



1870

1870

92
5856
656
Ent

With respects of the Author 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.

Alphabetical index to Agricultural Reports	Page	1
List of Vegetable and Animal Substances	"	80
Errata and Addenda	"	102

WASHINGTON :

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

1877.



g 2
85856
G56
Ent

Glover, Townsend

Manuscript Notes from my Journal,

OR

ENTOMOLOGICAL INDEX,

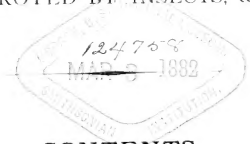
TO NAMES, &c.

IN

AGRICULTURAL REPORTS,

WITH LIST OF

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



CONTENTS.

Alphabetical index to Agricultural Reports	Page	1
List of Vegetable and Animal Substances	"	No
Errata and Addenda	"	102

WASHINGTON :

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

1877.

*Entered according to Act of Congress in the year 1877, by Townsend Glover,
In the office of the Librarian of Congress at Washington.*

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 1876, 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 "S." and a number attached to it, signify that it is the latest name given by Scientists, and that a colored plate of it may be found at plate & figure so and so, on my plates of insects figured for the use of the Department, in the Entomological cabinet of the Museum of Agriculture in Washington. The following Abbreviations have also been used.

Col. Coleoptera ~ Cr. Crotch. ~ Dip. Diptera ~ Eu. Europe ~ Fig. Figure ~ Hct. Heteroptera
 Hom. Homoptera ~ In. Ins. Insect. ~ Italics a line, under a name ~ signifies that it is merely a synonym. L. or Lar Larva ~ Lec. Leconte ~ Lep. Lepidoptera. in Mex. Mexico. ~ New Neuroptera ~ Orth. Orthoptera ~ p. page ~ Pl. plate ~ Pop. pupa ~ S. Am. South America ~ Syn. Synonym ~ Dep. Ag. Department of Agriculture, reports.
 D. J. O. 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 "S." 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 — X. misplaced in Miscellaneous List.

