*, & web worm
Psychanthia texor, (Lep.) Colorado potato beetle, & other insects. *Ag. Rep.* 1875,
 { p. 119, fig 11. *SS. II/22* (Holt)
- Stilus sparsus, I. "Carnet". I. carries off Harvest flies (Carnet called locusts) to its hole
 { in the earth, or mud, & hurds them, to form food for its young. *Ag. Rep.* 1866 p. 63
 { 1867 p. 67. *SS. III/19* (Horn)
- Stomach bot fly, see *Gasterophilus equi*. *SS. L VII/34* Ins VIII/22, & 14/11 (Horn)
- Stomoxys calcitrans (Dip) "Stable stinging fly" Ins stings severely, & is extremely annoying
 { to mankind, as well as cattle, in rainy weather, it resembles a common house
 fly, but has a projecting trunk. *Ag. Rep.* 1872 p. 132, fig 19. *SS. IV/10* (Horn)
- Strachia hungarica (Horn) Portuguese Cabbage bug, very destructive to the cabbage
 { especially in the Southern States, injures also turnip leaves, & cruciferous plants,
 { *Ag. Rep.* 1867 p. 71 fig — 1870 p. 90 habits & remedies 1871 p. 64 fig 18. (good)
 { 1875 p. 116, fig 3. is destroyed by *Leptoglossus phyllorhynchus* (see *SS. II/31*) *Murgantia*
hungarica *SS. II/22*. (Holt) (see also *Strachia*)
- Strangalia luteicornis, (Rathvon) *Ag. Rep.* 1861, p. 620, fig 90. I. live in stumps, I. in flowers
 { *SS. XXII/13* (Col)
- Stratiomidae, *Ag. Rep.* 1863 p. 317.
- Strategus, anticus, (Col) burrows in sandy fields, in N.J. *Ag. Rep.* 1863 p. 89. *SS. XXX/22*, *XIII/20* (Col)
- Strawberry saw fly, (Horn) I injures foliage *Empyritus maculatus* *Ag. Rep.*
- Strawberry blossom weevil, (Col) *Anthonomus signatus* *Ag. Rep.* 1877 p. 73, fig 3.
- Striped bug, *Diabrotica villata* *Palaeoc* Syn *SS. XXV/2*, (Col)
- Striped Cricket (Orth) *Achetia vittata* see *Memobius*, *SS. VII/18* (Holt)

Stylophidius. *Stylops*. (Col) L. parasitic in the body of bees & wasps. IG. xxx/15. (Col)
Stylohyga montana. (Orth.) Oribatei cochineal. almost omnivorous. feeding on animal & vegetable substances. traps poison & other remedies Pyrethrum & root of 1st weed "Phylolacca decandena. Ag. Rep. 1874 p. 138 fig 4 (Syn. Halla) Stylohyga
IG. 11/546. 4 VIII/12. (Orth)

Sylvanus see *Silvanus*.

Synchora punctata. (Col) L. found in Rotten Oak stumps. Ag. Rep. 1868. p. 104 fig. 173. IG. xxvii/7. (Col)

Synoxylon (Aphid.) *basilare*. (or 12) in wood of hickory. & Elm. Ag. Rep. 1868. p. 99. fig 155.

{ *Synoxylon*. IG. xiii/1. (Col)

Synoxylon sedentarium. (Col) (Eu) stems of unhealthy grape vines. Ag. Rep. 1865 p. 91

Syrphus see. *Arid fasciatus*. (Hymn) Ag. Rep. 1866 p. 32. (Hymn)

Syrphus (Dip.) L. destroys plants like Aphides. (Hom) Ag. Rep. 1866 p. 44. Example. Syrphus

{ *holatus*. IG. 111/31. (Dip)

Syrphidius (Dip.) probably found *Gnath angusticornis*, in their bodies. Ag. Rep. 1868. p. 102. (Dip.)

Syrphus (Dip.) destroying plant lice (Aphides) Ag. Rep. 1864. p. 84. pl. 8. — destroys in Cotton lice.

{ Ag. Rep. 1868 p. 112 pl. x fig 5. example. Syrphus gominatus. IG. 111/29. (Dip)

Syrphidius (Phymata) *erosa*. destroys other insects. Ag. Rep. 1875. p. 126. fig 35. Phymata. erosa.

{ IG. 111/13. (Bot)

System of instructions. on which museum is based. Ag. Rep. 1865. p. 35.

Systena blanda. (Col) injure foliage of Maple. Ag. Rep. 1873. p. 167. fig 1. IG. xxviii/5. (Col)

Sabanidae. Ag. Rep. 1863 p. 276. — 1868. p. 317. — 1872. p. 129.

Sabanus atratus. large Black horse fly. (Dip) bites on stings horses cattle. &c Especially in woody districts. Ag. Rep. 1872. p. 129. fig 15. Sabanus atratus. IG. L. 12/35 1x/40 111/514/4

Tachina (Dip) parasitic in other insects. Ag. Rep. 1866 p. 44.

Tachina (or *Sarcophaga*?) (Dip) destroys Red legged Grasshopper, *Scaphiopus* Emur. rubra.

{ & C. *Sprius*. or the western grasshopper &c Ag. Rep. 1867 p. 66.

Tachina — *Goryphora* (Dip) destroys *Goryphora Chrysomela decumlineata*. Ag. Rep. 1874. 74

{ 1874 p. 123. Example. *Tachina*. Dasyceira? IG. x/33. (Dip)

Tachina viridis. (Dip) destroys caterpillars of *Lyriocampa* (Eckes) *imperialis*. L. Ag. Rep. 1866 p. 44.

{ IG. 11/16. (Dip)

Tachinidae. (Dip) Beneficial to the agriculturist. as destroying noxious caterpillars & other insects.

{ Ag. Rep. 1863. p. 276 — 1872. 131. — &c (Dip)

See plant. with plate copied by IG. article by IG. 12 Ag. Rep. 1857. p. 166.

Telomona ampeloides (Hym.) frequents *Ampeloides*. & Grape. Ag. Rep. 1876 fig 12. IG. 11/25 Hom

Telomona (Entella) *concaea* (Hom) IG. 1/1. Hom

Telae (Hym) Europe said to destroy the eggs of *Notonecta* &c Ag. Rep. 1875 p. 132 example.

{ Ex *Telae laeviusculus*. IG. x/31. (Hym)

Telephorus.? (Col) Ag. Rep. 1868 p. 117. (Col)

Telephorus bilineatus. (Col) L. useful as destroying other insects. Ag. Rep. 1868. p. 96. fig 130.

{ IG. xii/14. (Col)

Telephorus fuscus. & *lucius*. (Europe) (Col) destroy the soft bodied larvae of Saw flies. Ag. Rep.

{ 1865 p. 91 (Col)

Telephorus lucius. see above under *fuscus*. Col

Telephoridae. (Col) never mention Ag. Rep. 1868. p. 96. — found on Snow in Sweden & France.

{ 1868. p. 96.

Tenebrionidae. (Col) in fungi wheat under bark & in decaying vegetable substances

{ Ag. Rep. 1868 p. 100. (Col)

Tenebrio *tenebrionellus* molitor. (Col) Mealworm. destroys flour. meal. scale bread. &c

{ ship biscuit. bran. with remedies. Ag. Rep. 1863. p. 549. 1868. p. 100. fig 161.

{ see *Tenebrionellus*. IG. xxvii/15. Lar 12/3 (Col) (damaged flour)

Tenebrio. *obscurus*. (Hym) habits as above but prefers sound & dry meal flour bran ship biscuit &c
 (Ag. Rep. 1868 p. 100. Tenebrionellus obscurus IG. IG. Flower.

.

$$v \sim \lambda \quad f(t)$$

Don lined spearman. see *Doryphora Chrysomela*, *decomlineata*. 39 XXIX/32 Col.
Anthrenodinus. Ag Rep 1863 p 376 — 1873. p 254 7^e 7^e.

West californian. see *Cissicampa americana* (Lep) *decaprens*. Syn. the American Lackey moth.
 { 33. eggs C1/19 LXII/9. J. LVII/1. C4/9. Lep }

Termites. (New) White ants. see *Termit. Fraupes*. found in decaying wood. corn. stalks. &c.
 { 33 III/8 to 11. (New) }

Termites fatalis. V. African White Ant. live in clay nests, excavate tunnels in the earth &
 { some bore into wood. Ag. Rep. 1864. p 435. (New) }

Terrible grasshopper. see *Oedipoda atrox*. Ag Rep. 1874 p 137 fig 10. 39 VIII/3. (Orth.).

Tessaropa tenuipes. (Col) L. in wood of Walnut, Hierarchy. Ag Rep. 1872 p 73 fig 26. see *Dysphaga*
 { 39 XLIII/10. (Col) }

Tetracha *Magadethala* *virginica*. (Col) destroy *Doryphora* (*Chrysomela*) *10 lineata*. or Colorado
 { potato beetle, & other insects. feed on Earthworms. &c Ag. Rep. 1872 p 65. fig 1.
 1874. p 123 *Tetracha*. 33. I/21. 24. Col (Cicindela. syn) }

Tetris *Tetris lateralis* Orth (Dactynotus) Ag. Rep. 1862 p 387. fig 29. when young resembles
 { membracae, Hom (Rathoon) *Tetrix*. 33. V/7. VIII/7. (Orth) }

Tetrigonia. (Hom) *vitis*. vine hopper. Ag. Rep. 1854 p 77. pl 6. see *Erythronoeura*. 1871. p 85. fig 19.
 1876. fig 33. history. habits. &c. see also *Erythronoeura basilaris*. 39 II/5. 37. 38. (Hom)

Tetrigonia (*Erythronoeura*) *basilaris*. (Hom) Ag. Rep. 1876 fig 33. injuries. Col. Grajes. see above.

Tetrigonia molles. Hom. frequentes *Aphis*. a grass. see *Aulacocerus*. Ag. Rep. 1876. fig 32.
 { 39 II/30 (Hom) }

Tetrigonia quadrivittata (Hom) frequentes Blackberry bushes. Ag. Rep. 1876. fig 34 see *Dicrocephala*.
 { *coccinea* 39. I/5. II/29. (Hom) }

Tetrigonidae. (Hom) 1868. Ag. Rep. p 215. (Hom)

Tetysa hexunctata. (Orth) large scutellum. Ag. Rep. 1875. p 116. fig 2. 39. II/27. Hol.

Tetuchistes. see *Aphodius*. Col.

Thanasimus. *formicarius* (Col) Europe I destroy L. of wood eating insects, 1865 p 91. 114.
 { 1868. p 97. (see *Ceras* & *pseudoclerus* syn) (Col) }

Thanasimus. (*pseudoclerus*) *nigripes* (Col) I feed on grubs of *Hydramis aculeatus*. Col. (see
 { *Dentrocimus* 33. XXXVIII/10. Col) is wood. Ag. Rep. 1868 p 97. fig 139.

Thanasimus nigripes. 39 XII/19. (Col) (syn. *Pseudoclerus incertus*)

Thelia bimaculata. Hom. Ins frequentes the Locust. Ag. Rep. 1876 fig 17. 39. II/20. 24. II/23 Hom.

Theridion brassicae. Heterophyllum. Two spiders destroying young worms of *Pieris rapae*. Lep.

{ *Phlebotia limbipennis*. Lep 1 Ag. Rep. 1871. p 82. 83.

Thick legged Buprestis. see *Chrysobothris*. *femorata*. (Col) 39. XI/15. XVI/12. (Col)

Three lined leaf beetle. on potatoes. see *Cniceris* *Lema trilineata*. Ag. Rep. 1863. p 576. food

{ Potatoes. three lined leaf beetle. I destroys the foliage. Ag. Rep. 1871. p 57 fig 6.

Lema trilineata 39. XXVII/10. (Col)

Thripidae (Orth) Ag. Rep. 1874. 130. 145. — (Orth)

Thrips (Orth) remedies Ag 1864 p 145. 145

Thrips (Orth) destroys eggs of *Diplosis tritici* or the wheat midge but is also said to be
 { injurious to plants. Ag. Rep. 1866. p 40. (Orth) ex. 39. VI/9. — (also 1872 p 127.)

Thrips (Orth) I injurious to grain wheat &c. grass leaves, but by others said to be insectivorous
 { & to destroy the eggs of vine warblers. &c. see *Erythronoeura*. Ag. Rep. 1871. p 86. fig 21.

Thrips (*Limothrips*) *cerasii*. (Col) (Hom) Wheat. injured (Orth) but said by others to feed
 { on the eggs of *Diplosis tritici*. the Wheat midge. an insect injuring grass.
 { of which. B on gall making larvae. Ag. Rep. 1874. p 165. fig 18. see *Thrips. cerasii*.
39. VII/9. 10. ? (Orth) (1874 p 172)

Thrips. name incorrectly applied to *Erythronoeura* (*vitis*) *basilaris*. the grape vine leaf
 { hopper. Ag. Rep. 1874.

Throscidae (Col) classed with Eucnemidae I on flowers Ag. Rep. 1868 p 92 one European
 { species inhabits Oak woods. (Col). 39. I/29

Theroscus. (Col.) Ag. Rep. 1868 p. 112. -

Thyreopteris ephemeraeformis *Oeceticus conivum*. Ag. Rep. 1855 p. 79. pl. VI. fig. 8. injures cotton & orange, Amber vine, Sarsch. Hemlock spruce, Linber. Sugars, Malia, Cedars. { "Basket worm", "Case Worm", or "Hangworm" remedies, 1864 p. 552. - 1866 p. 41. 97. } destroyed by a parasite Hym. *Cryptus inquisitor* (JG. 11/5.) *Thyreopteris* x. JG. XII/1. to 5 Sep.

Thysanura. (Orth.) see *Poduridae*. JG. ex *T. sulcosus* VI/7. (Orth.)

Thysanoteria. (Orth.) see *Trips*. JG. ex. VI/9. (Orth.)

Ticks Bird (Orth.) *Mallophaga*. Bling bird. Ag. Rep. 1874 p. 146. ex *Docophorus*. *oryx* n. JG. XII/5

Ticks on Sheep. Ag. Rep. 1864 p. 563. remedy. 8th (Orth.)

Tickling Bait. see *Monochamus titillator*. L. in mood of pine. (Rathoun) Ag. Rep. 1861 p. 613. fig. 65, 66, 67. JG. XVII/1. (Col.)

Tiger beetles. see *Cicindela*. *Megacephala*. *Tetracha*. (Col.)

† *Tricrasia*. *Troria sanguinicornis*. (Col.) more mention. Ag. Rep. 1868 p. 103 fig. 178. probably { parasite on Bee, or their food. *Tricrasia*. JG. XXVII/17. (Col.)

Tills. (Col.) more mention. Ag. Rep. 1868 p. 97. 112. & see *Clorus*.

Tillus ambulans. (Eu) (Col.) L. in Oak. Ag. Rep. 1868 p. 97. (Col.)

Tillus elongatus. (Col.) (Eu) destroy the larvae of wood eating insects. Ag. Rep. 1868 p. 97. (Col.)

Tillus undulatus. (Col.) see *Cymatodermis*. 1868. 497. JG. XII/20. XIV/44. (Col.)

Timber beetles. see *Symexylon*. Ag. Rep. 1868 p. 98. (Col.)

Tinea granella. Lep. Grass moth. Wolf. L. injures maize. found in old cotton. boly. prob { for seed. Ag. Rep. 1854 p. 65 plate 4. % see *Colletes*, erroneously named by JG. B. 1855. p. 48. pl. IX. fig. 3. - & 1864 p. 586. JG. IX/1. 5 0/12. (Sep.) (1859 332)

Tinea flavicornella. Clothes moth eats also furs & feathers. & see remedies. Ag. Rep. 1864 p. 556. { JG. LXVI/14 (Sep.)

Tingis arcuatus (apinis) (Hbst.) sucks sap of quince. Distings mantinea. Ag. Rep. 1878. fig. 36. p. 126. (Hbst.) JG. IV/2. (Hbst.)

Tingis juglandis. (Hbst.) sucks sap of Nuttallnut. Birch. Willow. & Ag. Rep. 1875. p. 126.

Tigularia & *Tigularia*. Ag. Rep. 1869. p. 317. & 1872. p. 178. (Lep.)

Tigula maculosa. (Lep.) Crane fly. Europe. more mention. Ag. Rep. 1872. p. 128. (Lep.)

Tigula stercoraria. (Lep.) Crane fly. destroys roots of grain. Grass. flowers. Inhabits. 7th. habit. { remedies 9th. Ag. Rep. 1872. p. 128. fig. 12. JG. I VII/10. J. X/27. (Lep.) (European)

Tigula trilinea. (Lep.) 1864 p. 166. (Lep.)

Toads as destroyers of insects. eat even *Blatta* Riss. *Epicauta villula* Sours. lay. (Olasa { listed 9th Ag. Rep. 1870. p. 98.

Tobacco worm. or caterpillar. fly or *Sphinx* (Lep.) *Macrosia carolina*. Lep. remedies.

{ poisoning with Cobalt. (blue stone) Ag. Rep. 1864 p. 549. - 1869 p. 296. - 1873 p. 158. } destroyed by *Roget*. wasps. *Schnecken*. & *Murex* *gaster congregata*. 9th. 1873 p. 159. { JG. I III/6. J. XV/2. (Lep.)

Tobacco leaves used as a wash to preserve houses from Riss. Ag. Rep. 1872. p. 132.

Tolyte lanius. (Lep.) Sarsch. chester. parasite *Phryganea planaria* (syn *fastuosa*) JG. VII/1.

Tomato worm. caterpillar. or fly (Lep.) *Macrosia quinque maculata*. Celsus 5th stinging { or poisoning persons 5th.

Ag. Rep. 1870 p. 80 fig. 34 - 1873 p. 158 1874 p. 129. JG. III/4. 5. J. XV/16. (Lep.)

Tomus mai. Apple bark beetle. (Col.) L. injures bark of apple trees. Ag. Rep. 1864 p. 186 p. 32. JG. XV/16. (Col.)

Tooth eyed *Ruprestis*. see *Chrysobothris dentipes* Ag. Rep. 1868 p. 92. L. in Oak wood JG. XI/18 (Col.)

Tortoise. beetle. see *Cassida*. 7th. (Col.)

Tortricidae (Lep.) Ag. Rep. 1868 p. 515.

Tortrix (Lep.) ? rolls up leaves of cotton. Ag. Rep. 1854. p. 61. JG. cover

- Tortrix*. cotton. (Lep.) of Lf. 85. Ag. Rep. 1855. pl. VII. fig. 1. feeds on Cotton foliage. &c.
 { is *Loxolaima Tortrix rosaceana*? var. *rossyphii*?
Tortrix rosaceana (Lep.) (or *Loxolaima* from *Loxos oblique* Sauer band) *rosaceana*.
 { rolls up leaf & devours foliage of Rose, Apple, cotton, fruit, & other trees.
 { see JG. XII/13, JPG. XII/14. Ins XV/20 - LXIV, 8.2.12 (Lep.)
Tortrix. apple. see above destroyed by *Melyras cinctus* JG. III/12 (Det), *melyras*.
Tasle a sort of *Cane* on which *Conixa* (Hct) deposits its eggs in Mexico Ag. Rep. 1866 p. 38
Toxothora (Lep.) a parasitic fly found in the flask shaped mud nest of *Eumenes*
 { *pratensis* (Hym) JG. II/27.18 — *Toxothora*. JG. V/35 (Lep.) (see also 1870 p. 78, fig. 35)
Trachis (Col.) Ag. Rep. 1868 p. 92. (Col.)
Trachyscleris (Col.) Ag. Rep. 1866 p. 41.
Trachys minutus (Eu). Ins feeds on hawthorn. Ag. Rep. 1868 p. 92. (Col.)
 That door spider, see *Clonixa nidularis*. Ag. Rep. 1872 p. 161. (fig.)
 Their cricket, climbing. see *Clanthus*. Ag. Rep. 1874 p. 128. (Crch.)
Tremex columba, or *perizon tremex*. L. feeds in wood of Pear &c. & is destroyed by *Phrysa*
 { *pumila* *atrata* & *lunator*. *Tremex* (*Sirex* Syn) *columba* Ag. Rep. 1866 p. 41.
 { *Tremex columba*. JG. I/12.13. (Hym) see also *Sirex*. & *Phrysa*
Trichestes (Phyllophaga) *pulscalis*. Tristes (Col) Ag. Rep. 1868 p. 88, fig. 71. L. feeds on
 { roots of grass, & foliage of fruit, & forest trees. *Phyllophaga tristis*. JG. VII/4 (Col)
Trichius (*Trigonopellastis*) *della* (Col.) Ins. feeds on sap of Cotton bolls, & nectar of
 { flowers. Col. 1855. p. 87. pl. VII. fig. 11. — 1868 p. 90, fig. 87. *Trichius* JG. IX/22. (Col)
Trichocera hyemalis (Lep.) (Eu) Turnip gr. &c. falsely supposed to be the cause of the disease
 { called anthry in Turnips Ag. Rep. 1872 p. 128 fig. 14. JG. Ins X/51 & VI/13 (Lep.)
Trichocnemis (Col) Rothson Ag. Rep. 1861 p. 613. mere mention. (Col)
Trichogramma oryzae (Hym) destroys *Orygia leuostigma* (Lep.) 1866 p. 42. "White spot moth"
 { Ag. Rep. 1866 p. 42 (Hym) *Orygia* JG. X/15 to 10. Ins XXII/9 LXI/546 (Lep.)
Tricranium (Gonia) *sanguiniferum* Ag. Rep. 1868 p. 103. *Tricranium sanguiniferum* JG.
~~JG. VII/17~~ (Col) (probably parasitic on Bees.)
Trichopterygidae. (Col) mere mention. Ag. Rep. 1868 p. 83 (Col)
Tricostoma chidwenis (Sdm) large beetle (Rothson) Ag. Rep. 1861 p. 611. Length 3 inches
 { color metallic green & habits carnivorous. (Col)
Tridactylus. (*Xys*) *terminalis*. said to be food of *Galgulus ocellatus* (Det. V/2 JG.)
 { Ag. Rep. 1875 fig. 55. p. 132. — *Tridactylus terminalis*. JG. III/6. (Crch.)
Trigona. (see *Apis*) Hym. Stinger bee of South America. Ag. Rep. 1866 p. 32 & 1869 p. 63 (Hym)
Trigonarectes *della* see *Trichius* Ag. Rep. 1855 p. 84. & 1868 p. 90. (Col)
Trioxys (Hym) destroys plant lice "Aphis". Ag. Rep. 1866 p. 41. (Hym)
Triphleps unicolor, *invidiosus*. *Triphleps* *invidiosus*. feeds upon other insects, probably the
 { *Sancta* may deep included. also. *Triphleps ruficornis*. or the leaf-vein gall louse.
 { Ag. Rep. 1875 p. 123 fig. 2. *Triphleps invidiosus*. JG. I/13. (Det)
Trochilium exitiosum. see *Agrobia*. peach tree. borer. Lf. JG. Lp. XIIII/2. (Lep.)
Trochilium fusciformis. see *Agrobia*. grape vine. borer. JG. XVII/5. (Lep.)
Trochilium tipuliformis. see *Agrobia*. Currant bush borer. JG. XL/3. Lf.
Trochiloides. & *Trochiloides* (Col) Ins. causes el. death. Flies in decomposing animal matter. Ag. Rep.
 { 1861 p. 66 & 107 (see also *Tor*)
Trogus *carbo* *delia*? *Tenebrionoides mauritanica*. (Cadele. Eu) (Col) Ag. Rep. 1869 p. 337.
 { said to destroy the larvae & the wheat weevil? feeds on grain bread. Wheat
 { stored grain 1868 & 83. 1865. 91 lives under bark of trees. 1870 p. 66.
 { *Tenebrionoides mauritanica* JG. XXXI/1. (Det)
Trogus *Tenebrionoides dubia*. feeds on Maize, Wheat, Beach nuts, & found under
 { bark. Ag. Rep. 1865 p. 91. — 1868 p. 83. — 1870 p. 66. — 1870 p. 66. fig. 3.
 { JG. Tenebrionoides dubia. IV/25. (Col).
Trogus (Col) some live under bark & others injure grain Ag. Rep. 1868 p. 83. 105 &c. (Col) *T. Glover*

- Use a few. Heart worm. Canadian name for *Pieris rapae*. (European white cabbage
 butterfly caterpillar. from its injuring the heart or interior of cabbages &c 39
 E.C/18 C.W/30 Ins E.14. 39 (Lep.)
 Vespa. (Hym) Ag. Rep. 1872. p. 132. Vespidae. Ag. Rep. 1866. p. 43. (Hym.)
 Vine hoppers. see Deligonia. Erythronera. &c
 Virginian. Suprestis. see Suprestis Chalcophora virginica. virginianus. L. injures wood
 { of pine. Ag. Rep. 1861. p. 607. fig 53. 1868. p. 91. fig 59. C. virginianus. 39 1/1/91 (Cot)
 Vinegar remedy recommended for the destruction of insects by the Imperial Soc.^a
 { Horticulture of the Rhone. - in the proportion of one part of vinegar to 9 parts
 { of water. Ag. Rep. 1865. p. 92.
 Volucella inanis. (Lep.) inanis. Ag. Rep. 1849. p. 339. (Lep.) Ex Volucella ronanica. 39 11/3/1864. 1
 Walking stick insects. see Spectum. Diapheromera. &c phasmodae. Orth. 1874. p. 133. 1/6
 { fed on leaves. Fluids. Injs resemble twigs.
 { Ex. Diapheromera Emorata 39 1/7. (Orth)
 Walnut. leaves used as a wash to keep flies from horses. Ag. Rep. 1872. p. 132.
 Wasps? eat young tobacco worms. see Macrosila carolina.
 Wasps. Hornets. & yellow jackets. fed on fruit of pear &c. Uhler Ag. Rep. 1866 p. 516. Hym
 Wasps. (Hym) Vespidae. to destroy. Remedies. 1864 p. 547. &c (Hym) - injure fruits
 { but also destroy flies. 1868. p. 43 - prob. breed in body of Chalcophora (Cot) Stylops.
 { Meloe angusticollis. - Ag. Rep. 1868 p. 102.
 Wash wood wasp. see Urocerus Ag. Rep. 1863. 276. (Hym)
 Water beetles. (Col) see Dytiscus. Hydrophilus. &c feed on aquatic insects &c fish & fish
 { spawn. Virginius in fish breeding establishments.
 Water beetles. adapted for aquaria. or otherwise. Ag. Rep. 1864. p. 459. (Col)
 Water bugs. Heteropterus insects inhabiting water. (Hem)
 Water fly. Phryganea. &c (Neur.) Ag. Rep. 1866. p. 40 Ex 39. I. vi/6. Ins vi/8. (Neur)
 Water measure. Hb. see Hydrophilidae. (Col) (Gerris &c) Ex Gerris coniformis 39 1/9. 1/6
 Water scorpion (Hb.) see Nepa. &c 1875. Ex. Nepa apiculata 39 1/10. (Hb.)
 Water skimmer. (Hb.) see Gerris.
 Wax insect of China. Fata (Cecada) umbata. Ag. Rep. 1857. p. 57. (Hom)
 Wax moth or Bee moth. (Lep.) see Galleria cereana 39 11/14. 1/11/7. (Lep.)
 Weaver. or Fall web worm. (Lep.) Hyphantria textor. 39 2. viii/5. 8. 16. I. LV/14. 18. (Lep.)
 Western grasshopper see Calopterus opretus (Orth) 39 xiv/16. viii/1. (Orth)
 Weevil. grain. see Calandra remotipunctata. (Sitophilus granarius) 39 3. xiv/2. (Cot)
 Weevil. Hunter. (Col) eats holes in leaves of maize. Ag. Rep. 1863. p. 573. affinis
 { Sphenothorus zone. 1870. p. 68 fig 10.
 Weevil. see Curculionidae. (Col) & incorrectly. Diplosis Acidomyia tritici.
 Weevil. red see Diplosis tritici. 1872. 126 so called incorrectly in Ohio. &c.
 Weevil. Wheat see Calandra remotipunctata. Sitophilus granarius Ag. Rep. 1865. 91 &c 39 xiv/2. 2n.
 Weevil. Rice. see Calandra oryzae. Sitophilus 1849 p. 334 1854 p. 71. p. 5. 1861 p. 603.
 { Calandra. 39 xiv/1. (Col)
 Wheat. midges. see Diplosis tritici Ag. Rep. 1864. p. 362. probably destroyed by Thromidea
 { Abalus typhaeus pugnae &c 39 11/7. (Hb.) Diplosis tritici. 39 1/10. 11. (Hb.)
 Wheel-bug nine pronged. (Hb.) feeds on other insects. Pronotus oxidatus Radamus novus.
 { 39 1864. p. 546. & 1875 p. 129. fig 41. Pronotus cristatus. 39 11/14. (Hb.)
 White ants. see Termites. (Neur) Ag. Rep. 1864. p. 545. Ex Termites. Kempis. 39 11/18. 9. 10. (Neuropt)
 White climbing cricket (Orth) see Oecanthus muscus 39 11/14. 2. (Orth)
 Whorlogig. see Gyrinus. lunatus &c (Col) Ex. 39 11/14.
 White grub. L. of Laconosterna. Phyllophaga. &c White grub parasite Relus 64. Rep. 1874. 162
 White necked pine beetle. see Dichelonycha ulbicollis. (Col) 1868. p. 67. 39 11/3. (Col)
 White pine weevil. see Pissodes strobili. 39 xiv/11. (Col); 39 Glover.

- Wilder, silk producing spider Ag Rep 1866. p. 37.
- Willow, Black. saw fly. *Pematus ventralis*. Ag Rep. 1873 p. 255 - hellebore recommended. (Hym)
- Worm, of *Canapi* is *Elater obscurus*. &c Ag Rep. 1861. p. 608. — is the larva of an *Elater* { with remarks. Ag Rep 1863 p. 566. — destroyed by baiting with sliced potatoes every day & destroying all found underneath — as they feed on vegetable roots &c. (G.) }
 1868 p. 93. — destroyed by sowing 6 bushels of lime "Mechi" Ag Rep 1869 p. 441
 Example 33. - XI. 46 *Corymbus*. Col
- Wood boring or wood eating insects, destroyed by *Ephialtes imitator*. (Hym 39 1/20 9 Vn) 13 &c }
 33. Braccon. (Ex 39. VII/31. Hym) Ag Rep 1866 p. 41. The larvae are also said to be }
 destroyed by *Situs*, *Thanasimus*, *Opilus*, *Elyrophilus*, &c (Col) see Ag Rep 1865. }
 p. 98 (Col)
- Woolly apple tree louse. see *Brosoma lanigera*. — III/21. Hym, 39
- Worm see *Tinea granella*. injures wheat & grains. 39. IX/1. C/12. (Exp.)
- Woolly *Onoclea*. (Col) *Onoclea*. *Catalpa*. *lanigera*. pear foliage. Ag Rep 1860. p. 315. *Cot alpha* }
lanigera 39. VII/17. (Col) (see 1868. p. 89. also)
- Woolly Bears. (Lep) caterpillars of *Arotia* &c as presenting a rough hairy appearance. Lep
- Worms earth. destroyed by *Staphylinidae*. (Col) Ag 1865. p. 91. — forms food for *Staphy* }
Lampis, *Pyralis* & lightning bug. Ag Rep 1868. p. 96. — eaten by *L. Tetracha* var }
genua 1870. p. 65. — see also *Embriculus*. 1871. p. 81.
- Worm earth. Japanese see *Megacolea* or *Ponochaela*. Ag Rep. 1871. p. 82.
- Worm, Col. of Dutch. Ag Rep. 1871. p. 81.
- Worms in horses. remedy. Ag Rep. 1860. p. 85..
- Worms. (Worm holes) tumors or abscesses under the skin of cattle caused by the larva }
 of *Hyphodermia bovis* or the skin bot fly. Ag Rep. 1872. p. 130. 39. VII/35 & VI/37. (Lep.)
- Xiphocera* (Orth) (Rathvon) Ag Rep. 1862. p. 3. not mention.
- Xija terminalis*. (Orth) said to be destroyed by *Galgulus oculatus*. (Hym V/2. 28.) see *Tridactylus*. }
 39. III/6. Orth)
- Xylorhiza sinuata*. (Col) (Ec) injures branches of grape. Ag Rep. 1865. p. 94 (Col)
- Xylorhagus*. Ag Rep. 1865. p. 92. m m. (Col)
- Xylopinus sapereoides*. (Col) in black oak stumps. & under bark. 1865. p. 100. fig 160. }
 39. XVII/34. (Col.)
- Xyloryctes saturus*. (Col) Ins. taken at root of Sweet gum. & Oak. Ag Rep 1868. p. 89. fig 79 }
 injurious to Oak. 1873. p. 152. fig 2. 39. XVIII/16. XLII/45. C. c
- Yellow caterpillar? of L. 39. (Lep) Ag Rep. 1855. p. 83. (Lep)
- Yellow jacket (Hym) was. *Vespa diabolia*. feed on fruit of pear, &c Uhler. 1860. p. 316. }
 39. VII/21. (Hym)
- Yellow. disease of the peach. prob. of fungoid origin. & not caused by insect. Ag Rep. }
 1863 p. 375.
- Zabrus gibbus*. (Col) (Europe) L & I said to injure grain Ag Rep 1855 p. 110. 1865 p. 529. }
 1863 p. 565. — 1868 p. 80. 105 &c.
- Zenaa*. (*Sandalus*) *pecca* Ag Rep 1865 p. 94. 105. found under bark. *Zenaa pecca* 39. XX/13 (Col)
- Zonitis atipennis* (*Memognathus*) 1865. p. 103. 104. (Col). 39. XXVII/21. XLII/48. Col. }
 J. G. Davis

Insects to a greater or lesser degreeBeneficial.

by destroying noxious insects

Aleochara (Col.) *anthomyiae*. destroys
 {*Anthomyia* brassicae. (Lep.)
Ammophila gryphus. (Hym.) destroys caterpillars.
 {*ans*. (Lep.)
Anatis (Coccinella) *truncatata* (Co.) destroys
 {*Catantop* Aphides (or plant lice) (Hom.)
Anthrenus (Hes.) destroys small insects. —
Antrenax (Lep.) destroys chrysalis of *Lepidop*.
Ante. (Hym.) destroys caterpillars of grass
 {worm, &c when injured. (Lep.)
Aphidius (Hym.) destroys Aphides. (Hom.)
Aphidius (Hes.) destroys other insects & also
 {kills honey bees (Hym.)
Asilus. missouriensis L. &c (Lep.) destroys
 {Honey bees, & other insects. (Hym.)
Asilus sericeus (Lep.) destroys other insects.
Baccha (Lep.) destroys Aphides. &c (Hom.)
Bombus. (Hym.) destroys flies & beetles
Brachinus. (Col.) said to destroy insects.
Brachytarsus varius. (Col.) destroys, coccis,
 {on pine. Europe (Hom.) ?
Bracon. (Hym.) said to destroy wood boring
 {insects. (Col.)
Brontes (Col.) said to destroy Scolytus, and
 {*Postichus* in Europe. (Co.)
Calosoma, calidum & scrutator. (Col.) destroy
 {other insects.
Campyloneura (Carpus) *winipennis* (Hes.) destroys
 {*Empidonera*, or wine hopper (Hom.)
Carpophilus, *separatatus* (Col.) Europe. said to
 {destroy *Postichus* in Wood. (Col.)
Carabus ligatus &c (Col.) destroys caterpillars.
 {of *Pontia brassica* &c (Lep.)
Conaphron (Hym.) destroys *Acidomyia* destroyer
 {of *Hessian fly* (Lep.)
Chalcid ? (Hym.) destroys *Chrysobothris* Lemor.
 {ata &c (Col.)
Chilocorus lineolaris. (Col.) destroys coccis
 {on orange. &c (Hom.)
Chryscha (Hym.) destroys eggs of *Anthomyia*.
 {*Cephus*, *Attilus* & other insects.
Cicindelidae (Col.) destroy other insects.
Cleonymus *chalcampae* (Hym.) destroys
 {Lep. *Chalcampa americana* (Lep.)
Cicindidae. (Col.) destroy wood boring larvae.
 {bees &c (Col. & Hym.)
 {Glover Sep. 29th 1877.