- Abraxas* (Eulopha) *nileana* (Lep.) Currant moth. Sparrows no protection. Chickens better. see Ag. Rep. 1869 p. 418. *Elopius* S. (Lep.) Lar. C. VII 14. Ins. III 5. LXX 24.
- Acanthis* (Came) *tecuriana* (Hct.) Red Bug. L. F. I. sucks 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. *Radarius personatus*, *Porales liguttatus*, *Conorhinus (Sanguisuga) variegatus*, and other Heteroptera Ag. Rep. 1864 p. 558. remedies, 1875, p. 127, fig. 38. *Acanthis* S. III 9. (Hct.)
- Acanth. cephaea* (Hct.)? (*Amol. Thomasi*?) is the "know-nothing black Anisocelis" of D. J. O. see Ag. Rep. 1858, p. 95, p. VII, fig. 9. (Hct.) S. 9. IV 119 VII 22 (Hct.)
- Acanthcephala* (*Metapodius*) *declivis* (Hct.) see Ag. Rep. 1876, fig. 14 p. 120. S. VII 26 (Hct.)
- Acanthcephala* *femorata* (Hct.) (Synonyms *Metapodius Anisocelis* & *Rhenuchus nasutus*) injures fruit of Cherry, Ag. Rep. 1875, fig. 13, p. 119. It is also found on Cotton. S. 9. V 20 (Hct.)
- Acanthosoma*, *quisea* (Europe) (Hct.) sucks the sap of Birch. habits &c. Ag. Rep. 1876 p. 117, no fig.
- " *lateralis* (US) Hct. is the representative of *A. quisea* of Europe Ag. Rep. 1875 p. 118.
- " *nebulosa* (Hct.) sucks the sap of trees, plants &c. Ag. Rep. 1875, p. 116, fig. 6. S. IX 7 (Hct.)
- Acanus*? see Tick insect, remedy Ag. Rep. 1864 p. 564. — *Acanus* scabies Tick insect Ag. Rep. 1861 p. 426.
- " *telenis*, Hct. spider injures *Lecanico* (Saunders) Ag. Rep. 1874 p. 109.
- " " " " injures foliage of cotton. Ag. Rep. 1855/79, fig. 7. & 1862 p. 388.
- " " " a red mite infesting grasshoppers. (*Acrisium* Orth.) Rathbone in Ag. Rep. 1862 p. 388. (see also *Automa*)
- " " " *saccharis*, or Sugar mite. Ag. Rep. 1877, 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. SB Gryllus abbreviatus VII/11 (Orth.)
- Acheta domestica* (Orth.) House cricket. habits remedii &c. Ag^l Rept 1874 p 142 fig 15.
 { Gryllus domestica SB VI/14 (Orth.)
- Acheta vitata* (Orth.) Striped cricket. feeds on vegetables. Carrion. &c Rathvon. Ag^l Rept. 1862 p 381.
 { Nemobius vittatus SB III/9. 10 (Orth.)
- Acrolothus* (Proconis) americanus. (Sep.) I destroy foliage of Grape vines. Ag^l Rept. 1874 p. 78. p. 6.
 { remedy. 1864. 547. &. 1870. p. 81. Acrolothus. SB XVII/3. Sep.
- Acrolothus* (Proconis) falsarius. (Sep.) I feed on foliage of grape vine & Virginia creeper. Ag^l Rept.
 { 1870. p. 81. fig 42. Acrolothus. SB LXVIII/27. (Sep)
- Acronycta* ? (Sep.) Larva destroyed by parasitic Ichneumon flies. great numbers being in one
 { Larva. Ag^l Rept. 1866. p. 43.
- Aceroides* (Orth.) I. P. S. feed upon Grass & herbage. Ag^l Rept 1874 p. 135. { Aceridii Ag^l Rept. 1869. 308. m.m.
- Aceroidium* (Acyridium) 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* (Cytacanthronis) amercanum. (Orth.). Rathvon Ag^l Rept 1862 p. 385 fig. 25. SB I/15 (Orth.)
- acridium*. alaticum (Orth.) Rathvon. Ag^l Rept. 1862 p. 384. fig 24. SB X/18 (Orth.)
- Acridium* (Caloptenus) femur rubrum (Orth.) Rathvon. Ag^l Rept. 1862 p. 384. fig 23. SB I/15 (Orth.)
 { all kinds of vegetation & when very hungry eat even the wood of fence rails. &c.
- { Caloptenus femur rubrum SB VI/7. & VIII/2. (Orth.)
- Acridium*: femur-rubrum. (Caloptenus femoratus) (Orth.) Rathvon. Ag^l Rept. 1862 p. 384.
 { Caloptenus viridatus SB VI/16 & I/16 (Orth.)
- Acridium peregrinum*. Migratory Locust (Orth) of Arabia Egypt Persia Senegal & Syria Ag^l Rept
 { 1874 p. 135 fig 7a. SB XIV/4 (Orth.)
- Acridium tartanicum* (Orth.) Migratory Locust of Algeria France. Germany. Hungary. Italy. Spain
 { Syrac. &c. Ag^l Rept 1874 p. 134. SB XIV/9 (Orth.)
- Acyridium*. see *Acridium*.
- x *Adgeria*. see also *Trochilium*
- Adelops nevada* (Col.) found on bones in the mammoth cave in Kentucky. U.S. Ag^l Rept. 1868 p. 216.
 { fig 20. SB XXXI/21. (Col.)
- Adgeria* (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. 83 pl. 7. Nat. Hist. habits.
 & remedies. 1857 p. 123. m.m. 1858 p. 350. remedy boiling water. borers of cherry tree &c. 1864 p.
 { 550. remedies. &. 1866 p. 29. m.m. 1870 p. 87. remedy hot water. 1872 p. 114. & fig (Troglobia) in burrows
 made by *Adgeria*. Adgeria. SB I/3. SB XLVIII/2. (Sep.)
- Adgeria* (Trochilium) postestiformis (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. Rathvon. habits. &. 1867 p. 72.
 { figured. Scuppernon grape said to be exempt. 1870. p. 72. mere mention. - -
- Adgeria. SB XVIII/5. (Sep.)
- Adgeria* (Trochilium) trinitiformis (Sep.) Currant borer. I bores in the stems of Currants, habits, remedies
 { & Ag^l Rept. 1864 p. 551. LPS p. XLV/3. SB (Sep.)
- Agarantus* suteracis (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 Passon vine or Maypop. Ag^l Rept 1855 p. 106 pl. 18 fig. 10. destroyed by Ich =
 { neumon flies Ag^l rept 1866 p. 43. SB Jan 1/8 In. XXXVI/3. Sep.
- Agrilini* (Col) European sp. I destroy Beech. Oak. Yew. Ag^l Rept. 1868 p. 92. 112. 114.
- Agrilus egenus*. (Col) Ins. eats holes in foliage of Locust Ag^l Rept. 1868 p. 92. 111. fig 103. 1870 p. 67.
 { SB XXIII/7. (Col.)
- Agrilus ruficornis* (Col) Larva bores into the joints of stems. of Raspberrys. Ag^l Rept. 1868 p. 92. fig 101
 { 1870. p. 67. fig 7. SB XI/1 & XII/9 (Col) SB lower.

Agrilus. viridis (Europe) (Col) Larvae feed on Beech wood Agl. Rept 1868, p. 389. 105

Agrionidae (New) 1868 p. 309.

Agrionta. manicus (Col) Larvae known as wire worms feed on roots of grass & herbaceous plants &c
{ mainly potatoes &c Agl. Rept 1868 p. 94 fig 112. Salt recommended Agl. Rept 1870 p. 67 fig 8
D.G. XI/28 (Col)

Agrionta. hesus (Col) Larvae feed on roots of grass & herbaceous plants I. wire worms Agl. Rept 1868 p. 94 fig 112

Agrionta. truncatus (Col) habits & food same as above. Agl. Rept 1868 p. 94.

" { *segetis* (Col) (Europe) " " " " Agl. Rept 1868 p. 94.

Agromyridae (Dip) flies the Larvae of which are generally leaf miners. Agl. Rept 1872 p. 136.

Agromyza. tritici (Dip) I. sucks grains of wheat when immature causing them to shrivel up.

{ Agl. Rept 1872 p. 136. They are destroyed a parasite *Diapria agromyzae* (Hym.) remedies
{ D.G. XI/3 (Dip)

Agrotis. Sep. Larvae commonly known as "cut worms", very destructive in fields pastures, and gardens

{ by cutting down vegetables & devouring them in their subterranean retreats Agl. Rept 1864 p. 533.