Clerus apicatus, & *alvearius* (Col.) destroy
 bees in Europe. (Hym.)
Coccinellidae. Lady birds, all with exception
 {of *Eriothina borealis*, destroy
 {plant lice Aphides. &c (Hom.)
Cockroaches. (Orth.) are said to destroy
 {bed bugs. (Hes.)
Coelinius niger (Hymen). Chlorops.
 {Lep.)
Conorhinus variegatus (Hes.) destroys
 {bed bugs. *Acantia*. (Hes.)
Crickets said sometimes to destroy other
 {insects.
Cryptus inceptor (Hym.) destroys *Thysanop*
 {terry *Chromera*, *orthis* or hairy
 {worm (Lep.)
Culex. Mosquito. (Lep.) destroyed by
 {Swallows, &c
Dasygogon (Lep.) destroys other insects
Diaprua agrorum. (Hym.) destroys
 {*Agromyza tritici*. (Lep.)
Diplodus, *lunulatus* (Hes.) destroys planor
 {*Cercaria*, & other insects (Col. &c)
Ditoma coronata (C. rope) (Lep.) said to
 {destroy *Postichus*. *Scolytus* &c (Col.)
Diptera destroyed by *Eumenes platona* (Hym.)
Dulus, *flavescens*. (Col.) (Europe) destroys snails
 {Slugs &c
Dytiscus (Col.) water beetle, destroys other
 {insects.
Ephialtes. (Hym.) destroys wood boring insects.
Erax. (Lep.) destroys other insects.
Eumenes fratema, destroys canker worm
 {*Anisopteryx*. (Lep.)
Euscelinus punctifrons &c (Hes.) destroys other
 {insects
Evagorus melibius (Hes.) destroys orange plant
 {lice *Attilus* &c (Hom.)
Euscelinus. *quasi* (Co.) destroys other insects.
 {*Attilus* &c (Hom.)
Forsiculus (sawing) (Orth.) said to destroy
 {*Attilus tritici* or wheat mealy bug
Gennissus (Orth.) destroys other insects.
Gyrinus (Apple bug) (Col.) destroys other
 {insects.
Hammatocerus *fancis* (Hes.) destroys other
 {insects. *Nabis* syn —

- Homocidus* (New) destroys other insects.
Leptodermis (Col.) destroys Aphides, &c. (Hom.)
Homocidus & wasps (Hym.) destroy Tobacco worms.
 & other insects. (Lep. &c.)
Hydrophilus, water insect (Col.) said to destroy
 other insects.
Hypophloeus (Col.) said to destroy insect in
 wood.
Inostemma (Hym.) destroys Hessian fly
Cecidomyia destructor (Dip.)
Schnecumon flies (Hym.) destroy *Umsata*.
Synanthus. *Ceratomya*. *Pyrosetia*.
 (V. Lep.)
Larrada argentata (Hym.) destroys cricket;
 (Orth.)
Lebis grandis (Col.) destroys *Chrysomela*.
 (Longphora) (Col.)
Leptoglossus philoporus (Hob.) destroys Murgon
 fly. *histionichus*. (Cabbage bug) (Hob.)
Le. blulidae. (Oregon flies) (New) destroy insects.
Lycaridae (Hob.) destroy other insects.
Lycanus dema (Col.) destroys soft bodied insects.
Macroglanis (Hym.) destroys *Cecidomyia destructor*
 (Lep. or Hessian fly) (Dip.)
 x *Diapheromera* or *Mantis* (Orth.) destroys other
 insects.
Melanolestes (Hob.) destroys other insects.
Meloe, is used in holes of bees, wasps, &c.
Meropis graminicola (Hym.) destroys, Rice
 weevil. *Culmbra ovata*. (Col.)
Microgaster congregatus (Hym.) destroys *L. Mac*.
 (Noxla, caroline, &c.) (Lep.)
Midas (Lep.) feeds on other insects.
Mylus cinctus (Hob.) destroys *Chrysomela*
 (Longphora, 10 lineata) (Col.)
Mommidea typhaca (Hob.) destroys *Spilosis*.
 (Wheat midge) (Dip.)
Nepa & *Notonecta*, water insects (Hob.)
 destroy other insects.
 x *Myrmelcon* (Ant. Lion) (New) destroys other
 insects.
 x *Onion*, *macrumum* (Horn) destroys *Paty*.
 (Samia, *caerapha*) (Lep.)
Pachymerus, calculator (Hym.) destroys
Diplosis tritici Wheat midge (Dip.)
Pasyrnachus elongatus (Col.) destroys *Chrysomela*.
 (Longphora 10 lineata) (Col.)
Pentatomia (Hob.) destroys caterpillars (Lep. &c.)
Phryganeon flavosae. (Cyn.) destroys —
 (Volyte Larva) (Lep.)
Phymata *exosa* (Hob.) destroys other insects.
Pirales biguttatus (Hob.) destroys bed bugs (Hob.)
- Platyaster* (Hym.) destroys, *Isosoma hordei*.
 { *Jaint. isomus* (Hym.)
 { destroys *Cecidomyia destructor*.
 { or *Hessian fly* (Dip.)
Podusus, cynicus, &c. (Hob.) destroys *Chrysa*
 (Mela, *Doryphora*) 10 lineata (Col.) &c.
Povon, (Hym.) destroys *Conotrachelus nem.*
 (Phar, or Plum weevil. Col.)
Pacilus (Col.) destroys other insects.
Pedestis rubiginosa (Hym.) destroys *L. of*
Chrysomela, 10 lineata. (Col.) &c.
Prionotus { *crustatus*. (Hob.) *Pedemus*, *novenarius*.
 { destroys other insects.
Proctacanthus *Bestardi* &c. destroys *Hier* bees
 { *Phaladephacus*. " " " (Dip.)
Pteromalus (Hym.) destroys *Chlorops*. (Dip. &
Isosoma hordei. (Hym.)
 " *tabacum* (Hym.) destroys *Microgaster*.
 { *congregata* (Hym.)
Pirales biguttatus (Hob.) destroys bed bugs (Hym.)
Pytho americanus (Col.) destroys *Orthogum*
 { *lineatum*. (Col.)
Radvius personatus (Hob.) destroys bed bugs (Hym.)
Rhagonia (Col.) (Col.) destroys Lar of *Sus*
 { *flav*. (Hym.)
Rhizophagus (Col.) destroys *Peritrychus* (Col.)
Rhyssa (Dimple) *atrata*. & *lineata*. (Hym.)
 { destroys *Tomax colamba*. (Hym.)
Rhysa *macromaculata* (Col.) (Col.) destroys
 { caterpillars. (Lep.)
Sphex (Hym.) said to destroy cockroaches
 { (Orth.)
Spiders destroy *Pirais rapae*. &c. (Lep.)
Staphylinidae (Col.) destroys other insects;
Sticticus *diana* (Hob.) destroys *Epilachna*.
 { *boracis*. or "Squash lady bug" (Col.)
 " *limbriatus* (Hob.) destroys (Lep.) &c.
Stenus grandis &c. (Hym.) destroys Cicada or
 { Hessian fly. (Hob.)
Tyrphus (Dip.) destroys Aphides, or plant lice.
 (Hym.)
Tachina (Dip.) destroys grass hoppers. (Orth.)
 { caterpillars. (Lep.) *colorado* *podata*
 { *hells*, &c. (Col.) &c.
 " *quida* (Dip.) destroys *Eacles*.
 { *impenalis*. (Lep.)
Telae. (Hym.) said to destroy eggs of
Notonecta. (Hob.)
Telphonus (Col.) L. said to destroy soft bodied
 insects.
Tetracha. (*Megecephala*) *virginica* & *carolina*.
 { L. destroy other insects.
 { *flava*. (Hob.) 30. 1877.

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Thanasimus (*Pseudoclerus*) (Col) destroy
 { grubs in bark.
 " *nigripes* destroy L of *Hydromus*.
 { *aculeatus* (Col)
Theridion & *Hyphophyllum* (Spiders) destroy
 young caterpillars of *Pieris*. (Lep)
Thrips (Th) said to destroy *Aphis* *tricolor* (H)
Troxana (Horn) destroys bees. (Hym)
Turicoides destroy wood boring larvae?
Toxophora (Dip) destroys *Eumecurus fraterna* (Hym)

Trioxys (Hym) destroys aphides, or plant lice.
Triphleps. *Anthrenus* *insidiator*. destroy
 { small insects.
 Wasps. (*Acrididae*) (Hym). destroy flies.
 { other insects.
 " { breed. *Meloe* (Coe) & *Phigiphora*.
 { (Col) in body
 Water beetles *Lyttidæ*. *Hydrophilus*
 " { &c. destroy other insects, fish
 { & fish eggs.

Other agencies useful in the destruction of Insects.

from Agl. reports.

Amanita muscarius, a fungus poisoning flies.
Amanthium muscatorum a plant " - "
 Arsenite of copper. Paris Insect. used to
 { poison insects.
Artemisia { plant used to fumigate or suffocate
 { bees in China
 Birds, injurious *Phœbeus* (AgRep 1867. 208)
Batrachium bassiana. fungus. destroying
 { Silk worms.
 Club foot in cabbage a disease.
 Cobalt - used to poison insects
Colletes *white* *leucatum* *altum* used to
 { destroy insects.
 Iodine, & starch used to attract snails, &c.
 Gulls destroy *Anabus* *semble* n. W. W.
Melia azadirach (China tree) leaves &
 { berries used to destroy insects.
 { Bats in houses &c.

Paris green. Arsenite of copper used -
 { to poison Boll worm, cotton cat
 { caterpillar. Tobacco fly &c.
Polygonum. - plant used as a wash.
 { for horses to drive off flies, see
 { also Walnut leaves.
 Poke berry, *Phytolacca* used to destroy
 { *Leptobroches* &c.
Pyrethrum plant used to destroy or
 { drive away insects
 Salt used to destroy wireworms.
 { the larvae of *Elateridae*
Sphaeria morbosus, a fungoid growth
 { forming black knots on plum trees.
 { & harboring noxious insects.
 Tobacco used as a wash on horses &c.
 - { to drive away flies - }

Amongst the diseases affecting the cotton plant, will be found, Blight,
 Scorching, and Rust.

Amongst the Birds. Gulls. Quail, Sparrows, &c. &c. are mentioned as beneficial,
 Lead is sometimes, bored into by insects - viz. *Chion cinctus*. *Hydrophilus*. -
 (*Callidium* *basulus* (Col) - *Anobium*, *Apate*, & *Bastus* (Col) have also been recorded.
 as being eaters of lead. & also probably a *Sorex* (Hym).

J. H. H. Sep. 30. 1877.

List of Vegetable and Animal Substances.

injured, or destroyed.

by Insects.

mentioned in the preceding Index.

The following list consists principally of such substances in connexion with insects as have been mentioned in the reports of the Department of Agriculture, from the year 1854, to the present date, many however have been omitted, when indefinitely named such as „ Brambles, Grass, „ Berbage, & Fruit or Forest trees, &c. Others have been inserted from my private note book, when deemed of sufficient consequence to the planter, horticulturist, or fruit grower. I would however here state that this list is necessarily very incomplete as it refers, mostly, to such food plants &c. as have been mentioned in the index, by no means includes other vegetable or animal substances mentioned in my larger note books, which probably may be published when the plates are all ready for publication. Some of the common English names of the insects are also omitted, as varying in different states. The European insects quoted are mentioned merely, to warn our own Farmers & Gardeners that such Genera or species of destructive insects are already existing in Europe, & may eventually, be introduced into the United States. — amongst the foreign imported seeds, roots or plants. Take for example the now too common insect, the new White Cabbage butterfly, *Pieris rapae*, which, totally unknown in the United States a few years ago, at present swarms from Maine, to Maryland & destroys the hopes of the gardener, & truck farmer. — Wherever the words "frequent" or "occur" in the list, it signifies that the plant referred to is probably injured by the insect named. The following abbreviations are also used. "fol" signifies either the foliage or simply the leaf, "inv" means "injured". The letter L, before the name of an insect, signifies either Larva, grub, or caterpillar. "P" pupa or Chrysalis. "Co" Cocoon & "i" imago or perfect insect. "a" note of interrogation, implies some doubt, and a single line under a name signifies it should be indistinct. It is merely a synonym. It is not the latest name given which is distinguished by two lines = under it. When a small star, or cross, is marked on the margin, before or after a name, it signifies that such name is misplaced in the alphabetical list. & should be corrected if this work is ever printed in type. The botanical names of the plants (principally from Gray) have been given for the use of students, or foreigners not acquainted with our common & local English names. The following abbreviations are also used. "Col" Coleoptera, or beetles. "Orth" Orthoptera, Grasshoppers, crickets &c. "Neu" Neuroptera, Dragon Flies &c. "Hym" Hymenoptera, Bee wasps &c. "Het" Heteroptera, Plant bugs &c. "Hom" Homoptera, plant lice, Leafhoppers, &c. "Lepid" or "Lep" Lepidoptera, Butterflies, moths &c. & "Dipt" Two winged flies, House or meat flies, Mosquitoes &c. "Dep Ag" Department of Agriculture. "Eu" Europe. "U.S." United States. "For" foreign.

Abies. Spruce or Fir.	Alder (Black) <i>Alnus serrulata</i> .
" balsamea. Balsam Tr.	" " fol. frequented by <i>Neotoma (Carpenter)</i> & <i>obscura</i> . (Hom.)
" canadensis. Hemlock Spruce.	" " frequented by <i>Coccinea Tassus</i> & <i>subfasciata</i> (Hom.)
Acer. Maple.	" " " by <i>Toxocopa undata</i> (Hom.)
" dasycarpum Silver maple.	" " " by <i>Graphodora chalybea</i> (Col.)
Alnus. Fruit of Oak.	" " " "
" " injured by <i>Balanus nuscus</i> &c.	" " " "
Alnus glandulosus. Tree hazel	Amanita, a fungus eaten by <i>Scispa Thomei</i>
" fol. eaten by <i>Sorbus Olusca</i> &c.	(Lep) <i>Lep</i> 25 th Aug 8 1877

- * *Amelanchier canadensis* sa Shadbush.
Amianthemum muscae trivium plant. used
 to poison Ples. (Lep)
Ampelopsis quinquefolia Viramian creeper.
 " frequented by *Tetramesa ampelopsidis* (Hom.)
 Animal substances destroyed by *Corroaches*
 { *Ectobia germanica*. *Nemurina americana*.
Stenomodes pensylvanica. *Stelotygia orientalis* (Orth)
 Animal remains. dead mice, &c. eaten by *Cricetids* (Col)
 " " eaten by *Dormesiles nubens*. &c. (Col)
 " " " *Gryllotalpa*. (C-M)
 " " " *Gryllus achota domesticus* (Or)
 " " " *Necrobia*. (Col)
 " " " *Staphylinus maculosus*. &c. (Col)
 Animals. blood sucked by *Pulex irritans*. (Hemipt)
 " " " *Culex* &c. (Mosquito) (Lep)
 " " *Acanthia* (Amex) *lectularius* (bed bug) (Hem)
 " " *Tabanus abstrusus*. &c. Horse fly. (Lep)
 " when dead see Carrion.
 Animals (& birds) infested with biting bird lice.
 { *Mallophaga*.
 Ants. nests. *Formica*. &c.
 " " frequented by *Claviger porcolatus* (Col)
 " " " by minute *Histriini*. (Eu) Col.
 " " " by *L. of Loricis* *Monogonatha*
 { *carpensis*. (Eu) (Col)
 " " " by *Pselaphidae*. (Col)
 " " " by *Scydmonidae* (Col)
Apium graveolens see Celery.
 Apple. see *Pyrus malus*
 " wood injured by *Ulaeus oculatus* (Col)
 " " " *myops* (Col)
 " twigs injured by *Ampikycterus* (*Bostrychus*)
 { *Alphata* *bicaudatus*. (Col)
 " fol. injured by *Amisopterus venatus* &c. (Lep)
 " " eaten by *Anthracia* *Attacus yema mui*.
 { Lep. (Foreign)
 " flower buds inj. by *Anthrenomus pedicular*
 { *mis* (Col) Europe.
 " " inj. by *Anthrenomus pomorum*.
 { Europe. (Col)
 " round holes eaten in fruit by *Anthrenomus*
 { *quadrigibbus*. (U.S.) (Col)
 " bark & roots injured by *Aphis* *Eriosoma*
 { *lanigera* or *Am. white* (Hom)
 " bark & fol. injured by *Aphis* *malv*. (Hom)
 " " " injured by *L.P.S.* *Aspidiotus*
 { *conchiformis*. Apple bark louse (Hom)
 " " " injured by *Aspidiotus harrissi* (Hom)
 " Pith in twigs injured by *Bostrychus*
Amphicerus. *bicaudatus*. (Col)
- Apple fruit injured by *Conotrachsea pomonella* (Lep)
 " " twigs inj. by *Cenusa babilus*. *dicerus*. (Hom)
 " wood inj. by *Chion. cinctus* *yangunicum*
 { or Hickory borer. (Col)
 " wood inj. by *Chrysobothris femorata* (Col)
 " fol. inj. by *Chrysompa decipiens*. *amora*
 { *isana* (Lep)
 " fruit. injured by *Conotrachelus*. *Rhyrachae*
rus-nemphar or Plum weevil. (Col)
 " fol. injured by *Datana ministra* (Lep).
 " wood injured by *Dicerca divaricata* (Col).
 { *Stenurus* (Syn)
 " twigs cut off by *Elaphidion villosum*. (Col).
 { *Stenurus putator*. or Oak pruner.
 " Bark & roots. injured by *Eriosoma lanigera*.
 { Woolly Apple tree louse. or Am. white. (Hom)
 " fol. injured by *Epicaerus imbricatus* (Col)
 " " " by *Graphorhinus vadous* (Col).
 { *Syn. Olivaceus*. *altus*. (Col)
 " fol. injured by *Perkhantra*. (*Arctus*) *testor* (Lep)
 " buds & twigs &c. injured by *Ichneutes*
novaeboracensis. *caneuroides* (Col)
 " Bark & wood injured by *S. Septosternus aculifer*.
 { *aculiferus* (Col).
 " fol. injured by *Lorotaenia* (*Tortrix*)
 { *rosaceana*. (Lep) Apple Tortrix.
 " fol. inj. by *Lygus lineolaris*. (Hom)
 { *Carpus oblineatus*.
 " Wood injured by *L. Lucania dama* (Col).
 " { fol. fruit & flower injured by *Macrodes*
tylus. *subspinosus*. or Rose bug. (Col)
 " { Young fruit injured by *Macrobasus*.
 { *Anthracis*. *fabricii* *unicolor*. (Col).
 " fol. injured by *Macronoxia*. *Polyphyla*
 { *variolosa*. (Col)
 " branches punctured by *Reanthus nixus* (Orth)
 " Twigs girdled by *Cincedera*. *cingulatus* (Col).
 " wood injured by *L. asmoderma crenicollis*
 " " " *Osmoderma scabra* (Col).
 " fol. injured by *Platysamia* (*Attacus*) *caerops* (Lep)
 " root. bark. injured by *Pomphigus papi* (Hom)
 " fol. injured by *Phyllophaga quercina*
 { *Lachnosternus*. *fascia*. &c. &c. &c. (Col).
 " fol. injured by *Podisus cynicus*. *Arma*
granulatus. (Hem)
 " fol. injured by *Podisus spinosus*. (Hem)
 " Wood injured by *Prionus laticollis*.
 { *brunicus*
 " Twigs Bark &c. injured by *Psylla pyri* (Hom)
 " Young fruit (Europe) injured by *Rhyssalus*
 { *laccus*. (Col)

Apple, wood injured by *L. Saperda candida*.

{ *laridale* (Syn.) (Col)

" { fruit & fragmented by *Sciara-male* (Col)
(or apple midges) (Dip)

" bark & wood injured by *Scytalus pyri* (Col)

" fol. injured by *Donacia viricolor* (Col)

" seeds injured by *Stenus surinamensis* (Col)

" fol. injured by *Emerinthus excavatus* (Lep)

" " " *Sphinx eremitis* (Lep)

" " " *Tetia alticollis polyphemos* (Lep)

" bark & wood inj. by *Donacia mali* (L)

" foliage injured by *Leptostyria* (*Tortrix*)

{ *resacana* (Lep)

" fruit injured by *Trypeta pomonella* (Lep)

Peach *Armeniaca vulgaris* L.

" { bark, twigs, &c. injured by *Aspidiotus conchi*

{ *formis* (Hom)

" { bark, wood & bark, injured by *Agonia*

{ *Trochilum ciliat* (Lep)

" fruit injured by *Ctenia hirta* (Europe) (Col)

Arbutus white cedar, *Thuja occidentalis*.

" fol. injured by *Thuridaphora ethemera*

" { *formis*. *Pecticus rufiterum*. Basket worm (Lep)

Armeniaca vulgaris, Apricot, L.

Arbutus ?

" foliage destroyed by *Bombyx matorum* (Lep)

Ash, *Fraxinus*.

" foliage eaten by *Cantharis vascularia* (Col)

" { *Beller* in a *Phidrogista* (L)

1st mountain *Pyrus Sorbus*.

" wood injured by *Saperda candida* (Col)

x *Asclepias*, milk or silk weed.

" fol. injured by *Cuchaeles*, egg (Lep)

" { frequent by *Sphenothorus* 13 punctatus.

(Col)

x Ash (spruce h.) seen prickly. & *Xanthoxylon*.

Ash, *Fraxinus*.