" Localities injured Ag. rept. 1872 p. 122. Caterpillars, or cutworms D.G. XCIX/11. (Sep)

" of the Onion (Sep) Agl. Rept 1865. 260. remedies & onion culture. 1866. p. 30 m. m.

" of Cotton (Sep) Agl. Rept 1855, pt. 6, fig 1 cuts off young plants of Cotton & crags them into their holes

* *Ailanthus Silk worm* (Sep) Introduction. Habits, culture, silk experiments, &c. Agl. Rept. 1861. —
{ 374. to 382. as *Bombyx cynthia*. by Dr Jno G Morris. *Ind.* & additional observations with
figures, by Dr Morris in Ag. Rept 1862 p. 390. see also *Attacus* & *Samia*
D.G. I. Cocoon, XXI/4, Ins. XLV/5. *Samia cynthia*. (Sep.)

Ailanthus. Wood. value of % experiments with, at the Paris Exposition of Insects, 1865. Agl. Rept. 1868 p. 93.

Ailans. myops (Col). purple line snapping beetle. I. feed on wood. of Oak, Apple, pine. Agl. Rept. 1868 p. 92.

{ D.G. X, fig 17. (Col)

Ailans. ocellatus (Col) big eyed snapping beetle. Agl. Rept 1860 p. 321. I. in Apple, & oak wood. —

{ *Rathvon* Agl. Rept. 1861 p. 608. figs 57, 58. in Locust wood. 1866 p. 189; in decayed wood —
1868 p. 92 fig 107. in Oak apple, Yew. D.G. X/15 (Col)

Alcia. arylliflora. (Sep) Latest name for *Anomis Xylinae*, the cotton army worm, see remarks
{ made by Prof. A. R. Grote, of Buffalo, N.Y. at the meeting of the Am^r association for the
advancement of science, held at Hartford, 1874 p. 128. See also *Anomis xylinae*. D.G. VIII/24 (Sep)

Aleochara. anthomyia (Col) destroys *Anthomyia*. brassicae. (Sep) a fly injuring cabbages. Report of
{ Dept. Ag. 1870 p. 66. fig 2. D.G. XLIV/9. (Col)

Allorhina. (Cotinus) 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.
{ Agl. Rept. 1868. p. 90. fig 82. D.G. VII/19. (Col)

x *Alowodes*. (Hom) 1876 fig 55 p. 7 found on *Conarus*, Tomato leaves, & Strawberries.

Alucida. arcabellula (Sep) Agl. Rept. 1844 p. 126. see *Unacampsis*. *Butalis*, & lastly *Galachia* D.G. XXVII/1

Alucida. ater (Hct) is the ♀ of *Alucida eunives* Agl. Rept 1875 fig 17 p. 120 D.G. IV/26. (Hct)

Alucida. eunives. (Hct) frequents Golden Rod, & smooth Sumach. Agl. Rept 1875 p. 120. fig 16. D.G. VI/21. (Hct)

Alucida. octonaculata (Sep) Eight spotted Forester. I. feeds on the foliage of the grape vine,
{ Paris green will kill the caterpillar, but is apt to poison the fruit. Agl. Rept. 1874 p. 129. . . .
{ D.G. I. letter C/2 number C/11 Ins XLIV/1 & LV/6. (Sep)

x *Amara* (Col) Some European species are said to destroy grain. Agl. Rept. 1868 p. 110-110. 116.

Amanita. muscaria. a fungus. poisonous to flies. Agl. Rept. 1870 p. 132.

x *Amanthium. muscatoricum*. Fly or Gall poison. a plant growing in the Southern states poisonous
{ to flies. Agl. Rept. 1872 p. 131.

American blight, a disease on apple trees. caused by an insect. see *Alphis lanigera* Hom. —
see *Eriosoma lanigera* D.G. III/21. (Hom.)

American Lackey moth. (Sep) see *Chisocampa americana*. Agl. Rept. 1860 p. 321. (Sep) 95

Ammophila. gryphus (Hym) I. carries off % destroys caterpillars. Agl. Rept 1866. D.G. I/24 (Hym)

* *Agratis segetum* (Sep) Europe. damage done in Picardy, France. Agl. Rept 1869 p. 632.

- Amphiceros*. (*Bostrichus* & *Aphate*) *licaudatus*. (Col.) Apple twig borer. Inj. done with the twigs of Apple, grape, hickory, pear, cherry. &c. Ag. Rept. 1868 pp. 99, 105. fig 136. & 1872 p. 118. fig. 8.
 { IS. XXXVIII/26 & XIX/9. (Col.) & *Amphiceros*. (See also Ag. Rept. 1866 p. 321)
- Amphicera*. (*St. Latr.*) *viridatella* (Horn) found on Brambles & Grass. Ag. Rept. 1870, p. fig 8. IS. I/67 (Horn)
- Arabis*. *simplicis*. (Orth) wingless cricket of Utah. destroys Grass. Wheat. &c. It is eaten by Gulls. &
 { Indians. Ag. Rept. 1871. p. 79. fig 130. & 1874. p. 111. fig 14. IS. XIV/5. (Orth)
- Anacamptis*. (*Butalis Alucita*) *amealata* (Lep.) Angoumois moth. injures corn, maize, wheat, Grass. Food. &c. Ag. Rept. 1854, p. 67, pl. 4. remedies. 1864, p. 556. 1858, m. m. see *Gelechia* IS. XVII/1, (Lep.)
- Anarsia*. *lineatella*, see *A. pruinella*. Ag. Rept. 1872, p. 112. (Lep.)
- Anarsia*. *pruinella*. (Prov. A. *lineatella* & Keller) (Lep.) Larvae destroy the ends of the twigs of
 { Peach trees in Maryland, in spring. Habits. remedies &c. Ag. Rept. 1872, p. 112, fig 1.
 { IS. CVIII/3 (Lep.)
- Anasa*. (*Cercus* & *Gonocerus*) *tristis* (West) Squash bug. L.P.S. injure Squashes, & Pumpkins, by sucking
 { Sap & poisoning foliage. They are said also to destroy the Colorado Potato beetle.
 { *Lophophora decomposita* (Col) Ag. Report. 1875, p. 120, fig 18. See also under *Gonocerus* & *Cercus*
 { IS. II/14. (Holt)
- Anatis*. (*Coccolista* & *Mysia*) *15-punctatus*. (Col) destroys Cotton aphides. Ag. Rept. 1854, p. 85, pl. 8,
 { IS. XXV/37. (Col)
- Anbury, a disease of Turnips, once attributed to *Inachocera pyemalis*, or the Turnip gnaw (Lep.)
 { of Europe. Ag. Rept. 1872, p. 123, fig 15. IS. X/31, 32. (Lep.)
- x *Ancylochira*. *lineata*. (Col) see *Buprestis*. Ag. Rept. 1868, p. 91. IS. XXI/13, (Col) (food pine)
- x *Ancylochira*. *striata* (Col) frequents Spruce, Spruce. Ag. Rept. 1868, pp. 91, & 113, 115, fig. 95. See *Buprestis*,
 { IS. XI/12 (Col)
- Anchylopera*. *vacciniana* (Lep.) Cranberry or fern worm. Ag. Rept. 1868, p. 207. (Fish) & Ag. Rept.
 { 1870, p. 85, fig 50. IS. C/1, fm Pack. (Lep.)
- Angoumois moth. See *Gelechia*, *amealata*. IS. XVII/1, (Lep.)
- Anomalacæ*. Fungi &c. origin. Ag. Rept. 1864, p. 529.
- Animals. in garden of acclimation, Paris. Ag. Rept. 1865, p. 95. (cattle, goats, sheep, &c.)
- Animals, & Birds, by Hennicott Ag. Rept. 1856, pp. 52, 6, 110, with plates. 1857, pp. 72, to 107, no plates.
- Animals, acclimation & domestication. (L. Craig.) Ag. Rept. 1859, p. 207.
- Anisopteryx*. *vernata* (Lep.) Canker worm. L. destroy foliage of Apple, Elm, Cherry, &c. Remedies Habits.
 { &c. Ag. Rept. 1864, p. 554. destroyed by *Calosoma scrutator* (Col) & *Camerus fraternalis* (Hym) -
 { Ag. Rept. 1866, pp. 39, 43. remedies, &c. 1870, p. 84, fig. 29. - 1874, p. 139. - 1875, m. m.
 { IS. Son XVIII/7. Inj. LIX/16, 17. (Lep.)
- Anisocelis*? (Holt) Ag. Rept. 1864, p. 61. on Cotton. 1855, p. 94. resembles *Acanthocephala* Thomas
 { IS. IV/11. (Holt) (& is the brownish black *Anisocelis* of IS. VI/8, fig 9)
- Anisocelis*. ? (Holt) more mention. Ag. Rept. 1854, p. 91.
- Anisocelis*. *albicinctus*. (Holt) banded winged *Anisocelis*. of D.S.B. Ag. Rept. 1855, p. 94, fig. VIII, on
 { Cotton. Bolls. See *Sarcotylus* & *Phyllopus*. IS. I/21, (Holt)
- Anisocelis*. *nasutus*. (Holt) see *Acanthocephala* *fenestrata* IS. I/20. Holt. in Cotton fields.
- Anisota* (*Argyrocampa*) *nubicunda*. (Lep.) Larvae feed on foliage of Silver maple. Ag. Rept. 1870
 { p. 83, fig. 44. IS. Son VI/14. Inj. LVII/9. (Lep.)
- Anisota* (*Argyrocampa*) *senatoriæ* (Lep.) L. feed on foliage of Oak. Ag. Rept. 1870 p. 83 fig 43.
 { & is destroyed by *Tetaneumon flavus* (Hym) 1866, p. 43. IS. Son VI/5, 6. Inj. LVII/16, 18. (Lep.)
- Anobium*. *pumilentarium* (Col) Ag. Rept. 1849, p. 834?
 { *pertinax* (") " " 1849, p. 355?
- Anobium*. (*obesum*) *panicum*. (Col) Ag. Rept. 1854, p. 72, pl. 5. injures Wheat, & other grains.
 { 1866 p. 99, fig 132. see *Sitotropha* *panicæ* IS. XIV/3, (Col)
- Anobium*. *striatum*. (Col.) Europe. known by the name of Death watch, from the ticking noise
 { made by them. (Ag. Rept. 1868, p. 99.)
- Anobium* *Eschschorum* (Col.) Europe, habits same as above. Ag. Rept. 1868 p. 99. . . IS. Son