" wood injured by *L. Dynastes tilus* (Col)

" " " *L. Trochilum Agonia* -

{ *denudatum* (Lep)

" { ash of flowering ash when punctured by a

{ *Acidea* said to produce a kind of manna

" wood prob injured by *Xyloryctes satyrus* (Col)

Asparagus, *asparagalis*.

" fol. injured by *Griecoris asparagi* (Col)

Apen, *corvus*.

" { bark fol. & injured by *Aspidiotus*

{ *cryptogamus* (Hom)

" bark inj. by a cocoon? (see Rep 1860 p 312)

" fol. injured by *Thuridaphora inclusa* (Lep)

" { *Cotone amara* (Lep)

Aster, stonewort.

" stalk bored into by *L. Pontania nitellatella*

" fol. injured by *Epicaeta pensylvanica* (L)

Aquatic plants, frequented by *Stycticus*.

Hydrophilus 2: 2: (Col)

Bacon, injured by *Domestica candaris* (L)

Balsam fir, *Abies balsamea*.

" { fol. injured by *Saturnia* (Lep)

" { *sec* *Styphochiria varu* (Col)

Baptisia, tinctoria, see wild indigo

Barley see *Hordeum*.

" { grain leaf 2: injured by *Elaph*

{ *avenae* (Hom)

" { grain inj. by *Chlorops*. *Brit*. Europe (Lep)

" { " " *Chlorops taeniosus* " "

" { causes swelling of the joints (Lep)

" { seed or grain injured by *Cicadomyia*

{ *Diplosis tritici* (Lep)

" { injured by a disease called *Gout*, wh

{ is a swelling of the stem Europe.

" { fol. & seed injured by a *swallow*

{ in the joints caused in *Egypt*

{ *Isosoma hordei* (Hymen)

" { grain injured by *Oscinus* (Lep)

" { said to be injured in Europe by

{ *Labus gibbs* (Col)

Bark of trees (under) frequented by *Colydiidae* (L)

" " " frequented by *Cepes concolor* (Col)

" " " *Gymnoderia undulata* (Col)

" " " *Eucemis Deltomelopus*

{ *romanicornis* (Col)

" " " *Ellechnia Photinus*

{ *corvus* (Col)

Bark (under) frequented by *Holoborides* (Col)

" " " *Holoborides bicornis* (Col)

" " " *Iph* (L)

" " " *Melanoxyidae* (Col)

" " " *Melanoides communis* (Col)

" { *eratomyctus*

" { frequented by *Mycaophiles* (Col)

" " " *Nidulabini* (L)

" " " *Nassus. Silvanus dentatus* (Col)

" " " *Staphylinidae* (some) (Col)

" " " *Theromus. Boudieria regifus*

" " " *Tenebrionides* (Col)

" " " *Tenebrionides Trogonita*

{ *mauritanica* (Col)

" " " *Tenebrionides Trogonita dubia*

" " " *Dytiscus saphoroides* (Col)

" " " *Leonia picta* (L)

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x *Umbrosia* Hagwood.

- Bass wood, Linden, *Tilia*.
 " fol &c. injured by *Lachnus caryae*. (Hom.)
 Bats. infested with *Acanthia Gomer lectularia*.
 { Bed bugs. (Bel.)
 Bauhinia, fol. eaten by *Urtica*. Bauhinia.
 { *Lichthia* (Lep.)
 Bean. *Faba*. *Phaeocolas*. &c.
 " injured fol &c. *Brachus fabae*. (Hom.)
 " " " " " " *Brachus obscurus* Rot.
 " " " " " " *Brachus granarius*
 { Col.
 " " " " " " *varicornis* (Col.)
 x Bed bugs. destroyed by *Conorhinus variegatus*.
 { *sanguisuga*. (Het.)
 Ber (honey) destroyed by *E. apimarus spissus* (Hym.)
 " " " " a plant. *Acacia*.
 " " " " by *Chilus*. (Hym.)
 " (Mason) " *Clarus abscissus* (Eu) (Col.)
 " (Honey) " " *apicatus* " "
 " comb. wax. honey destroyed by *Galleria cerana*.
 { Was or bee moth. (Hym.)
 " nourish L. of *Meloe angusticollis* in body (Col.)
 " destroyed by *Promachus dastardi*. (Hym.)
 x " " " *Proctacanthus*. (Hym.)
 " nourish L. of *Stylaps* in body. (Col.)
 Bess nests frequented by *Thorus imis*.
 { *formicarius*. (Col.)
 " " " by *Tomis*. (Col.)
 Beech. *Fagus*.
 " " injured by *Agri. lini*. (Eu) (Col.)
 " Sap eaten by *J. uliorhina* (Colinis) (Col.)
 { *nitida* (Col.)
 x " Wood injured by *Agri. viridis* (Eu) (Col.)
 " " " *Bierrea* (Stenurus) →
 { *divaricata*. Col.
 " frequented by *Enisoma imbricator*. (Hom.)
 " " " *Obisocerus coquebertii*. (Hom.)
 " injured by *Polydrosus micans*. Col. (Eu.)
 " nuts injured by *Trogosita* { *Tenebrionides*
 { *calvus*. Col.
 Beet. *Beta*.
 " shoots & leaves injured by *Silpha atrata*.
 (Eu) (Col.) & *laevigata*. (Eu) (Col.)
 Bergamot. *Monarda*.
 " " (wild) injured by *Sphinx eximius*. (Lep.)
 Betula Birch.
 Birch twigs & fol. frequented by *Acanthosoma*.
 { *grisea*. (Het.)
 " " twigs & fol. injured by *Enisoma tessellata*
 { *florum*
 " under bark frequented by
 { *Pyrochroa coccinea* (Eu) (Col.) -
- Birch fol. injured by *Singus juglandis* (Het.)
 Birds (some) infested with bed bugs. -
 { *Acanthia Gomer lectularia*. (Het.)
 " " infested with Biting bird lice see.
 { *Mallophaga* (Orth.)
 " blood sucked by *Fleas*, *Pulex irritans* (Dip.)
 " skins injured by *Pinus* for Col.
 { see Nat. Hist. specimens. &c.
 Biscuit ship injured by *Slodnera* (*Amolium*)
 { *parvica* (Col.) & see Bread &c.
 " " injured by *Tenebrio* { *Tenebrionellus*
 { *molitor* &c. (Col.)
 Bittersweet. *Solanum dulcamara*.
 " fol. injured by *Lygus*. *Hyglossus*.
 { *Cineatus*. (Het.)
 Black alder. *Alnus serrulata*.
 " injured by *Carulea subfasciata*. (Hom.)
 { *Syn. Jassus*
 " injured by *Proctodera chalybea*. Col.
 " " " *Proctodera undulata*? (Hom.)
 Blackberry. *Rubus villosus*.
 " flower & fruit frequented by *Byturus*.
 { *Eu* (Col.)
 " bushes frequented by *Castoplera*.
 { *proctus*. (Hom.)
 " bushes frequented by *Dicrocephala*.
 { *coccinea* *Illyria quadricollata*. (Hom.)
 " stalks frequented by *♀ Acanthia*.
 { *nivica*. (Orth.)
 " stalks bored by *Chlorotripanotalis*. (Col.)
 " Bushes frequented by *Chloris* (Hom.)
 " " " by *Proctodera undulata* (Hom.)
 Blackberry. *Vaccinium*
 " frequented by *Chlorotripanotalis*. (Hom.)
 Blood of Animals, mankind &c. sucked
 { by *Culex*, *Musquitos*, *Pulex*, *Fleas*
 { *Acanthia* bed bug. &c. &c.
 Boleti. see also *Fungi*.
 " frequented by *Haplocephala bicornis* (Col.)
 " " " by *Tenebrionidae*. (Col.)
 Blister flies. see *Cantharis*. *Epicauta* &c. (Col.)
 Bombs in Mammoth cave. Ky. frequented by
 { *Adelops hirtus*. Col.
 " eaten by *Slachylinidae* & *Dormesidae*. Col.
 " see also *Carnion*
 Books. injured by *Dormesidae*. Col.
 " " " *Dormesidae lardarius* Col.
 { *vulpinus* &c. Col.
 " injured by *Ptilinus pectinicornis*.
 { Col.
 " injured by *Platamodes*. *Ecotoma*
 { all the *Blattellidae* or Cockroaches (Orth.)
 { *Blattella*. 26 Aug. 74.

Brambles. *Rubus*.

" frequented by *Ampelisca* (Flato) *viridula*.

{ 8:8: (Hom) & many other insects too numerous to enumerate here (see list).

Brown. injured by *L. Tenelimonellus*. *Tenebrio*.

{ *molitor*. (Col) See flour, meal, bread &c.

Brassica oleracea see Cabbage Cauliflower &c.

Brassica rapa Turnip.

Bread injured by *Ecdelia* *Elalla germanica*

{ & other cockroaches. "Orth."

" injured by *Sitodrepa*. *Anolium* /

{ *panicida*. (Col)

" injured by *Tenebrionellus*. *Tenebrio*. *molitor* (Col)

" " " " " *obscurus*, &c.

" " " *L. Trogista*. *Tenebrionidai*.

{ *mauritanica*. (Col)

Buckwheat. *Fagopyrum*.

" fol. injured by *Prodenia autumnalis* Lf.

Buttercup. *Ranunculus*.

" injured by *L. Epicausta cinerea* (Col)

{ *Cantharis marginata*. (Col)

fol. injured by *Meloe angusticollis*. (Col)

Butternut. *Juglans cinerea*.

" frequented by *Enchyrops*. *videntata* (Hom)

" bark & wood. injured by *Scolytus* -

{ *caryae*. *quadris*. *laevius*. (Col)

fol. injured by *Triphis*. *juglandis*. (Hb)

Carbace. *Bomarea oleracea*.

" roots &c. injured by *L. Anthomyia*.

{ *crassica*. (Lep)

" club rot, a disease formerly thought to be

caused by *L. Anthomyia brassicae* Lf.

" leaves & head. injured by *Aphis brassicae* Lf.

" " " *L. Tomicia americana*. Ent. (Orth)

" leaves & injured by *Gnaphorhynchus*.

radicosus. *Gnaphorhynchus folias*. Hb.

" flowers frequented by *Lygus lineolaris*.

{ *curvus obliqueatus*. (Lep)

" leaves &c. injured by *Murgantia*

strachii *histrionica* (Hb)

" " " by *Nysius raphanus*. (Hb)

" " " by *L. Plenis oleracea*. (Lep)

" " " " *prolixica*. "

" " " " *rarae*. "

" " " *Phyllotreta strobilata*. Hb.

{ *Orchestes vittata*. (Hb)

" fol. injured by *Plutella* (*Phyllosticta* of Lf)

{ *amipenella* *Crostoma brassicella* Lf.

" fol. injured by *Prodenia*. *comenellana* Lf.

" " " by *Smynturus*. (Hb)

Cactus tuna and a hedge plant in Spain

Cactus cochineifera. food of the cochineal insect

Cactus food of coccus cacti. (Hom)

{ or cochineal insect. (cactus prickley pear)

Cannabis sativa, hemp.

Cantharides, or Blister flies, eaten by

{ *Sitodrepa* *Anolium panicida*. (Col)

Capsicum. Cayenne or red pepper

Carcasses, see carrion.

Carrion, devoured by Carrion beetles.

{ *Silpha necrophorus* Hb

" eaten by *Nemobius* (*acheta*) *vittatus*. (Orth)

" " by *Corynetes* *necrobia violaceus* Co.

" " " *Blomestidae*. (Col)

" " " *Crochilus villosus*. (Col)

" " " *Histeridae*. (Col)

" " " *Callithora vomitoria* Lf. x

" " " *Lucilia Caesar*. (Lep) x

" " " *Surcophaga carnaria* Lf. x

" " " *necrophorus marginalis*

" " *Silpha*. (Col)

" " *necrophorus Silpha americana*. (Col)

" " *Nemobius* (*acheta*) *vittatus*. (Orth)

" " *necrophila* *pellata*

{ see *Peltis americana*. (Col)

" " *nitidulidae*. (Col)

" " *Peltis americanus*. *necrophila*

{ *pellata*. (Col)

" " *Peltis*. *necrodes*. *Surinamensis* (Col)

" " *Silpha*. *necrophorus americana*.

" " *Silpha* (*necrophorus*) *velutina* (Col)

" destroyed by *Staphylinidae*. (Col)

" " *Silphidae* *geminata*. (Col)

" " *Trogidae* &c. (Col)

Carrots *Daucus carota*.

" fol. injured by *L. Popilio asterias* (Lep)

" injured by *Phytodecta ephippium* Lf.

" " *Pella rosae* (Lep) Lf.

Castor oil plant. *Ricinus communis*.

" " " eaten by *Attacus urindia* Lf.

" " " *Samia Attacus cynhus* Lf.

Castanea pumila. Chinquapin.

Castanea vesca. Chestnut.

Caterpillars destroyed by *Ammophila*.

{ *gryphas* (Lep)

" destroyed by *Staphylinidae*. (Col)

" " " " *Calosoma calidum*

{ *scutellator* &c. (Col)

Cattle, in Europe, sometimes killed by

{ *Simulium columbianensis* (Lep)

" stung by *Stomoxys calcitrans* Lf.

Cats infested & tormented by fleas.

{ *Pulex irritans* &c. (Lep)

J. Flower Aug. 27. 77.

Cauliflower. *Brassica Botacea*. var.
 " fol. inj^d by *Pieris rapae* V. (Lep.)
 Cayenne pepper. Red pepper. V. *Capiscum*.
 { eaten by *Silene* (*Enobium*) *panicar* (Col)
 Cedar red. *Juniperus virginiana*.
 " fol. inj^d by *Thyridopteryx ephem.*
 = *creformis*. *Reticus confusum*.
 (Col)
 Cedars affected by *Santalus*. (Col)
 Celery. *Ahium. graveolens*.
 { fol. inj^d by *Parilio asten*. (Lep)
 { seed inj^d by *Depressaria orientella*
heracliana Syn (Lep.)
 Cereals. see Wheat. Rye. V.
 Cheese eaten by *Corymbes* (*Neorodius*) *rupestris* (Col)
 " " *Musca cornuta*. (Dip)
 " " *Pophila casei* (Cheese fly) (Lep)
 Cherry. *Prunus. cerasus*.
 " fruit inj^d by *Acanthophaea femorata* (Hes)
 " sp. *Metapodius. Anisostictis. Rhinachus*
parvulus }
 " { Root, bark, wood, inj^d by *Agavea* -
Prochilus *Exilis* (Lep)
 " { Wings bored into by *Amphicorus*
Bostmychus lucidulus. (Col)
 " fol. inj^d by *Anisosteryx vornata* (Lep)
 " fruit cult^d inj^d by *Anthrenomus*.
uniparum (Col) Europe
 " { fruit (wiles) inj^d by *Anthrenomus inuovus* (Col)
Europe
 " { Wings & fol. inj^d by *Aspidiotus conctis*.
formis on the scale insect. (Hom)
 " { fol. destroyed by *Chrysomela decipiens*
americana (Col)
 " { fruit inj^d by *L. Conotrachelus* (*Rhyn.*
cus nemophan. (Col)
 " fruit inj^d by *Corimelaena atra* V. (Hes)
 " fol. inj^d by *Astana ministra*. (Lep)
 " " *Diabrotica vittata* (*Haltia*) (Col)
 " wood inj^d by *Dicorca divaricata* (*Stenurus*) (Col)
 " " *Synasles Styus*. (Col)
 " { fol. inj^d by *Graphorhinus vadosus*. (Col)
Epicarpius fallax. Col
 " { fol. inj^d by *Epicarpius imbricatus*. (Col)
 " " *Lyphantria* (*Urtia*) *tentor*. (Lep)
 " { wood inj^d by *Lucanus dama* (Lor) (Col)
 " { fol. fibres & fruit inj^d by *S. Macroctylus*
subspinatus Col
 " { Trench, & punctured by *Leanthus niveus* (Grb)
 " { wood inj^d by *Omoderma crenicola* V
O. scabra. (Col)
 " { fol. inj^d by *Phyllophaga. Lachnosterna*
Lucas V. & other may beetles. (Col)
 " { fol. inj^d by *L. Platysma* *Atticus*.
acerofia (Lep)

Cherry fol. inj^d by *Polyphylla Macronoxia*.
 " { *variolosa* (Col).
 " fol. inj^d by *Scelendria cerasi* (Hym)
 " { eaten by *L. Tella. Attacus* *Polyph*
mus (Lep).
 " { fol. inj^d by *Trichetes Phyllosnaga*
tus (Col)
 Chestnut. *Castanea vesca*.
 " fruit inj^d by *Balaninus nasicus* V. (Col)
 " { *Jucos* cut off by *Elaphidion melosum*
Senocorus putator (Col)
 " { wood inj^d by *Orthostethus* *Slater*
infuscalus. (Col)
 " { Bark (under) frequented by *Silvanus*
bidentatus. (Col)
 " frequented by *Smilia inornata* (Hom)
 " { *Membracis* Syn
 China aster flowers inj^d by *Epicauta pennsylv*
vanica & other *Cantharides*. (Col)
 Chunguapin. *Castanea pumila*.
 " fruit inj^d by *Balaninus nasicus*. B.
 " { *tactus* & other nut weevils. (Col)
 " { fol. frequented by *Dictyophora Smilia*
inornata (Hom)
 Cicada. destroyed by *Anabus simplex*. (Orth)
 Cirsium lanceolatum. Thistle.
 Citrus aurantium. Orange.
 " lemonium. Lemon
 Climatis. Argemone bower.
 " fol. inj^d by *Epicauta cinerea*. (Col)
 { & *margurata* V. (Col)
 Colra galls on roots formed by *Paridius*
 { *chloris* (Eu) (Col.)
 Cornus Dogwood.
 Clothing inj^d by *Ectobia Blatta germanica*.
 " { & other Cockroaches.
 " { inj^d by *Tinea* *laupontella*.
 { & other clothes moths.
 Clover. *Trifolium*
 " { fol. inj^d by *Asaria costalis* (Lep)
 " { *Arabis odinalis* Syn
 " { fol. inj^d by *Colias pholodice* V. (Lep)
 " { & inj^d by *Graphorhinus. vadosus*.
 " { *Epicarpius fallax*. Col
 " { fol. inj^d by *Pyrrantia. Arcto*
is alata. & other *Arctians*. (Lep)
 Cotton. *Gossypium. herbaceum*. V.
 " { fol. frequented by ants. for the sake
 of the honey dew. made by plant lice;
 { roots & plant injured by " Cat worms
 " the caterpillars of *Agrotidae*. (Lep)
 { & wire worms. Lar of *Elateridae*. V.
 J. Howe Aug 28/77

Commelina, *Large flower*.

" injured by *Prodenia commelinae* (Lep.).
Collections of insects, &c. injured by *Anthonomus*.
& varied. &c. (Col.)

" " injured by *Scymnus maculatus*.
& almost all the *Scymnidae*. (Col.)

Col. of net hat. see also fur, catkins, &c.

" " " dried plants, &c. injured by *Pteris*.
& fur. &c. (Col.)

Cork, injured by *Scymnus maculatus*.
& *Anthonomus* &c. (Col.)

Corn & maize, see also maize.

" grain injured by *Unacamsis* *Selechia*
& *cecella* (Lep.).

" Sweet, or maize, injured by *Ips quadri-*
& *sejunctus*. see *Ptychophagus quadryctatus*.
(Col.)