- Aphodii*, (Col) Agl. Rept. 1865, p. 40, & 1868, p. 86 & 108. Col.
- Aphodius*, *vimetarius* (Col) fed on excrement of herbivorous animals. Agl. Rept. 1865 p. 39. — 1868, p. 86 & 111. fig. 56. — § 3. VIII/2 (Col.)
- Aphodius*, *maculipennis*, (Col.) found on the stomach of pewee flycatcher, together with *A. vimetarius* & *A. apicatus*. (Md.) 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. 1864, p. 539. § 3. I/11 (Hom.)
- Aphrophora*, *parvicornis*, (Hom) found on White pine, & supposed by the negroes to produce the forest horse flies (Md) § 3. II/36 (Hom.) (see also *Syn Membracis*, Agl. Rept. 1876, p. 26.)
- Aphrophora*, (Circopis) *quadrangularis*, (Hom) Ag. Rept. 1876, p. 24, said to injure the hay crop. { found on Brambles. (Md) § 3. II/36 (Hom.)
- Aphrophora*, *Membracis* *quadrinotata* (Hom), (Frog spit) Agl. Rept. 1876, p. 27 found on grape berries. Md. § 3. II/33 (Hom.)
- Aphrophora*, (Hom) on Peagweed. Agl. Rept. 1876, p. 25. § 3. I/11 (Hom.)
- Aphronemes*, (*Reduvius*) *spidifera*, (Het) destroys other insects, & is said likewise to kill honey bees. { Ag. Rept. 1875 p. 130 fig. 43. — § 3. VI/24 (Het)
- Apis*, see also *Bee*. (Hym)
- Apis* *acraeensis* Honey bee of the east Indies. Agl. Rept. 1866, p. 32. (Hym)
- " *adansonii*, " " " Senegal. " " " " " "
- " *fasciata*, " " " Egypt & Syria. " " " " " "
- " *indica*, " " " India. " " " " " "
- " *labrossa*, " " " West Indies. " " " " " "
- " *lucorum*, " " " Italy (acclimated in U.S.) " " " " " " § 3. IV/24.
- " *mellifera*, " " " European domestic. " " " " " " § 3. IV/25 & 30.
- " *trigona*, " " " S. America (stingless). " " " " " "
- " *unicolor*, " " " Madagascar. " " " " " "
- Apple bark louse, or scale insect. See *Aspidiotus*, (*Coccus*) *conchiformis*, (Hom) Ag. Rept., Ethn. 1860, p. 39
- { Oyster shell Apple bark louse. (scale oblong, eggs white), Remedius. — 1867, p. 73; — 1864, p. 561, 1869, p. 336. — Remedius & 1870, p. 88, fig. 87. — 1876, p. 49. see *Aspidiotus*.
- § 3. III/28 (Hom)
- Apple bark louse, Native, or Harris's bark louse (Hom), *Aspidiotus*, (*Coccus*) *harrisii*. Scale oval, pure white, eggs red. injures apple bark of trees. Remedius, Agl. Rept. 1870, p. 88, fig. 58, 45. 1876, p. 49, fig. 50. § 3. III/27 (Hom.)
- Apple blight, or incorrectly "American blight", caused by an insect *Aphis*, *Eriosema lanigera*. { Remedius, Agl. Rept. 1864, p. 860. — 1876, p. 41. see *Eriosema* § 3. III/21 (Hom)
- Apple (tree) borer. see *Saperda* (*ovellata*) *candida*, (Col) Agl. Rept. 1863, p. 575. Larva bores into wood of apple, &c. see *Saperda candida* § 3. Lar. C/21, Ins. X/7. (Col.)
- Apple bug, (or 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 *Tyrinus* (*tyrinus*) *americanus*. § 3. III/16 (Col)
- Apple Burner's. See *Chrysolothus* (*Suprestis*) *femorata*, (Col) Larva bores into the wood of Apple trees. Agl. Rept. (Whar) 1860, p. 319. see *Chrysolothus femorata* § 3. I/10/25. Ins. XI/15. & XVII/12. (Col)
- Apple maggot, or Fly. (Dip.) see *Syrpheta pomonella*, Larva feeds in pulp of Apples. Ag. Rept. 1867, p. 72 § 3. IX/14. (Dip.)
- Apple midge. see *Sciara* (*Melobus*) *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, Remedius, &c. see *Carpocapsa pomonella* { Ag. Rept. 1854, p. 52, pt. 7. — 1860, p. 315 — 1869, p. 536. — 1870, p. 86. 1871, p. 375. § 3. I/3, § 3. XV/8, § 3. LXVIII/7, 8. (Lep) (syn *Denthina*) § 3. Lower.



- Apple tree Sphinx. see *Smerinthus* (*Sphinx*) *Esacutes* (Lep.) Caterpillar eats foliage. Ag. Rep. 6.
 { IS. I/1/4. Ins XXXIX/4 (Sep)
- Apple Tortrix. see *Tortrix* (*Dorotoma*) *rosaceana* (Lep.) destroyed by *Melias anclaus* (Hb.) see Ag. Rep.
 { 1875 p. 130, fig 44. IS. III/12 (Hb.) Tortrix Sep. 1855 p. 85. pt VII, fig 3 IS. LXIII/12. SP. XY/4 J. 1/20 LXV/159a (Sep)
- Apple twig borer. see *Comphlocenus* *bicaudatus* (Col.) Ag. Rep. (Uhler) 1860. p. 321. J. borer in twigs on
 { Apple trees. remedies etc. IS. XIX/9 (Col)
- Aradidae (Hbt.) found under bark of trees, & feed on minute fungi. Ag. Rep. 1875. p. 127.
- Aradus americanus. (Hbt.) feeds on minute fungi under bark. Ag. Rep. 1875. p. 127. fig 37. IS. III/3 (Hb.)
 { (Hbt.) probably mistaken for *Beet Bug*. Ag. Rep. 1875. p. 127. (1865)
- Aracocerus coffeae. (Col.) found on Peach trees, (south) under bark, & in shrivelled or rotten fruit.
 { Ag. Rep. 1872. p. 114. fig 3. see *A. fasciculatus*. IS. XXXIX/21. (Col)
- Aracocerus fasciculatus. see above, *A. coffeae* (Col)
- Archesia yaleata, syn. *Smelica auriculata* (Horn) found on prairies, on *Verbena hastata*. Ag. Rep.
 { - 1876. p. 20. fig 21. IS. I/17. Horn
- Arctia textor. (affinis) (Sep.) found on Cotton. Ag. Rep. 1855. p. 84. pl. VII. fig 2 see *Hyphantria textor*
 { IS. L. VIII/5. 8. 16. J. LIV/13. 18. (Sep)
- Arctia. sp. ♂ eats the foliage of cranberry (Forsk.) Ag. Rep. 1869. p. 268. (Sep)
- Arctia. (*Pyrrarctia*) *isabella* (Lep.) is destroyed by an *Scheumora* sp. (Hym.) Ag. Rep. 1866. p. 11.
 { as *Pyrrarctia*. IS. I/ VIII/9. 10. Ins LIV/4. (Sep)
- Aneides (*Cotalpha*) *lanigera* (Col.) Woolly aneides. destroys foliage of pear. Ag. Rep. (Uhler) 1860. p. 315. 319.
 { 1868. p. 89. 105. *Cotalpha lanigera*. IS. Sep. C. II. S. VIII/7. (Col)
- Argynnis columbiana. see *Euprosticla claudiae* (Lep.) found in Cotton fields eating "May pop" or
 { wild passion vine? & sometimes, but very seldom, eats very sparingly of Cotton. Ag. Rep.
 { 1874. p. 61. - 1855. p. 66. 105. p. 118. fig 9. abundant in Cotton fields, in *Chilomena*. S.C.,
 { as *Euprosticla claudiae*. IS. S.P. 1/6. Ins 36/1. (Sep) (see also Ag. Rep. 1868 m m)
- Arma? *Podisus* (Hbst.) a plant bug, that destroys *Doryphora 10 lineata*, or Colorado Potato beetle.
 { Ag. Rep. 1871. p. 74 etc. see *Doryphora* (*Chrysomela*) IS. XXIX/32. 9. (Col).
- Arma (*Podisus*) *spinulosus* (Hbst.) Destroys Colorado potato beetle, *Doryphora* (*Chrysomela*) *10 lineata*. Ag. Rep.
 { 1866. p. 43. 1874. p. 123. - 1875. p. 118. fig 9. *Podisus spinulosus*. IS. II/28 (Hbst)
- Arma, *grandis*. see *Podisus cynicus* (Hbst.) destroys: *Doryphora* (*Chrysomela*) *decemlineata* Ag. Rep.
 { 1874. p. 123. & 1875. p. 118. fig 8. as *Podisus cynicus*. IS. II/29. (Hbst)
- Army. worm. Autumnal or fall. see *Prodenia autumnalis* (Lep.) Ag. Rep. 1871. p. 376. destroys turnips
 { Buckwheat, grain, grass. Tomatoes etc. etc. remedies etc. IS. CVIII/15 (Sep)
- Army worm. of Cotton. see *Alabama xylinae* (*Alstia argyralleae*). injures Cotton only. Ag. Rep. 1855.
 { p. 71. pt VI. fig 5. (first article) etc. Alstia argyralleae. IS. S.P. XVII/4. Ins XIX/8. Sep
- Army worm. Grass. of the east West. see *Eucaenia unifurcata* (Lep.) destroys Grass & Grass. Ag. Rep.
 { 1861. p. 552. remedies etc. IS. LXC/11. 22. Ins LXVI/16 & LXVII/7. (Sep) (see 1870 p. 83. fig 46)
- Army worm. Grass of the south. *Lophyrus macra*? or *frugiperda*? S.B.A. (Lep.) caterpillar feeds
 { upon the grass, & feeds between the rows of cotton, seldom injuring the plants. Ag. Rep.
 { 1855. p. 77. pt VII/6 - as the grass caterpillar. IS. XXIII/5. (Lep) (see also in article on the
 { *Alabama xylinae* *Alstia argyralleae*. for differences between Cotton & Grass worm.)
- Army worm. or Snake worm. see *Sciera Thoma* (affinis) Ag. Rep. 1872. p. 115. - IS. I/19. (Lep)
- Arthropalus (*Clytus*) *picatus* (Col.) Locust tree borer injures wood of Locust etc. Ag. Rep. 1870. p. 73. fig 23.
 { remedies etc. (syn *Clytus fissuosus* & *C. robiniae*) see *Cyllene robiniae*. IS. Sep. C. II. Ins XVII/25 (Col)
- Artemesia. Wormwood. dried stems & leaves used in China to fumigate Bees. Ag. Rep. 1860. p. 91.
- Arthromaora. aenea. (Col.) I found on flowers. Ag. Rep. 1868. p. 101. IS. XXVII/15. (Col) (*Stalysa* Syn.
- Articulata. Ag. Rep. 1868. p. 101.
- Ash tree borer. (Lep.) *Trochilium donuleti* (Lep.)
- Asilidae (Dip.) feed on other insects. Ag. Rep. 1866. p. 44.
- Asilus sordicus. Linn feeds on other insects. Ag. Rep. 1866. p. 44. IS. III/6. (Lep).