" fol. injured by *Saturnia io* & *Cyprichina varicosa*.
" " " *Toponyma macra* (Lep.)

Cornus, see Dogwood, & *Corylus*, see Filbert, Hazelnut

Cotton *Gossypium herbaceum*.

" plant, fol. frequented by ants. (Hym.)
& *Formica* &c. for the sake of the honey dew

" roots, plants injured by Cut worms. Lar
& of *Agrotidae*.

" fol. injured by Cotton army worm. &
& caterpillars on fly. *Aletia argyllacea*.
& *Anomis xyloae* (Lep.)

" fur, injured by *L. Arctia*? (Lep.)

" " " *Pyrranthus texar* (qf) (Lep.)

" plants injured by *Detritus*. cray. fish.

" fol. injured by *Spanworm*. prob. *Boarmiden*.

" " " *Calocoris variatus*. (Col.)

" Bolls frequented by *Carphophilus hemipterus* (Col.)
" " when decayed frequented by *Centurus*
& *hercules*. (Col.)

" flower, frequented by *Chauliognathus*
& *mercurius*, & *pennsylvanicus*, & *edens*, & *provid*
& on the pollen. (Col.)

" Bolls when injured frequented by *Colastes*
& *simulicetus*. (Col.) seed probably on minute fungi.

" & & larvae injured by *Dialobolia* & *deco-*
& *decompunctata*. (Col.)

" Laves stained by *Dysdercus*. *cuticellus*.

" *Pyrethron*. (or the cotton stainer. (Hb.)

" flower &c. injured by *Spicausta atropis* (Col.)
" fur, injured by *Span worm*, prob. *Eupithe-*
& *cia misculata* (Lep.)

" Bolls when injured frequented by *Euryomyia*

" *Coloma* *inde*. (Col.) prob. for flowers, say.

" Bolls when injured frequented by *Euryomyia*

" *Euphorbia melancholica* (Col.) prob. for sap.

Cotton fields, frequented by *Eurhacia claudia*

" { *Argemone columbina* (Lep.) feeds on
& wild passion flower.

" fol. injured by grasshoppers *Calopterus*
& (Orth.)

" Bolls injured by *Heliothis umbrosus*
& *armigera* (Lep.)

" fol. &c. injured by *Cyprichina varia* -
& *Saturnia io* (Lep.)

" fur injured by *Lepidoptera* Ag. R. 2 1858
& p. 103. pl. 4. fig. 6. (Lep.)

" fol. injured by *Leptomyia macra* (Lep.)

" frequented by *Parus saccinellus*. (Hb.)

" injured by *Derid.* Ag. R. 1853 p. 103 pl. 18
& fig. 6. (Lep.)

" flowers frequented by *Notus monod.*

" & (Col.)
" Sticks injured by punctures of *Orchelinum*
(Orth.)

" fol. injured by a *pionatoma*. probably
& *Euschelus punctus*. (Hb.)

" Bolls injured by L. of *Prodenia commel-*
& *igna* (Lep.)

" flowers & decaying bolls frequented by

& *Silvanus quadricollis*. & Col

" fol. injured by *Thysidopteryx* *aphem-*
& *coraciformis*. *Proctus confusum*. (Lep.)

" Bolls when injured frequented by *Trico-*
& *gracilis* & *Wolf*. (qf) (Lep.)

" fol. injured by *Lep. Tortrix*, prob.

& *Lonotacna rosaceana*. (var) (Lep.)

" fol. injured by *Tortrix*. ? (Lep.)

" flower frequented by *Michiaella delta* (Col.)
probably for nectar. (Lep.)

Cotton articles, in Reports, for reference

" Remarks on the cultivation, 1869, p. 38.

" The Cotton trade, 1852 p. 189.

" Remarks on the Cotton, of India
& 1853, 195.

" in the climate of the U.S. 1858, 363.

" history & culture in Mass. 1861, 177.

" Investigation on Cotton fibres, 1854, p. 151.

" Insects frequenting the Cotton plant 1853, p. 164.

" History & results of the culture of Cotton
in British India, 1853, p. 226.

" Accidents & diseases of Cotton plant, 1855, 230.

" { chemical researches on the seed of the
& Cotton plant, 1853, 226.

" { Cotton districts of the globe considered
& with reference to their climates, 1855, 217.

" { Flower Aug. 31. 77 15 Over. -

continuation of

Cotton, articles in Reports for reference.

- Cotton { Production, Commerce & Manufacture.
of Cotton in the various countries
of the globe, 1856, p. 255.
- " { Investigations on the insects and
diseases affecting the Cotton plant
1857, p. 121.
- " { Insects injurious to the Cotton plant
in Florida, 1858, p. 271.
- " x Manufactures in the U.S. 1857, p. 300.
- " Cotton, 1862, p. 104.
- " Protection by free labor, 1864, p. 58.
- " Culture, 1866, p. 190.
- " Planting, 1866, p. 193.
- " Under high culture, 1867, p. 409.
- " x History & cultivation of Cotton, 1853, p. 371.
- " Cotton in Missouri, 1861, p. 221.
- " Chronological & statistical history
of Cotton, 1872, p. 406. &c. &c.

Cotton, principal articles in Ag. Reports
referring to insects.

- 1854, p. 59. Cotton insects (not ment. *Aloni*
{ *exlinae*. *Alia argyllacea*.
- 1855, p. 71. { Cotton army worm, *Alia argyllacea*.
article.
- 1856, p. 271. Cotton Stainer. *Lysarcus saturatus*
- 1867, p. 68. Army worm, & grass worm. *Ag.*
- 1871, p. 83. Remedies, liquid poisons, &c.
- 1872, p. 118. Localities injured.
- 1873, p. 163. Short article showing differences
{ between the real Cotton Army
worm, & the grass worm. *Ag.*
- 1874, p. 128. The Fly as just coming from
{ the south. *Ag.*

- Crab. (apple) fol. & twigs injured by *Aspidiotus*.
{ *conchiformis*. (Hom.)
- Crabapple. *Baccinum oxycanthus* *Ag.*
- " fol. injured by sp. of *Antia*. (Lep.)
- " " *Antylopera vaccaeana*. (Lep.)
- " { buds, blossoms injured by *Onthonomis*.
saturatus. Col.
- " fruit, injured by L. 1870, Ag. Rep. p. 486, fig. 51
- " leaf-blossom injured by *Cecidomyia*. *Ag.*
- " fol. frequented by *Clasoptera proteus*
{ *capit* (Syn.)
- " fol. injured by *Psithophora edentidem*.
- " raton, *Th. n.* Hawthorn. White flower.
- " Wood injured by *Junonia cardui* (Hb.)
univ. (Hb.)

- Crotalaria. Rattle box.
- " seeds in pods destroyed by *Uthusa*
{ *deceus bellia*. (Lep.)
- Crowfoot. See Buttercup. *Ranunculus*.
- Cruciferae. fol. injured by *Morgania*
{ *Storcha histomonica* (Lep.)
- " fol. injured by *Nysus raphanus* (Hb.)
- Cucumber. fol. injured by *Diabrotica vittata*
{ Col.
- " fol. injured by *Epitrix cucumeris*.
{ *crispidodera pubescens*. (Col.)
- Crpidodera pubescens*. See *Epitrix cucumeris* x.
- Cucumber fol. injured by *L. Phacelia nitidialis*.
{ (Lep.)
- Cucumis melo. melon.
- " melo pepo. Squash.
- " sativus. Cucumber.
- " pepo. Pumpkin.
- Cucurbitae injured by *Anasa (Gonocerus)*
{ *tristis* or Squash bug (Hb.)
- " fol. injured by *Epilachna borealis* (Co.)
- Current. *Ribes rubra*.
- " { cones in stems & shoots. *Algonia Trochu*
{ *lim tipuliformis*. (Lep.)
- " { bark, fol. injured by *Aspidiotus*.
{ *conchiformis*. (Hb.)
- " { fol. injured by *Ellorea rubra*. (Lep.)
{ *Abraas*. (Lep.)
- " { fol. injured by *Lygus lineatus*. *Cassus*.
{ *quadrimaculatus*. (Hb.)
- " { fol. injured by *Nematus ventricosus*.
{ *Hym*. (imported insect)
- " { branches, punctured by *Q. lecanthus*.
{ *ruvus*. &c. (Hb.)
- " { fol. injured by *Psithophora grossulariae*.
{ *Hym*. (native insect)
- Cyperus. Galangale - 2 scabre.
- " { plant frequented by *Anthracinus*
{ *notatus*. (Tetragonus) (Hb.)
- Cyclonia. vulgaris. sa. Guerc.
- Decomposing vegetable. & unimul. matter.
- " { See. manure. Carion. Dung. &c.
- Dahlia. stalks bored into by *Lygus*
{ *nitela*. (Lep.)
- " { fol. injured by *Lygus lineatus*. (Hb.)
{ *Cassus quadrimaculatus*. (Hb.)
- Dracopis. fol. injured by *Lygus lineatus*. (Hb.)
- L. anderson. Taraxacum. *Alnus* *lucida*.
- " { fol. injured by *Pyronecia (Urtica)*
{ *isabella* (Lep.)
- Eutria fol. injured by *Lygus lineatus*. x.
{ *Cassus quadrimaculatus* (Hb.)

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Dogs. Blood sucked by *Tula irritans*. (Wp.)
Yucca.

Hogwood *Cornus*.

" {fol. eaten by *Salixia* *is.* *Hypocheris*
 {var. (Lep.)

Diospyros virginiana or Persimmon

Earth worms. eaten by *Phaenax pyraei*.
 {*Ecdolampis* (Lyttoning. bug) (Col)

Egg plant. *Solanum, aculeatum*.

" {fol. injured by *Longipora* *Alysoma*
 {lar. *juvencus*? (Col) & *decimlineata*.
 (Lep.)

" {fol. injured by *Epicauta americana*. (Lep.)
Elm. *Sarothamnus canadensis*.

" stems bored into by *L. Desmocorus*.

" {*palidus*, *cyaneus*. (Col)
 {flowers frequented by *Macrodactylus*.
 {subspinosus. (Col)

Elm. foliage injured by *Uniolephus*.

{*varicatus*. (Lep.)

Elm. {fol. injured by *Ceratomia* *ampylor*.

" {*quercuformis* or *Elm Sphinx*. (Lep.)

" {fol. injured by *Cotilia* *lanigera*

{*areolata*. (Col)

" {fol. destroyed by *Ennomos* *subsignaria*.

{(Lep.) hard tooth measuring worm.

" {fol. destroyed by *Salixia calmariana*.

{*Triauxella xanthomelaena*. (Lep.)

" {fol. injured by *Gnephodes chalybea*

{*halicta*. (Lep.)

" {fol. injured by *Halimelia* *crumata*.

{*Phyllophaga*. (Col)

" {fol. injured by *Pyrophantia* *Corticis*

{(Lep.) (Lep.)

" {fol. injured by *Polyphylla variolosa*.

{*Macronoxia*. (Col)

" {Purplish sap. fed upon by *Larve*

{of *Mycetozoa*. (Lep.)

" {fol. injured by *Lachnospira*

{*Phyllophaga*, *pusca*, *hirsuta*, *micans*.

{(Lep.)

" {Twigs girdled by *Onidides*

{*cinclus*, or Twig girdler. (Col)

" {fol. injured by *Phyllophaga fuscata*.

" {*Phyllophaga* *Attacus*

{*aceropa* (Lep.)

" {twigs & in pits. *Synonyxylon* *apote*

{*basilare*. (Lep.)

" {fol. injured by *Silva* *Attacus*.

{*polyphemus*. (Lep.)

Eryngium *campestre*. (Eu)

{frequented by *Anthophorus* *binaculata*.

{(Lep.)

Eupatorium frequented by *Archaea* *galata*.

{*Emilia* *auriculata* (Hon)

Excrement of herbaceous animals. see also

{manure. dung. &c

" {frequented. it form food of *Ateuchus*

{*Egyptiorum*. or sacred beetle of the

{*Egyptians*. (Lep.)

" {fed upon by *Archobius*. (Lep.)

" {frequented by *Centron* *laevi*. (Lep.)

" {by *Copris*. *carolinia* (Lep.)

" {*Scorpius* *spandides*. (Lep.)

" {*Scorpius*. (Lep.)

" {*Phonax* *conspex*. (Lep.)

" {*Scorpius*. (Lep.)

" {*Sphaerulidae*. (Lep.)

Fagopyrum. Buckwheat.

Fagus. Beech

Leaves. injured by *Dermostidae*. see also

{*Cur.* *colligens*. (Lep.)

" {on twig buds. infested with biting

{bore lice see *Mallophaga*. (Orth)

" {destroyed by *Linia* *flaviventella* &

{*exp*

Filbert. see *Corylus*. *Hanks* &c.

Field crops injured by *Colaphus* *pomus*

{*rubrum*, *C. spinosus* & more or less

{by almost all grasshoppers. (Orth)

Fig *Ficus carica*.

Fig *Indian*. in Asia fed upon by *coccus* *laca*.

{or *lac* insect. (Hon)

Fig. fruit injured by *Allophora* *nitida*

{*extrema*. (Lep.)

" {fruit & sap. fed upon by *Eurygomyia*

{*Cotonia* *indica*. (Lep.)

" {fruit & fol. injured by *Pemphigus*

{*microptera* or *lubber* grasshopper (Orth)

" {fertilized in Eu. by *Cynips* *pinus*. or

{the fig mark. (Hym)

Fig. *Albes*.

" {The larvae or grubs in wood of fig

{are said to be destroyed by *Thaumatomy*

{*formicarius*. (Lep.)

Flowers roots injured by *L. Typha* *decaed* &c. (Lep.)

" {As flowers in general are frequented by

{all kinds of insects merely, or the style

{of the pollen & nectar upon which they feed.

{& do no injury to the plant itself, but on

{the contrary are frequently beneficial,

{by fertilizing them. only such flowers

{as are decidedly injured by insects, will

{be mentioned in this list under their

{proper heading as *Cotton*. *blackberry* &c.

{*J. Glouc* Sep. 1-77.

* *Faba*, horse bean.

Flesh. frequented. Used upon by. *Musca*
{*Lucilia* *Cassor*, *Calliphora* *vomitoria*,
Sarcophaga *cornuta*. & (*Dips*.)

Flesh, fls. see *Lucilia*. *Calliphora*. *Sarcophaga* sp.
Flies mainly parasitic insects. *Melob.* *ampulicoid*.
& in body. (Col)

Flour injured by *Pinnus* fur. (Col)

" " " *enebromoides*.
" when moist injured by *Tenebrio* *tenebrior*
= *molitor*. & when dry by *Lobosoma*
(Col)

Flour. see also bran. meal. wheat. &c

Forest trees. fol injured by *Phyllophaga*.
Lacuna *rossa*. *fusca*. &c & all the way
on June bags. &c (Col).

" " fol. injured. by *Cryptophyllus* *con-*
cavus. & all the *Kalyptids*. (Orth)

" " fol. injured. by *Gagys*. *curatigina*. (Col)
" " " *Polyphylla*. *Macromoria*.
varicosa. (Col)

Forest trees. this being such an indefinite
term. only such are ment. & on this
list as are especially named in
the text. as *Ash*. *Oak*. &c

Fruits. (ripe) injured by *Adelura* (*Colinus*)
{*nileta* (Col)

" " injured. by *Eurygaster* (*Col*) *Tortuaria*.
{*auricularia*. (Orth)

" " bored into by *Tortuaria* *nileta*. &
{*lepis*.

" " injured on ground. by *Telidae*.
{*Myreapha*.

" " injured by some *Orthosidae*. (*Dips*)

Fruit trees. Fruit injured in Europe. by —
{*Phyllobius*. *argentatus*. *p. pyri*. &c: Col

" " " fruit injured. by *Polyborus*.
{*sericeus*. (France) (Col)

Fruit trees. {fol injured by *Colapha* *limigera*.
{*Arctodes*.

" " {blossoms. frequented. by *Hoplia*.
{*delius*

" " {fol. &c injured. by *Orygia* *lucicola*.
{ " " " " *Phyllophaga* *fusca*. &c: &c.

" " {& most of the way June beetles (Col)
{ injured by *Phymatodes*. *allioniae*.

" " {& *P. comicus*. (Eu. Col)
{ fol injured by *Lixotoma*. (*Tortuaria*)
rossana. (Sep.)

Fruit trees. This being such an indefinite
term. only such as are particularly
mentioned in the list are quoted.

* *Formica*. ant.

* *Fragaria*, Strawberry.

Fungi. fed upon by *Uradus* *americanus*. (Hb)
" " " *Bolitotherus* *coriarius*. (Col.)

" " in cotton bolls. fed upon by *Carphophilus*
{*hemipterus*. (Col) & *Colastes* *semilectus*.
(Col)

" " (Puff balls) frequented by *Corocora*.
{*oculata*. (Col)

" " frequented. by *Polydidae*.

" " " *Phyllophagidae*.

" " " *Prodonidae*.

" " " *Endecatomas* *rugosus*. (Col)
" under bark. *Leptididae*. (Col)

" eaten by *Mycetozoa*.

" eaten by *Pelid* *necrosis*. *serrator*
{*ensis*. (Col)

" eaten by *Podara* *villosa*. (Orth)

" " " *Suora*. (all *Thomae*). (Dip)

" frequented by *Staphylinidae*. (Col)
" *Tenebrionidae*. (Col)

Fungi. injured by *Phorus* fur. see also
{*Col. nat.* History. *Fathens*. &c: Col

" " injured by *Stena* *flavifrons*. & *lepis*

Galingale. sedge. see *Cyperus*.

Laguncularia *Whorle* or *Huckleberry*.

Garden crops. injured by grasshoppers.

{*Calaptenus*. *femor rubrum*. *C. strabus* &c

{other grasshoppers in general. (Orth)

{*Longor*. *Lingebor* *officinalis*.

" " dried roots eaten by *Pitohyph* *Unclum*
{*haruac*. (Col)

Golden Rod. *Solidago*.

" " flowers. frequented by *Alydus* *curvus*.
{(Hb)

" " flowers. frequented by *Epicauta*

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Gooseberry. fol. injured by *Pematus*.

{ *veneticus*, " imported currant worm" (Byn.) }

" frequented by *Pachylotona ornata*.

{ *munosa*. (Hom.) }

" injured by *Polydrosus plamfrons* (Cu.)

{ *Europe*.

" fol. injured by *Phistophora quosulana* (Horn.)

{ *raivosa* Saw fly (Horn.) }

x *Gynrythra glabra* see *Lignoria*

x *Gossypium herbaceum*.. Cotton

Grafts injured by *Polydrosus sericeus* (Cu.) Col.

Grain in general. Wheat. *Oryza* Barley &c.

" roots &c. injured by *Agrotis septem* (Cu.)

{ *Stals* } & many other cut worms (Byn.)

" seed to be injured by *Amura* &c.

{ *Cu.* (Col.) }

" injured by *Blacus Microtus*

{ *leucoplerus*. (Holt) (Horn) (Byn.) }

" injured by *Curculio* (*Staphylinus*)

{ *granatus* } *hemitepistatus* (Col.)

" injured by *Caranora oxyra*.

{ *Staphylinus* } (Col.)

" injured in Europe by some *Curculio*

{ *laevis*. (Holt) }

" *Oryza* Barley. Wheat &c. injured by

{ *Chionops* } (Dip.)