- Asopia costalis* (Lep.) (*Pyralis donalis*). *Hyposoter costalis* Noel Humphrey. Clover worm, or Gold
 { Hunga moth. L injures Clover when dry, & in stack or Barn, also has been reared on
 fresh Clover flowers. Ag. Rep. 1867, p. 73. & 1870, p. 24, fig. 22, as *Asopia costalis* IG. L. p. LXXIII (1870)
- Asparagus beetle* (Col) *Crioceris asparagi* - injures Asparagus. (imported from Europe) Ag. Rep.
 { 1865, p. 91. IG. L. p. 30. Ins. XXX/17.
- Asphondylia* (*Cecidomyia*), *grassularia* (Lep.) Gooseberry midge, L injures the fruit Ag. Rep. 1872, p. 127.
 { as *Cecidomyia* IG. p. 9. XI/28. (Lep.)
- Aspidius* (*Coccus*) *citricola* (Hom) Injures bark & tissue of Orange & Lemon Ag. Rep. 1876, p. 113.
 { IG. p. 4 (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. 1860, p. 319. (Ehler) comesy.
 1867, p. 73. — 1869/1336. — 1870, p. 20, fig. 57. Trinckley. — 1876. fig. 19, found on Apple.
 { lulus, abundant cherry, each. on ant. pear, plum, &c. IG. aspidius III/28 (Hom)
- Aspidiotus* *crucigeranus* (Hom) injures bark of Pear & Cydonia Ag. Rep. (Paris) 1860, p. 312. (Hom)
 " " *fulvipes* (Hom) — parasitic on limbs of Pear " " " " p. 313 "
 " " *glauca* (Hom) on bark. Feeds on fruit of Orange & Lemon Florida, the most common
 { Aspidiotus sp. (Coccus sp.) Ag. Rep. 1865, p. 115, pl. X, fig. 5. & 1876, fig. 47. IG. pl. IV (Hom)
- " " *Harrisii* (Hom) Nod. Apple, Harris's bark louse, or Scale insect, scale oval, pure white.
 { Eggs, red? Ag. report, 1870, p. 80, fig. 52. remedies, &c. — 1876, fig. 50. Apple. IG. III, 27 (Hom)
 { syn Coccus
- " " (*Coccus*) *penifoliae* (Hom) Insect on pine cones, or needles. Ag. Rep. 1865, p. 91. & 1876, fig. 51.
 { IG. 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. 21, fig. 10.
- Astoma* (*Astoma*) *leucostriata*? a small red mite parasite on Grasshoppers. *Calopternis femur*.
 { Walburn &c. & found clustered on body or under the wings. Ag. Rep. 1876, p. 138.
- Ateuchus* *Egyptiorum* (Col) the scarabaeus of the Egyptians. food, excrement, Ag. Rep. 1868, p. 56.
- Attacus* (*Samia*) *ceropria* (Lep). I classed amongst native silk producing insects Ag. Rep.
 { 1864, p. 543. mm 551. — mm 1865, p. 93 — 1866, p. 36. — destroyed by Cydonia
 { maccurum (Lep.) IG. p. 41. — 1867, p. 374 mm — 1870, p. 24, fig. 22, as *Attacus ceropria*,
 { syn Platysamia ceropria. Ins IG. XLVI/2. Lar VII/2, L. p. 1; food. Apple, Cherry. Em. Plum. 8/38
- Attacus* (*Samia*) *cynthia* (Lep.) see. Aitonian silk worm for introduction from 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. Aitanthus & Caster oil plant.
 { as *Samia cynthia* IG. L. p. Coc XXI/1 (Lep)
- Attacus* *pernyi*. See *Antheraea* (Lep.) Ag. Rep. 1866, p. 38 & 1870, p. 81 food. Oak IG. L. p. CIV/16 & CVI/16
- Attacus* (*Zelee*) *polyphemus* (Lep.) a native silk producing insect. silk gut mad. — from
 { the caterpillar. — silk produced from the worm by M. Trouvelot. of Neafor. Mass. Ag. Rep.
 { 1864, p. 551. — 1865, p. 93 specimens in Paris exposition & — 1866, p. 37 M. Trouvelot of
 { Neafor. Mass. in 1865, had not less than a million of caterpillars feeding on bushes.
 { 1867, p. 62 m m. see Boulay & Antheraea. IG. L. VII/5. Ins V/11 (Lep.) food. Elm. Oak. Cherry &c.
- attacus*. *Callosamia promethea* (Lep) said to be a silk producing caterpillar. the cocoon is
 { suspended from a branch like *Samia cynthia*. Ag. Rep. 1864, p. 551 & 1866, p. 37.
 { Callosamia promethea IG. L. III/3 VII/6. Ins XLIX/1, 5. (Lep.) food. Sassafras, Oak, Sela &c.
- Attacus* *Yama mai* (Lep.) see Boulay & Antheraea. IG. L. p. CIV/16. C. VII/16 & IX/16 food. Quercus, Apple.
- Atelalidae* (Col) Europe Ag. Rep. 1865, p. 89. m m. ex. *Atelabus analis* IG. XXIII/3
- Aulacicus* (*Tetragonia*) *multipes* (Hom) Ins frequents grass, Cyperus. Ag. Rep. 1876, fig. 32. IG. III/30 (Hom)
- Autonium* (*Colydium*) *parallelofiedora* (Col) found under pine bark. Ag. Rep. 1866, p. 38, 113, 113,
 { IG. V/29. as Autonium