" injured by *Picus testaceus* (Col.)

" " *Staphylinus* *Acidomyia*

{ *tritici* "Wheat midge" (Dip.) }

" when young injured by *Corax*

{ *fortis* } (Col.)

" injured by *Belachia cerealis*.

{ *Anacampsis*. } *Angoumois* moth (Byn.)

" & shoots injured by *Chionops* (Col.)

" & grain injured by *Curculio*

{ *extranea*. } *unipuncta*. Western

{ *army* } worm (Byn.)

" frequented by *Mormonella ovalis*.

{ *Cu.* (Col.) }

" injured by *Curculio* (Dip.)

" " in Cu. by some *Staphylinus* (Col.)

" said to be injured by *Staphylinus* (Col.)

" plant injured by *Prodenia autumn*

{ *nalis*. } *luteolus* army worm (Byn.)

" injured by *Curculio* *luteolus*.

{ *Cu.* (Col.) }

" injured by *Staphylinus* *parvulus* (Col.)

{ *Anolus*. } (Col.)

" injured by *Curculio* *luteolus*.

{ *Staphylinus* } *caraboides* (Col.)

" injured by *Curculio* *granella*.

{ *grain* } moth. or leaf. (Byn.)

Grain Roots injured by *Staphylinus* *stercorarius*.

{ *Cu.* crane fly. (Dip.) }

" injured by *Staphylinus* *caraboides*.

{ *Curculio* } *luteolus* (Col.)

" injured by *Staphylinus* *stercorarius*, &c.

{ *Curculio* } *luteolus* (Col.)

" injured by *Staphylinus* *stercorarius*.

{ *Curculio* } *luteolus* (Col.)

" roots & shoots &c. said to be injured

{ *Curculio* } *luteolus* (Col.)

" { *Curculio* } *luteolus* (Col.)

" fol. mid by *Staphylinus* *stercorarius*.

{ *Curculio* } *luteolus* (Col.)

" root stem wood &c. injured by

{ *Curculio* } *luteolus* (Col.)

" { *Curculio* } *luteolus* (Col.)

" fol. injured by *Staphylinus* *stercorarius*.

{ *Curculio* } *luteolus* (Col.)

" { *Curculio* } *luteolus* (Col.)

" { *Curculio* } *luteolus* (Col.)

" { *Curculio* } *luteolus* (Col.)

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" { *Curculio* } *luteolus* (Col.)

" { *Curculio* } *luteolus* (Col.)

" { *Curculio* } *luteolus* (Col.)

" { *Curculio* } *luteolus* (Col.)

- Grape fol & injured by *Nerera hilona*
Rhaphigaster pennsylvanicus (Holt)
 " " injured by *Myioides raphanus* (Holt)
 " {branched, pubescent by *Acanthos*
 {new-cast. (Cult)
 " {frequented by *Oleocerus, cuneolatus* (Hom)
 " {fruit bunches of fol. injured by *Pelidnota*
 {punctata. (Col)
 " {fol injured by *Grapt. us* gall leaf.
 {*Comphigus* (*Dactylophaga*) *villosa* (Hom)
 " {seed & fruit injured by *Pentameria viti*
 {variana *Lobelia latifolia* (L.P.P.)
 " {Roots injured, by *Phylloxera*
 {vastatrix. (Hom) (*ultrata* prob same thing)
 " {Wood & roots, injured by *Pteris*
 {intricatus. (Col), & *P. laticollis* (Col)
 " {frequented, by *Proconia undata* (Hom)
 " {fol injured, & rolled up by *Rhynch*
 {lasi. *setulosa* (Col)
 " {fol, injured by *Fraxi* *Dr. Fly*
 {*Selandria, vicia* (Hom)
 " {injured fruit, frequented by *Stelicta*
 {geminata. (Col)
 " {frequented by *Stictoplera Smilia*
 {inermis. (Hom)
 " {when unhealed frequented, by *Syrph*
 {ylon. *serotatum* (Col) (Eur. Pe)
 " {frequented by *Delamona ampelopsidis*.
 {Hom)
 " {injured by *Emithoneura. Tetragonia*.
 {verrucosely called *Thuris* (Hom)
 " {branches injured by *Xylopertha*.
 {sinuata. (Col) (Eur)
 x Ground Cherry, *Physalis, viscosa*.
 " {fol, injured by *Chrysomelae, 10 lineata*.
 {*Monophora*. (Col)
 Graminae. Grasses
 " {root, injured by *Agriotes vlesus*. &
 {*Amonchus* *US* *Agrotis* *truncatus* (Col)
 " {frequented, by *Amphiscepa* (Stata)
 {bivittata (Hom)
 " {eaten, by *Amabrus* (L.P.P.) *simplex* (Cult)
 " {prob seed injured by *Anacamptis*
 {*Petalis* *Alvita* *Cerculella* *Unguicoma*
 {muth. (Cult)
 " {Swamp, frequented, by *Oxychis* (Col)
 {injured by *Culepterus femur rubrum*.
 {Spretus. W. & all grasshoppers. (Cult)
 " {seed, injured, by *Diplasis, Acutomyia*
 {tristis. Wheat midge. (Lip)
 " {destroyed by *Gryllotalpa borealis*.
 {& all mod. crickets. (Ork)

- Grass, seeds, & roots, injured, by *Homalidae* (Col)
 " {roots, fed upon by *Holotrichia, crenulata*
 " { " " by *Dactylophaga fusca*. (Col)
 " {& all the may beetles. (Col) *Lachnosterna*
 " {fol injured by *L. Laphrygma*.
 {macker. or *fung. ponder.* (Lip)
 " {inj. by *Leucania, unipuncta*. *Drum.*
 {Lep)
 " {injured by *Macrocladus, sublimatus*.
 " { " " *Polistes, Microtus leucophterus*.
 {Col)
 " {eaten by *L. Anulus* *vacuolus*
 {*Oreochelimum unguic.* (Cult)
 " {frequented by *Pocloptera* (Ormes)
 {inimosa. (Lata, Eur. (Hom)
 " {injured by *Prodenia autumnalis* (Lip)
 " {Roots injured by *L. Tiquia olivacea* (Lip)
 " {injured by *Xyphidulum fasciculatum*.
 {*Oreochelimum gracile* (Cult)
 Gum, sweet. *Liquid amber, Styraciflua*.
 " {for eaten by *Eacles, Chrysomela*
 {imbricata. (Lip)
 " {Roots, & wood, prob injured by
 {*Dytiscus Satyrus*. (Col)
 Hair of many animals &c. eaten by
 {*Mallophaga*, or biting bird lice
 Hay, {said to be injured by *Uthrophora*
 {*quadriangularis*. (Hom)
 Huckle. *Corylus*. — Hawthorn *Crataegus*
 " {fruit injured by *L. Balanus rectus* &
 {nasica. & *Nat. usinis*. (Col)
 " {wood injured by *Phorus pectus*
 {iconis. (Col)
 " {fol, injured by *Dichelonycha sub*
 {vittata. (Col) &
 " {fol, injured by *Trachys minutus* (Col)
 " {inj. by *Polydorus, means* (Eur) (Col)
 Homlock. *Abies canadensis*.
 " {leading shoot & injured by *Pissodes*
 {Strob. (Col)
 " {fol injured by *Hydrosternus*.
 " {phemora, *ormis*. *Leptis confusum*
 {Lep)
 Herb. salad see salad.
 Herb. *Cannabis sativa*
 " {injured by *Laemophila modestis*
 {Col
 Herb. injured by *Hom. lici*.
 Herbaceous plants injured by *Agriotes*.
 {manches. (Col) *U. latus* injure
 {roots. (Col)
 " {roots injured by *Agriotes segetis*.
 {& *truncatus* (Col) *Stover* 1877 Aug 4.

Hickory. *Carya alba* &c.

- " {Twigs bored into by *Amblicerus*.
 " {*bicaudatus*. *Doryctichus*. (Col.)
 " {Wood bored into by *Chion canclius*.
 " {*C. gargaricum*. *Hickory borer*. (Col.)
 " {Fol. inv. by *Doryctichus aspericollis*.
 " {*Ara*. (Col.)
 " {Fol. inv. by *Catalpa lanigera*.
 " {*Ara*. (Col.)
 " {Fol. inv. by *Lachnus caryae*. (Hom.)
 " {Wood inv. by *Pieris diversata*.
 " {*Xerurus*. (Col.)
 " {Wood inv. by *Dysphaga tenuipes*.
 " {Col.)
 " {Twigs cut off by *Elaphidion*
 " {*villosum*. *Senecorus putator*. or
 " {*Cate pruner*. (Col.)
 " {Fol. & inv. by *Naxana hilares*.
 " {*Phaphagaster pensylvanicus*. (Hem.)
 " {Frequentated by *Othocerus myotti*.
 " {*(Hem)*
 " {Twigs inv. by *Oncideres cingulatus*.
 " {Col.)
 " {Bark & wood injured by *Scolytus*
 " {*quadrispinosus*. *Carya*. Col.)
 " {Fol. frequentated by *Smilax rana*. (Hom.)
 " {Wood injured by *Synoxylon*.
 " {*Ara*. *Basillare*. (Col.)

* Hawthorn. *Crataegus oxyantha*.

Hoofs of Animals when in storage.

- {injured by *Dermodestes lardarius*,
 { &c. (Col.)

Honey comb. &c. injured by *Galleria*

- {*cerana*. (Lep.)
 " {Honey dew. fed upon by *Aphis*. (Hom.)
 " {*Lucanus*. (Col.) *Dytiscus* &c.

Hoops. (*Stemulus*) injured by *Aphis*. (Hom.)

- {*Ptelea* fol. frequentated by
 {*Enchenopa bidantata*. (Hom.)

Hordcum. *Barley*.

- {in storage) injured by
 {*Dermodestes lardarius*. &c. (Col.)

Horses

- {annoyed & blood sucked by
 " {ear fly of the west *Chrysops*
 " {*vittatus*. *Stomoxys calcitrans*
 " {*Tabanus atratus*. &c. &c. (Dipt.)
 " {tormented by *Hippoboscæ*.
 " {*equina*. (Dipt.)
 " {injured by stomach bots.
 " {*Gasterophilus equina*. (Dipt.)
 " {*(Europe)*. injured by *Simulium*
 {*Columbianum*. (Dipt.)

Horse. nettle. *Solanum carolinense*.

- " { {Foliage eaten by *Chrysomela*.
 " {*Doryphora*. 10 lineate. & *Chrysom*
 {*ela*. *Doryphora puncta*. (Col.)

Huckleberry. see whortleberry.

- Ilex. . . fed upon by *Coccus ilicis*. (Hom.)
 Indigo wild (*Baptisia tinctoria*) fed
 {upon by *Macrodactylus subspinosus*. (Col.)

- Insects in muscins. destroyed by *Anthon*
 {*mus*. *Dermodestes*. &c. &c.

Jamestown weed. (*Satura*) eaten by.

- {*Chrysomela Doryphora* 10 lineate.
 { &c. (Col.)

- Jenniquin, or Sisal hemlock (abroad) injured
 {by Maax? *Cochol*. & *Rus*. (Col.)

- Jujube. (*Forcign*) fol. eaten by *Bombyx*.
 {*mylitta*. (Lep.)

Juniperus. *virginianus*. Fed cedar.Knot weed. see *Polygonum*.

- Larch (*Larix*) fol. injured by *Thyridophora*
 {*ephemeriformis*. *Pecticus con*.
 {*ferum*. (Lep.)

- " {Fol. inv. by *Tortice larvus*. or
 {Larch cheater. (Lep.)

- Larix americana*. *Tamarack*. Am. or
 {black Larch.

- Lead. bored into & injured by *Chion cinctus*.
 {Col.)

- " {bored into & injured by *L. Hylobius*
 {*varius*. (Col.)

- Leather. injured by *Ectobia* (Blatta.) *Ger*
 {*manica*. & other cockroaches.
 {*crucialis* &c. (Orth.)

Lemon. *Citrus limonum*.

- " {Fol. limbs &c. injured by *Aspidictus*
 {*citricola*. A. *Gloverii*. &c. (Hom.)

- " {injured by *Decasium* (*Coccus*)
 {*hesperidum*. (Hom.)

- Lettuce. (*Lactuca*) leaves injured by *Nysius*
 {*trifidus*. (Hem.)

- Lilac (*Syringa vulgaris*) fol. &c. injured by
 {*Phylloxera conchiformis*. bark
 {cause. (Hom.)

- " {fol. eaten by *Callosamia promethica*
 {Col.)

- " {fol. eaten by *Cantharis vesicatoria*
 {European blister fly (Col.)

- Ligustrum vulgare. *Junus*. or *prim*. x
Leucanthemum vulgare. (Ox eye daisy). x

Linden. or Basswood. (*Tilia*)

- Sweet wood injured by *Saperda vestita*.
 {Col.) 39 lower 15 Col. &c.

- London. {Col. inj. by Ceratonia asmyator.
 {quadricornis (Lep.)
 " {Col. injured by Canomos. sub-
 {signaria (Lep.)
 " {Col. injured by Thyridopteryx
 {ephemerae formis. Aceticus.
 {coniculum (Lep.)
 Liquid amber Styraciflua. Sweet gum.
Liquidambar. Glycerhiza.
 {frequented by Acarus telanus
Liriodendron tulipifera. Tulip tree &c
 Locust. Robinia pseudacacia. It &c.
 " {Col. inj. by Aphis egenus. (Col.)
 " " " Cecidomyia robiniae (Lep.)
 " " " " pseudocacia.
 " {frequented by Enchenopa li-
 {notata. (Hom.)
 " {Wood injured by Cyllene robin.
 {vae. Cylus pectus &c (Col.)
 " {Sap. fed upon by Euryomia.
 {inda. (Col.)
 " {frequented by Thela bimaculata
 {(Hom).
 " {Col. injured by Macroctylus
 {subspinosus. (Col.)
 Lupine (Lupinus) form food of Uthesia
bella. (Degeer) (Lep.)
Lycopersicum. esculentum. (Tomato)
 Maize. Indian corn. Tea may.
 x " {Col &c injured by Blissus. Micropus.
 {Encorterus. Chunche bug. (Het.)
 " {seed inj. by Amacopsis
 {cerealella. (Lep.)
 x MacLura aurantiaca. Baye oranges
 {or Bois d'arc.
 Maize. {injured (grain) Calandra.
 {Sitophilus remotipunctata.
 {granarius. & C. oryzae. (Col.)
 " {injured (grain) frequented by
 {Calastus semibolus. (Col.)
 " {Sap. eaten by Euryomia unda.
 {(Col).
 " {Grain injured by Elcehia.
 {cerealella (Lep.)
 " {Stalk bored into by Gortyna
 {nitela. (Lep.) (Spinnlet worm)
 " {in ear injured by Heliothis
 {armigera. (Lep.)
 " {Col &c injured by Macroctylus
 {subspinosus. (Col.)
 " {Roots & Stalk injured by L.
 {Proxus. imbricornis &c (Col.)

- Maize. in Ear &c injured by rodentia
commelinae. (Lep.)
 " {Col &c injured by Pyrararchia
 {isabella. (Lep.)
 " {Col &c injured by Sabornia io
 {Hyperborea varia. (Lep.)
 " {Stalk &c pierced by Sphenophorus
 {caruosus. & others. (Col.)
 " {Stalk injured by "Bill bug" resemble
 {Sphenophorus caruosus. (Col.)
 " {Blade or leaf pierced by Sphen-
 {ophorus reos.
 " {grain injured by Tenebriodes
 {stuber. & most of the Tenebros
 {(Col.).
 " {Stalk when decaying (interior)
 {frequented & eaten by Sermes
 {flavipes. (New) &c
 " {grain injured by Triza granella.
 {off. (Hoff) & Lep.
 Mankind. blood, sucked by Acanthis
lectularia or bed bug. (Het.)
 " {Itch in mankind produced by
 {Ucanus scabei
 " {Blood sucked by Conorhinus
 {sanguisuga variegatus. (Het.)
 " {Eggs of Corixa pomonata &c
 {used as food by mankind. in
 {Mexico &c (Het.)
 " {Blood sucked by Culex ciliatus.
 {&c (Dip) & other mosquitoes.
 " {Body loose. infests mankind
 {Pediculus pubis. (Hom.)
 " {Head loose. infests mankind.
 {Pediculus humanus capitis (Het.)
 " {Clothes loose. infests mankind
 {Pediculus vestimenti. (Het.)
 " {blood sucked by Pulex irritans
 {or the flea. (Dip)
 " {Wash hurried into. by Sarcophylla
 {hemetrans. or Chuge. (Dip.)
 " {blood sucked by Simulium
 {modicum. midge or sand fly. (Dip.)
 " {blood sucked by Stomoxys
 {calcitrans. (Dip) &c
 " {blood sucked by Tabanus atratus.
 {& other horse flies. (Dip.)
 " {stung or pierced by Singis
 {arvatus. &c (Het.)
 Manure. see also Excrements &c.
 " {catered by L. Phanaeus carripex.
 {Col. Phaen
 J 9 lower 15 Oct. 1877.

- Manure, food of *Geomys splendidus*.
 { *Copris carolinensis* & *Aphodius* &c.
 { all the so called dung beetles (Col.)
- Maple, (acer) saw eaten by *Altorthina*.
 { *nidula*. (Colinus) (Col.)
- Maple, (silver) fol. injured by *L. Annotis*.
 { (*Pyecantha*) *rubicunda*. (Lep.)
- Maple, wood, injured by *Chrysobothris* (Col.)
 { *gundereckii* bark, frequented by
Dendroidea canadensis. (Col.)
- " buds & twigs, injured by *Thy*.
 { *cerus curculionoides*. (Col.)
- " branches & twigs frequented by
 { Maple scale, *Decasium aceris* (Hom.)
- " injured by *Macronoxia* vari:
 { *cosa* (Col.) *Polyphilla*
- " fol. injured by *Phyllobthaga*.
 { *Lusch* & other map beetles. (Col.)
- " fol. injured by *Thyridothrips*
 { *erhemeraeformis*. (Karlous) (Lep.)
- " wood, injured by *Ptilinus*.
 { *pectonilornis*. (Col.)
- May apple, *Podophyllum peltatum*.
- Maypop, *Passiflora*.
 " fol. inj. by *L. Agraulis vanille* &
 " " " *Euthria claudia* (Lep.)
- Meat, injured by *Plinius*, *For* (Col.)
 " " *Therionomelus molitor*.
 { *I. obscurus*, & most of the *Tenebrion*
 { (Col.)
- Meat, injured by *Calliphora vomitoria*.
 { *Lucilia carser*, *Sarcophaga*, &
 { most of the blow flies. (Lep.)
- " when dried injured by *Cory*
 { *netes violaceus*, *Dermestes*
 { *Cardarius* & c. (Col.)
- Melon (*Cucurbita melo*) fol. &c. injured.
 { by *Diabrotica vittata*. (Col.)
- " injured by *Phaethonaria nidulalis*.
 { Col.
- " fol. & fruit injured by *Promelia*.
 { *microthra*. (Orth.)
- Mentha, mint. — *M. viridis* spearmint.
Mugwort, (*Artemisia*) fol. &c. injured by
 { *Pteris rapae*. (Lep.)
- Milk, or Silk Weed, *Asclepias*.
 " fol. eaten by *Euchuetes* eggs. (Lep.)
- " flower frequented by *Chrysobothris*.
 { *Eumolpus* *auratus*. (Col.)
- Mint — *Monarda*
 " fol. injured by *Lygus lineatus* (Hetz)

- Monarda* *Bergamot*.
 Mountain Ash *Pyrus*. *Sorbus americanus*.
Morus, mulberry. *Morus*. *multicaulis* &c. Mulberry.
 Mullein, (*verbascum*) frequented by *Eas* =
 { *chistus*, *punctipes*. (Hetz) (*Pentatomia*)
 Mulberry, fol. eaten by *Bombyx*, *Sciricaria*.
 { *morii*, or the silk worm. (Lep.)
 " wood, injured by *Dorcasema*
 { *Willii*. (Col.)
- Mules, injured by Stomach bot. *Paster* =
 { *gulus* eggs, & other insects, injuring
 { horses. (Dip.)
- Museums, nat. hist. injured by *Dermestes*
 { *anthrenus*, &c. &c. (Col.)
- Mustard (*Sinapis*) injured by *Nysius*
 { *saphanus*. (Hetz)
- " fol. injured by *Murgantia*.
 { (*Strobilica*) *histrionica*. (Hetz)
- " fol. injured by *Pteris olivacea* (Lep.)
 " " " " *rapae*. "
 " " " " " *prothidea* "
- Nasturtium, *Tropaeolum*.
 " fol. &c. injured by *Pteris rapae* (Lep.)
- Nat. hist. sp. injured by *Dermestes*, *Anthrenus*
 { *Plinius*, *Sitotroga*, &c. &c. (Col.)
- Nectarine, *Sorbus vulgaris* (var. *laevis*)
 " fruit injured by *Conotrachelus*
 { *innatus*, & insects injuring the
 { peach. (Col.)
- " roots & bark injured by *Agge*.
 { *nis*, *exilis*, & other insects
 { injuring the peach. (Lep.)
- Negundo, fol. inj. by *Thysanopteryx ephom*
 { *eracornis* (Lep.)
- Nicotiana, *tabacum*. *Tabacco*.
 Nuts, see *Harle*, *Filbert* &c.
 " fruit injured by *Belomimus*
 { *nasicus*, &c. &c. (Col.)
- Oak, *Quercus*.
 " fol. inj. by *L. Annotis* *senatoria* (Lep.)
 " " " *L. Agnibus* (Europe) Col.
- " wood, injured by *Alaus myops*, &
 { *A. scutellatus* (Shagbark bug). (Col.)
- " fol. inj. by *Antheraea* (*Bombyx*).
 { *perhye*. (Lep.) (Foreign)
- " fol. eaten by *Antheraea Yoma mai*
 { (Foreign) (Lep.)
- " fol. eaten by *Callosamus promethia*.
 { Lep. &c.
- " frequented by *Comptosia*
 { *vitreana*. (Hetz)

- Desr.* . . . {twigs & small branches injured by *Psylla pyri*. (Hom.)
 " . . . {buds &c. injured by *Rhopalos*.
lateralis. (Hct.)
 " . . . {bark & wood injured by *Scolytus*
pyri. (Col.)
 " . . . {fol. inj^d by *Scandonia cerasi*. (Hym.)
 " . . . {fol. inj^d by *Sonicia unicolor*. (Col.)
 " . . . {young fruit injured by *Sciara*
pyri. (Lep.)
 " . . . {fol. inj^d by *Lyphle bromus pyri*.
 {a note.
 " . . . {fruit when ripe, inj^d by *vespa*.
 {Wasp.. (Hym.) & Hornet.
Persica vulgaris.. Peach.
Perseimonon.. or date plum. *Diospyros*.
virginiana.
 " . . . {fol. injured by *Hyphantonia*.
 {larva. (Weaver) (Lep.)
 " . . . {twigs gnawed by *Oncideres*
cinquefida. (Col.)
Pellay . . . injured by *Pinus fur*. *Dermes*.
 {larva. (Col.)
Phlox . . . injured by *Heliothis phloxiphaga*.
 {larva. (Lep.)
Phaseolus . . . *Faba* Beans
Pigeons . . . visited by Red Bugs *Acanthia*
lactulosa. (Hct.)
Pine . . . *Pinus* wood. inj^d by *Alaus oculatus*.
 & *myxos* &c. (Col.)
Pine . . . white (& gray). frequented by *Aphrotho*
ra 4 notata. (Spittle insect?) (Hom.)
 (& *A parallelus*. (Hom.)
Pine . . . {fol. injured by *L. anomala*.
lucicola. (Col.) & *A. pinicola*. (Col.)
Pine . . . {wood & bark inj^d by *Aulonum*
parallelus pycnopodum. (Col.)
 " . . . {leaves &c. inj^d by *Aspidiotis*.
pinifolia. (Hom.)
 " . . . {twigs &c. injured by a white scale.
aspidiotis. *vinicentis*. (Hom.)
 " . . . {fol. injured by *Lophyrus*.
abietis. (Hym.)
 " . . . {wood & fol. injured by *Buprestis*.
lineata. (Col.)
 " . . . {wood inj^d by *Chalcophora*
wherryi. *C. virginianensis*. (Col.)
 " . . . {wood injured by *Chrysobothrus*
harrisii. (Col.)
 " . . . {wood injured by *Corticus*
hypophloeus parallelus. (Col.)
 " . . . {frequented by *Delphax truncatata*.
 (Hom.)
- Pine* . . . wood & bark &c. injured by *Dendroctonus*.
fulvipes *torulans*. (Col.)
 " . . . {Pitch} wood inj^d by *Dianca punctulata*
 (Col.)
 " . . . {White} fol. inj^d by *Dichelonyche albicollis*. (Col.)
Pine . . . {fol. inj^d by *L. Eccles imperialis*. (Lep.)
 " . . . {Pitch} wood inj^d by *Exochus palis*. (Col.)
Pine . . . wood . . . *Hylobius picivorus*.
 " . . . " *Hylobius bajalis*.
 " . . . {white} frequented by *Lecinus strobil*. (Hom.)
Pine . . . wood inj^d by *Lophyrus abietis*. (Hym.)
 " . . . {Austrian & Scotch} injured by
Lophyrus lecontei. (Hym.)
 " . . . {white} fol. inj^d by *Lophyrus Abbottii*. (Hym.)
 " . . . {wood inj^d by *Melanophthalma*
fulvipes.
Pine . . . wood inj^d by *Monochamus*
tillator. (Col.)
 " . . . {white} leaping shoot &c. injured by
Pissodes strobil. (Col.)
Pine . . . {wood inj^d by *Pissodes cyathicus*.
orthosoma *truncatus*. (Col.)
 " . . . {under bark} frequented by *Pitya*
depressus. (Ee) & *P. americana*.
 {in nests of *Rhagium stenocorus*
lineatus. (Ee)
 " . . . {bark & wood injured by *Tomicus*.
pinii. (Col.)
 " . . . {wood inj^d by *Xyleborus saggi*
tatus. (Col.)
Plantain.. *Rubra*.. *Plantago*.
 " . . . {fol. eaten by *Pyrarchia isabellae*.
 {and most of the *Arctians*. (Lep.)
Plum . . . *Prunus domestica*.
 " . . . {bark & wood & roots &c. injured by
Algonia exitiosa. (Lep.)
 " . . . {fol. inj^d by *Anisopteryx venusta*.
 (&c. (Lep.)
 " . . . {round holes eaten in fruit by
Anthonomus quercusobis. (Col.)
 " . . . {holes eaten to kernel &c. *Anthonomus*
scutellarius prunivora. (Col.)
 " . . . {bark inj^d by *Aspidiotis conchiformis*.
 (Hom.)
 " . . . {fol. destroyed by *L. Clisocampa*.
americana. (Lep.)
 " . . . {fruit destroyed by *L. Conotrochelus*
ramulorum.. or *plum uersus*. (Col.)
 " . . . {wood inj^d by *L. of* *Licorica divari*
cata. (Col.)
 " . . . {fol. inj^d by *Eccles immanis*. (Lep.)
 " . . . {fol. inj^d by *Graftoviera chalybea*. (Lep.)
 {Flora At. P. 11.

- Plum. fol. injured by *Staphylinus testaceus* (Lep.)
 " twigs & buds, inj. by *Stethorus curvatus*
 " *Canadensis*. (Col.)
 " {fol. & blossom. *L. Macrodactylus* lvs. sub-
 " " spinosus. (Col.)
 " {fol. inj. by *Macronoxia* (*Polyphylla*)
 " *variolosa*. (Col.)
 " {branches punctured by *Uranus*.
 " *rimus*. (Orth.)
 " {injured by *Phyllobius ovatus*.
 " (Col.) (Europ.)
 " {fol. inj. by *Phyllophaga fusca*, &c.
 " (Col.) & other May beetles.
 " {fol. inj. by *Platysamia cerisea* (Lep.)
 " {frequented by *Ormenis*. (*Pecoleptera*)
 " *pruinosa*. (Hbt.)
 " {inj. by *Rhynchos cypreus*. (Col.) &c.
 " {injured by *Semaria prunivora*.
 " (Lep.)
 Plum. Knot. a fungoid growth ser. *Sphaeria*
 " *orbosa* & frequented by various insects.
 Podophyllum peltatum. Mas. appl. mandrake
 " {frequented by *Ormenis*. (*Pecoleptera*)
 " *septentrionalis*. (Hbt.)
 Pollen & petals of flowers injured by Slugs.
 " & by earwigs (Forficula).
 Polygonum. Knot. weed.
 " 2 sp. fed on by *Coccus polonicus* (Htg.)
 Poplar. or Aspen. *Populus alba* &c.
 " {fol. injured by *Cantharis vesicatoria*.
 " *Es.* (Col.) (Blister Fly)
 " {fol. injured by *Cotalpa*. (*Arceuthobium*)
 " *lanigera*. (Col.)
 " {fol. destroyed by *Enomos*. subsp.
 " *namia*. (Lep.)
 " {fol. injured by *Ichthyura inclusa*.
 " *Platysamia americana*. Poplar spinorides
 " {decayed wood, frequented by
 " *Tricnus laticollis* &c. (Col.)
 " {fol. inj. by *Popilliochaeris variis*.
 " *Saturnia* co. (Lep.)
 Poppy. (Parover.)
 " heads frequented by *Cutorhynchus*.
 " (macule) (Col.) Europ.
 Potato. *Solanum tuberosum* -
 " roots inj. by *L. Allorhina*. (Cotinis)
 " *nitida*. Col.
 " {stalk bored by *Banes*. *Banded*
 " *truncatus*. (Col.)
 " {fol. &c. inj. by *Blissus*. *Microphus*
 " *leucanthus*. (Hbt.)
 " {fol. injured by *Chrysomela*. *Gorypho*
 " *ra* *lineata*. (potato beetle) (Col.)
 Potato fol. injured by *L. Chrysomela*.
 " *Staphylinus juncto*. (false potato bug
 " (Col.)
 " {fol. frequented by *Entilia carinata*
 " (Hem.)
 " {fol. inj. by *Epiceuta cinerea*.
 " 6. *Cervina*. & *laminata*. & *homa*.
 " *syronica*. & *vittata*. &c. *Cantharis*
 " *Lytta* (Col.) Potato beetles.
 " {Stalks bored into by *Gorythia*
 " *nitida*. " Spinule worm" (Lep.)
 " {inj. by *Gryllotalpa borealis* (Orth.)
 " {fol. inj. by *Soma trilobata*. (Col.)
 " " " *Lycus lineolaris*. (Hbt.)
 " " " *L. Macrostela carolina*.
 " & *Myrmica maculata* (Potato
 " worm) (Lep.)
 " {fed upon by *Meloe angusticollis*.
 " (Col.)
 " {fol. inj. by *Nysius raphanus* (Htg.)
 " {scab disease said to be caused by
 " *Uromyces fuscatus* & *Squamea maculata* (Eu-
 " (Lep.) ?
 " {said to be injured by *Phakellura*.
 " *nitidula*. (Lep.)
 " {juv. of fol. eaten by *Pedura*.
 " *velata* (Orth.)
 Pot herbs. fol. &c. injured by *L. Pontia* oilacea
 " & other white butterflies. (Lep.)
 Prickly ash *Antioxylon*. *carolinianum*.
 " {fol. eaten by *L. Papilio cressiphontes*.
 " *Tras*. (Lep.)
 " {bark & wood, eaten by *Stenomus*
 " *canthoryla*. (Col.)
 Prickly pear. see Cactus
 Prickle Tree? *Liquidum vulgare*.
 " {frequented by *Ormenis*. (*Pecoleptera*)
 " *pruinosa* (Col.)
 Prunus. Plum Cherry (Gray)
 " *Pyrus americana* Am. Mountain ash.
 " *malus*. appl.
 " *communis*. pear.
 " *Phyl. balt.* "jung."
 " {frequented by *Canocara oculata*.
 " (Col.)
 Pumpkins *Cucurbita*?
 " {fol. &c. injured by *L. Anasa*
 " *tristis*. (Hbt.) (*Gonocerus*)
 " {fol. inj. by *Diabrotica villata* (Col.)
 " {Sap fed upon by *Eurygaster indo*. (Col.)
 " {fruit &c. injured by *L. Heliothis*
 " *armigera*. (Lep.) (Boll worm)
 " {flower Oct. 19. 1877

Quail. (birds) destroy church bugs.
 Phisus leucophaea. Machopus Hor.

Quince. Cydonia vulgaris.
 " injured by Conotrachelus nemu
 " char & many of the insects inju-
 " ring the Apple. (Col.)
 " fol. & fruit injured by Typhus.
 " laricoides. (Het.)
 " fol. fruit injured by Tingis.
 " arcanus. Het.

Radish. Raphanus.
 { Root inj. in Europe by Anthonomus
 { raphani & radicum. (Dip.)
 " fol. inj. by Margarita. (Stracke)
 " infroncha. (Het.)
 " fol. inj. by Physia raphanus. (Het.)

Requard. Amorbia.
 frequented by Aphrophora? (Hom.)

Raspberry. Rubus idaeus.
 " fruit inj. by Cosmolaena atra
 { 95. (Het.)

" { Pith in stem eaten by Agrius.
 " { ruficollis. (Col.)
 " { Leaves frequented by Byturus.
 " { timontanus. Europe, Cos.
 " { Flowers cut off by Desydes flavipes.
 " { (Europe, Cos.)
 " { fol. inj. by Liquis lineatus & Hom.
 " { Stem bored into by Oberca tri.
 " { donata. (Col.)
 " { Branches powdered by Leanthus
 " { ruicous. P. Orth.

Rattle box. Crotalaria.
 { seeds in pods, form food of Utethe
 " { sa, Paorea bella. (Lep.)

Red leaf. { water color faint, even eaten
 " { by Octobus germanica. Cook.
 " { (Coach. Orth.)

Red pepper. Capsicum.
 " { fol. eaten by L. Macrois car.
 " { luna. (Lep.)

Reeds. stems form hibernating quarters
 { of Cyphon pallidus. (Col.)

Riseda Mignomette.

* Rhus glabra smooth Sumach, V.
 * Rhus karna, Ononis avensis.

" { roots frequented by Borytus
 " { laeons. Ex (Het.)

Ribes grossularia. Gooseberry?
Ribes ribesia. Currant.

Rhubarb. Rheum.
 (3 Blower Col. 20. 1877.)

Rhubarb. { fol. frequented by Osmenis (Pacel
 " { optera) pruinosa. (Hom.)
 " { fruit injured by Sitotropha panicea.
 " { (Col.)

Rice. Oryza sativa.
 " { grain inj. by Calandra Sitophilus
 " { oryzae. (Col.) V.
 " { frequented by Murmetus onalis.
 " { Europe. (Col.)

Ricinus communis. Castor oil plant.

Rose. R. rubiginosa. Sweet briar &

Rose. { fol. injured by Cantharus vesicars
 " { loria, E. blister fly (Col.)
 " { fol. inj. by Choroclaena (Tortrix)
 " { rosaceana. (Lep.)

" { flower fol. inj. by Macroctactylus
 " { trichopus (vel Rose bug.) Col.

" { fol. inj. by Selandra rosae.
 " { Rose slug. (Firm.)

" { fol. inj. by Sorica neptostis. (Col.)
 " { " " Tortrix, Loroclaena rosaceana.
 " { (Lep.) -

Robinia pseud-acacia. Locust. x

Rotter wood. fed upon by L. melanotus (Col.)

Rubus. Bramble. R. idaeus. Raspberry.
R. villosus & Blackberry &c.

Rye. Secale cereale.

" { fol. & injured by Albis arvenae. (Hom.)
 " { grain inj. by Ditroses lecidomyia
 " { tritici.

" { swelling in joint, caused by Isosoma
 " { exuviana. Norda. (Firm.)

" { grain. inj. by Casius. (Orth.)
 " { plant. fol. inj. by L. Prodenia -
 " { autumnalis. (Lep.)

" { grain. inj. by Silvanus surinon
 " { ensis, & other grain destroying
 " { beetles. (Col.)

Sabal palmetto. Palmetto. ?

Salix caudata

Saccharum officinarum. Sugar cane.

Sap of tree fed upon by Licanus dama
laronia & other Coleoptera or
 beetles.

Sassafras. Sassafras officinale

" { fol. fed upon by Ceratomyia prome
 " { thera (Lep.)

" { buds & shoots inj. by Diapheromera
 " { thicketum femoralis or stick insect
 " { (Orth.)

Secale cereale. Rye.

Sorvice berry Amelanchier canadensis.

- Shad bush or Service berry, Wood in?
 {by *Saperda candida*, *lunulata* (Col)
- Sheep - injured by Scab. see *Canes*.
 " {injured by head maggot, see
Anthomyia ov. (Lep.)
- " {injured by Shear tick, cause
 or fly, *Melophagus ovinus* (Lep.)
- Ship biscuit, in? by *Sitona perniciosa*.
 {Col}
- Shrubs, twigs, & buds, eaten by *Phasmodon*.
 (Orth.) *Diaphoromera* &c)
- Sisal hemp, fed upon by insects, see
 also *Conjunctus*.
- Sinapis mustard.
- * Sick weed, *Asclepias*.
- Skins, dried, injured by *Anthrenus* varius
Dermestes maculatus, &c *Pharus*
 {Ten. &c (Col)}
- Skin of living birds, &c, infested by
 {*Mallophaga*, or biting louse, &c,
acarus &c}
- Snakes, when dead, eaten by *Scirpa americana*, &c (Col)
- Snails, form food of *Lamprocyba* (Col)
 " " " *Silphidae* &c (Col)
- Snow in Europe, sometimes frequented, by
 {*Heteronidus* (Col), *Chionocleptus* (Lep.)
 &c}
- Sod grass, injured by *Gryllotalpa borealis*.
 {Orth., L of cut worms *Agrotis*
 &c (Lep.)
- Solanum dulcamara, Bitter Sweet.
 " *esculentum*, Egg plant.
 " *tuberosum*, Potatoes.
 " *canadense*, Horse nettle.
 " *canadense*, fed upon by *Chrysomelae*
 {e.g. *Porphophora* *punctata* & 10-
lineata (Col)}
- Sorghum, fol &c injured, by *Phisus* *microstoma*
laevigatus, (Chinche leg. & many
 other insects injuring maize &c (Hes.)
- Sorghum, Sugar millet.
- * Sours, *Pyrus americana*, Mountain ash.
 Spear mint, fol. eaten by *Sphinx erom-*
ictis, (Lep.)
- Spices, or fruit, *Alies*.
 " wood, in? by *Ancylochira*
 {*Bathrestis* *striata* (Col)
 " (leading shoot &c, in? by *Risodes*.
 {Stroli.
 " fol in? by *Thyristophorus ephem-*
 {erac, *Bombus* - Hang or basket worm (Lep.)

- Squash, *Cucurbita melopepo*.
 " fol. fruit &c in? by *Anasa*, *Gonocerus*
 {*luteus* (Squash bug) (Hes.)
 " growing plants, fol. in? by
Diabrotica vittata (Col)
 " fol & fruit, in? by *L. Epitachna*
 {*borealis* (Col)
 " fol &c, in? by *L. Phatellura nitid-*
 {*alis* (Lep.)
- Strawberry, *Fragaria*.
 " plants frequented by *Aleurodes* (Hes.)
 " blossom in? by *Anthrenus* *lucig-*
natus, *signatus* (Col) &c)
 " in? by *Anthrenus incurvus*.
 {*Europe* (Col)
 " fruit, in? by *Coronulaena*, &c &c
 {&c (Hes.)
 " fol in? by *Empyidae maculatus*.
 {Hym. Strawberry worm, or saw
 fly.
 " fol &c, in? by *Lygus lineolaris*.
 {Hes.)
- Starwort, *Aster*.
 " Stuffed animals, birds, &c, injured by
 {*Pharus* var., *Dermestes*, *Anthrenus*
 {&c (Col)
- Sugar cane, *Saccharum officinarum*
 " in? by *Gryllotalpa didactyla*
 {Orth. (in West Indies &c)
 " {frequented by *Naucisibus dentatus*
 {Col
 " fed upon by *Pyrrhonoras rostrata*
 {Col (Can. in West Indies &c)
 " *Silvanus dentatus*, Col.
- Sumach smooth, *Rhus glabra*, &c.
 " {frequented by *Alydus carinus* (Hes.)
- Sumach, fol. in? by *Anomala varians*, &c
 {Col)
- " fol frequented by *Pylæothoë* (Hes.)
- Sugar millet, *Sorghum*.
 " Swallows, infested with bed bugs, *Acron-*
ictus *laticlavus*, Hes.
- Sweet bear, *Rosa rubiginosa*
 " fol in? by *Scirpa vesperina* &c Col.
- Syringa vulgaris, Lilac.
 Tamarack, *Macromatach. Am* " *Carck*.
 {*Larix americana*.
 " fol in? by *Tolyte larici*, " *Larck*
 {cheater" (Lep.)
- Taraxacum, dandelion, *Leontodon*.
 " *Leontodon lanceolatum*.
 " frequented by *Eschsch.* " *Portulaca*
 {*punctipes* (Hes.)

- Thorn. *Crataegus*.
 " wood. inf. by *Saperda candida*.
lividula (Col.).
Thuya occidentalis. Amer. Cedar tree. white
 cedar.
 Tree. London. Basswood.
 Timber. (Naval Ship) wood. inf. by
Gymexylon naveli. (Col.) Eu
 Tobacco. *Nicotiana tabacum*.
 " fol. inf. by *Macrosia* (Sphar)
carolina & *M. quinque maculata*.
 Tobacco worm. horn blower. (Sph.)
 " fol. inf. by *Acanthus nives*. (Orth.)
 " when cured & dry destroyed by
Sitona poncelet. (Col.)
 Samals. *Lycopersicon Esculentum*.
 " fol. infested by *Aleurodes* (Hom)
 " fol. inf. by *Chrysomela* (Dorypho)
ra & *lineata* & (Col.)
 " stalks, bored into by *Coryna*
nileia. (Shrubs worm) (Sph.)
 " fruit inf. by *Heliothis ornage*.
ra (or boll worm) (Sph.)
 " fruit. fol. inf. by *Macrosia* (Sphar)
carolina & *M. quinque maculata*.
 (Sph.)
 " fruit or inf. by *Prodenia* -
communis. (Sph.) & *Prodenia*
autumnalis. (Sph.)
 Tree. Sape. sucked by *Prochyma arbore*.
 (Hom) & see apple Oak &
 " (Sape) & cat. by *Phasmidae*.
Staphylinus lineata & (Orth)
 " blazes. blighted by *Phytomyza*. & (Sph)
 " infested by insect. see under
 Oak, apple. & &
 Infolum. see Clover.
 Triticum. Wheat.
 Tricacotum. nasturtium.
 Tulip. *Lilium tulipifera*.
 " fol. inf. by *Cutorhynchus*. (Col.)
 " or *Phytomyza*? (Col.) forms blazes.
 " under bark. frequented by *Endea*
colonus (Col.)
 Turnip. *Brassica rapa*.
 " fol. inf. by *Murgantia Strachia*
histrionica (Col.)
 " fol. inf. by *Pieris proclia* (Col.)
 " *P. brassicae*. & *P. rapae*. (Sph.)
 " fol. & under by *Prodenia* -
autumnalis. & *Comminae* (Sph.)

- Turnip. (leaf). a disease said to be caused
 by *Sciana facata*. & *Spunguemacu*.
 (Lata Lij) Europe
 " (leaf). a disease falsely attributed
 to *Trichocera hyemalis* or turnip
 winter grout. - Lij
 " *Trichocera hyemalis* a small grout
 lately supposed to cause the disease
 called turnip
 " blaze injured by a *Smythanas*. (Col.)
 Umbelliferae. said destroyed by *Leptostoma*
orientalis (syn *heraclea*) (Sph)
 " inf. by *Lucus*. (Col) (Hes). flowers.
 " frequented by *Chromola*. (Col.)
 " fol. inf. by *L. Papilio asterias*
 (Sph.)
 Vaccinium. Blueberry. bilberry. &c.
 " *Oxycoccus microcarpum*. Cranberry.
 Vegetables & animal substances fed upon by
 { *Cecidus conquis*. *Staphylinus*
maculatus *Harpalus hederifugus* &
 (Col) & &
 Vegetables eaten by *Podura villosa*
 (Orth.) *Pterodroma americana*. (Col)
 Vegetables. destroyed by *Acheta rusticus*
 & several other crickets. & (Orth)
 " inf. by *Blissus* (*Proctopus*) *leu*
colonus. (Chinch bug). (Hes)
 " injured by *Diatraea desodora*.
maculata. (12 spotted). (Col.)
 " injured by *Phyllotreta*. *bonae* (Orth)
 " (substances). *Aglyptus domus* & s. & other
 { crickets & (Orth)
 Vegetables. inf. by *Epicausta vittata*. & other.
 { *cantharides*. (Col.)
 " inf. by *Hemaphys vittatus* (Orth)
 " " *Orchestris strolata* (Col)
 " " *Romalea microphala* &
 { numerous other grasshoppers. (Orth)
 " parts injured by *L. melanotis*.
 { common. & numerous other were worm.
 (Col) (Pa close edge)
 " root inf. by *L. Scula olivacea*
 (Col) numerous other crone, & (Sph)
 Verbascum. Mullein.
 Verbena hastata.
 " frequented by *Archiasia galat*
ta. (Hom) *Smilia auriculata*
 Vinynea creper. *Omphalopus*.
 " fol. inf. by *Abacthis* *altissima* & &
 Vinyens. lower see *Cimex*.
 39 Nov Oct 3. 1877.

- Nut. *Juglans*
 " { fruit inf. by *Enochmus nemus*
 " { phan.
 " { wood inf. by *L. Dysphago. knipus*
 " { (Col.)
 " { twig cut off (from inside) by *Elas-*
 " { phidion. *pululor*. *Stenocrus*. (Col.)
 " { wood inf. by *Helomonas*. be=
 " { maculatus. (Col.)
 " { fol. inf. by *Laesnus carya*. (Hom)
 " { twig girdled (from outside) by
 " { *Oncideres angulatus*. (Col.)
 " { frequented by *Chlorus amygdali*.
 " { (Hom). & *Smithia van*. (Hom)
 Nuts. { growth parasitic insect in bud.
 " { *Stylops*. (Col) *Star of Meloe*. (Col)
 Wex. (Box) destroyed by *Galleria cerasana*.
 " { (Lep)
 " — { formed by *Flata limbata* in
 " { China. (Hom)
 Wheat. *Triticum vulgare*
 " { grain, sucked inf. by *L. of*
 " { *Agromyza tritici*. (Lep)
 " { fol. & grain injured by *Anabrus* -
 " { simplex. (Orth)
 " { grain inf. by *Anacompses*
 " { *ceratella*. (Lep)
 " { fol & grain inf. by *Archi avonae*.
 " { or oat plant. (Hom)
 " { fol & grain inf. by *Plessus* (Microg)
 " { *laeophorus*. (Hem)
 " { straw & stem inf. by *Proscus oph*
 " { *abalis*. (Eu) (Col)
 " { grain injured by *Calandra Sitophi*
 " { = *lar*. *granorus remotipunctatus*.
 " { & *C. oryzae*. (Col)
 " { when young inf. by *Calathus latus*
 " { (Col) *Curcio*.
 " { stalk & inf. by *Aphis pygmaeus*.
 " { (Col) *Curcio*.
 " { Swelling of stalk, or joint, caused by
 " { *Chlorops tenuis*. (Lep)
 " { Grain inf. by *Diplous*. *Ceidomyia*
 " { *tritici*. (Wip) (Wheat midge)
 " { Stem & plant inf. by *Ceidomyia*
 " { (destroyer of wheat fly. L.)
 " { grain inf. by *Selechia cerealilla*
 " { (Lep)
 " { injured by a swelling in the stem
 " { called "Belt" ?
 " { grain said to be inf. by a beetle
 " { *Carphalus caliginosus*. *Pangus*. Col

- Wheat Swelling of joint, caused by *Isosoma*
 (Eumyloma) *hordei*. (Hym)
 " { plants inf. by *L. Lophomyza macra*.
 " { (Lep)
 " { inf. by *Elabes lyphaeus*. (Hem)
 " { young grain inf. by *Oscinis* (Lep)
 " { fol. grain & injured by *S. Prodenia*
 " { *autumnalis*. (Lep)
 " { seed inf. by *Silvanus summanensis*.
 " { (Lep)
 " { grain inf. by *Silodocha panacea* (Col)
 " { " *Tenebrionites*. *Trogosita*.
 " { *mauritanica*. (Col) *Valer* *Tenebrionida*
 " { said to be inf. by *Thrips*. *limo* =
 " { *thrips cereal*. (Orth)
 Whortleberry. Huckleberry. *Laylussacia*.
 " { frequented by *Cercia imicolor*. (Col)
 White cedar. *Arbor vitae*. *Thuja occidentalis*
 Willow. *Salix*
 " { twig inf. by *Cercia lubatas* (Hom)
 " { fol inf. by *Calappa lanigera*.
 " { *areoda*. (Col)
 " { Wood inf. by *L. of Dynastes*.
 " { *tityus*. (Col)
 " { fol. inf. by *Ichthyura inclusa*.
 " { *Clatara americana* (Lep)
 " { Wood inf. by *Lucanus dama*. Col
 " { fol. inf. by *Picornis rapax*. (Lep)
 " { " " *Hypocypria varca*.
 " { *Saturria*. (Lep)
 " { fol. inf. by *Tingis juglandis*. (Hem)
 Figelia. fol inf. by *Sygas lineatus*. (Hem)
 Wood. said to be eaten. by *L. Cistellidae*. (Col)
 " ? eaten by *Orthophrura damicornis*.
 " { (Col)
 " ? rotten frequented by *Pyrochroidea*
 " { (Col)
 " ? when decaying frequented by
 " { *Tornes flavus*. (Hem)
 " ? injured or bored by *Proceridea*
 " { (Hem)
 Yellow in peach, not caused by insect.
 " { but said to be a fungus growth.
 Anthoxylum. prickly ab. (see *Sphaeria*)
 Sea mays. Indian corn. Maine.
 Zinc. steel zinc hole eaten through by *L*
 " { *Hypotrachea caput*. (Col)
 Zingiber officinalis. Zingiber.

Corrections & Errata.

In a manuscript work like the present, it is almost impossible for a proof reader to correct errors, after the page has once passed the hands of the Lithographer & printer, as in order to alter a single word or paragraph the whole page, would have to be rewritten. The following principal errors & additions, have already been found, & together with many others which doubtless will hereafter be discovered will be given in another edition & should the work be deemed worthy of being printed in type.

Page 1, line 3. alter to 1876.

" 1. " 24. Alter to XVIII/24 instead of LXI/24
in Altraxas

" 4. " 16. alter to 1/14 instead of 1/14

" " 30. Insert. (Anisomorphus) huprestoides

{ *Spectrum luniculatum* (Orth.) feet
on *Juncus*, & *Scilla* (Lep.) after
Unimus

Page 9, line 27. Insert *Atacus* *Bauhinia*;

{ see *Bombyx*, *Saidherbia*.
IS. XI/11 (Lep.) after *Altraxas*

* Page 10, line 17. Insert. *Platela* *boner*. *IS. XII/32*
after *Bandus*.

Page 14, line 46. Alter word *Macetes* to *Magocetes*

" 16. " 6. Insert the word *Epicauta*, between
Cantharus & *Corvus*.

Page 16, line 23. Alter *Weigelia* & *Dietzia* to
Weigelia, & *Dietzia*. (& wherever
these two words occur in the text.)

Page 17, line 18. Insert the word "Grain" after
"wheat."

Page 18, line 1. Alter *Regol* *Walnut* moth to
Elm, *Sp. 1876*.

Page 20, line 19. Omit, 1865 p. 456.

" 23. " 43. Alter, VII/8 after *IS. VI/14* Orth.

" 24. " 15. Insert *Coryneles* *neotoma* *viola*.
{ see *Ins* feeds on *Corion* *IS. XII/32*
(Col.) after *Coryneles* *sulphur*.

Page 27, line 19. Insert "*Salona* *maistras*. *L. 1876*
{ on *fol.* of *Apple* & *IS. XI/7* *LXXIII/12*.
(Col.) before "Day fly".

Page 27, line 33. Insert "*Hermesaria* *Oxymella* -
herschiana (Bp.) I feeds on *Galery*
Pontax & *IS. XVI/11* (Lep.)

" 27, line 51. Insert "*Deutera* *fol* injured by
Lugus *lineatus* *IS. 19/1* (Hom)
after *Deutera* *darning* *needle*.

" 27, line 51. Insert "*Diabrotica* *Galeruca*
duodecimfuniculata. *Ag. 1876* 1876.
p. 60. 1855 p. 90 p. VIII fig. 1, eat
holes in vegetables. *Flowers* of *Cotton*
(Lep.) (Col.) after *Deutera* *darning* *needle*.

Page 29, line 44. alter *Silyrus* to *Silyrus*

" 29, line 50. Bottom of page insert *Silyrus*
{ *Tesaroia* *lenuipes* *IS. XIV/10* (Col.)
after *Dysdercus*.

Page 31, line 2. Insert "*Elm* *Sp. 1876* see *Corvus*

{ *mir* *quadricornis*, *emulator* *L. 1876*
{ on *fol* of *Indian*, *Elm*, & *IS. VIII/1*
XII/1 (Lep.) after *Elisaria*.

Page 32, line 13. Insert "*Epitris* *cicumenis* see also

{ *Chalcidodora* *pubescens* *IS. XIV/14* (Col.)
after *Epitris*.

Page 33, line 49. Insert "of cucumber &" after young
plants.

Page 36, line 32. Alter *XII/43* to *XII/33* end of.

{ *Galeruca*

Page 36, line 33. Insert "house" between *cor* & *fly*.

" 36. " 36. Alter *XXXIV/9* to *XXXIV/9*, after *Chalcidodora*

" 40. " 23. Insert "*Cypocorycia* *varia*, see
{ *Saturnia* *IS. VI/6* *XVIII/12* (Lep.)
after *Lypharima* *taxor*.

Page 46, line 2. alter *Weigelia* to *Weigelia*.

" " 33. insert "*Macronoxia* *mesonoxia*
{ or *Polyphylla*, *varicosa* *IS. XXII/20*
{ *Col.* after *Macronoxia* *mesonoxia*.

Page 50, line 1. alter *pratescent* to *pubescent*.

" 51 " 2. Insert "*Nephopterix* *undulata*
{ see *Thyate* *nebulosa*. *IS. XVI/1*, *LXX/2*
(Lep.) after *net*.

" " 2. Insert, "*Nemophila* *plumifera*, silk
{ producing *Spider*. *Ag. 1876* 1876.
{ *osca*, *Inst* *vol 6* after *Nepa*
apiculata.

Page 53, line 25. Insert "*Ormenis* *pinusaria*. &
{ after to *Psallidoptera* *IS. 1/6*. (Hom)
after *Oreocla* *cockroach*.

Page 53, line 47. Insert "*Orthosoma* *brunnea* see
{ *Oronox* *cylindricus* *IS. XVI/2* (Col.)
after *Orthosoma* *sacchararia*.

Page 55, line 33. read *Sc* - *la*.

" 55 " 33. Insert "*Pellis* *surinamensis*, see
{ *Necroby*, *IS. 19/2* (Col.) after *Pomph*
gus pyre. *IS. 1876*, *Nov 1*, 1877

Addenda & Errata.

Page 56, line 40. Insert *Lechnosterna*, as a Syn.

{ at the end after *Col. Umate guenei*
line 38 as merely a Synonym.

Page 57, line 12 Read, *Magelia* instead of *Wigelia*.

" 59, " 25. Alter *Macronema*. *IG* VII/18, to

{ *Macronema*. *IG* XXII/2. (Col.) "

Page 62, line 18 alter *Bete noir*, to *Bete rouge*.

" 68. " 21. Insert "*Smirinthus exaccatus*,

{ see *Sphena exaccatus* *IG* II/14, XXXI/4

{ *Lep.*: before *Smilia auriculata*.

Page 71, line 35. Insert "*Telea* see *Attacus*

{ *polyphomus*. *IG* VII/5. VI/14 (*Lep.*)

alter *Telamona*.

" 71, line 52 Bottom of page. Insert "*Tenebrionides*

{ *dubia*, see *Progonisila*, *Syn.* *IG* IV/25. (Lep.)

" " " Bottom of page Insert *Tenebrionides*

{ *mauritanica*, see *Progonisila carabae*.

des. *IG* XXXI/3 (Col.)

Page 74, line 65. make *Tenebrionellus*, a synonym "

{ *Progonisila caraboides*.

Page 74, line 74 Alter *tenebrionellus* to *Tenebrionides*

" 76, line 41. Insert "*Reigou*" for injured by

{ *Lygus lineatus*, " after *reigou* weevil.

page 77, line 33. Insert *Styphnodium fasciatum* see

{ *Orchelimum gracile* *IG* VI/1. (Orth)

page 82, line 35. Insert. *Chrysocnus auratus* *IG* XXIV/6

{ (Col), alt. Col.

page 84, line 49. alter *Commelinus*, to *Commelyna*.

" 85, " 4. alter *Panicum*, to *panicum*.

" 89, " 22. (Col. injured, by *tenomata lucicola*

{ *U. vumans* &c. (Col.)

page 94, line 28 Alter *Sumnemonis*, to *Sumnamonis*

" 96, line 42. make *Scatallatus* the right name

{ & *prunicea* the synonym

J. Glover Nov 2 1877

Blank for notes.

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