J. G. Lewis.

- Bees, honey, are killed by *Opimonus spissus* (Hct.) Ag. Rept. 1875, p. 130, fig. 43. Pedicularis, Sp.
 { Ag. 11/24. (Hct.)
- Bees are likewise destroyed by *Altilus missouriensis*, Dip. Ag. 11/25. Proctacanthus piniadelphicus (Lep.),
Ag. X/34 & Promachus bastardi. Ag. 11/22. (Hct.) (not yet in Ag. Rept.)
- Bees, fly. *Bombylus* (Lep.) hovers over flowers extracting the nectar with its long sucker. Ag. Rept.
 { 1867, p. 317. example. Ag. 11/18 (Lep.)
- Bees, mason. (Lep.) *Galleria coreana*. Larvae destroy honey comb, & render hives filthy with their
 { web. & ultimately causing the total destruction of bees & their, the larvae, eat wax &c.
 { Ag. Rept. 1866, p. 555, remedied. (Ag. 11/14. S.P.S. LXXXVII.) (Lep.)
- Beesman. French local name for *Rhyacionia bacchus*, Ag. Rept. 1865, p. 90. Col. I. injures Apples
- Bed bug. see *Acanthia lectularia* (Hct.) Ag. Rept. 1864, p. 558. (7. medicis 25. 1875, p. 127, fig. 38. Hct.)
 { first introduction to England, 1858. Ag. 11/9 mag. (Hct.)
- Beetles, Coleoptera. article on food habits &c. of Beetles with figures. Ag. Rept. 1868, p. 78.
- Bombardier (Hym.) eat & carry off other insects, such as flies &c. Ag. Rept. 1872, p. 132. example, (Lep.)
 { Ag. 11/30. (Hym.)
- Borene. . . to destroy insects on plants. Ag. Rept. 1861, p. 332.
- Borytus* (Hym.) spinosus. (Hct.) Ag. Rept. 1875, p. 121, fig. 20. Ag. 11/10. (Hct.)
- Borytus* (Hym.) elegans (Europe) taken about roots & young stems of Root-Harrow (*Ononis asvensis*)
 { Ag. Rept. 1875, p. 121. (Hct.)
- Belostoma* ? mere mention. Ag. Rept. 1868, p. 815.
- " " americana? (Hct.) Ins. aquatic. destroy Insects, fish, & probably fish eggs. Ag. Rept.
 { 1873, p. 134, fig. 6. Ag. 11/8 (Hct.)
- Biellul. Ag. Rept. 1875.
- Bilio*, albanensis. (Lep.) food of robins in spring. The larvae are said to injure plants. Ag. Rept. 1866, p. 160.
 { Ag. 11/7. (Lep.)
- Big bed bug. see *Conorhinus variegatus*. (Hct.) said to destroy bed bugs & suck blood of man & woman.
 { Ag. Rept. 1865, p. 127. Ag. 11/19. (Hct.)
- Big eyed snapping bug (Beetle) see *Alaus oculatus* (Col.) Ag. Rept. 1860, p. 281, 297. L. in wood of
 { Apple, Oak, & pine see. Alaus oculatus. Ag. X/15. (Col.)
- Bull bug of the peaches. *Car. (Col.) injans* maine plant. & resembles *Sphenophorus caryosus*. Ag. XII/6.
 { (Col.) Ag. Rept. 1870, p. 68 Ag. XIII/6. Col.
- Birds, injurious 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. 186, p. 89.
- Birds, in Europe killed & eaten, & the consequent multiplication of insects. Ag. Rept. 1861, p. 322.
- Birds, by E. L. Samuels. Ag. Rept. 1869, p. 276. families, &c.
- Birds. — Bird laws, & use as destroyers of insects by J. T. 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*. Ag. 11/8.
- Blackberry bark borer. (Hym.) see *Urexa bipunctata*. (Col.) Lar. live in pits of Blackberry & Raspberry.
Ag. Rept. (Hawthorn.) 1866, p. 619. figs 52, 54. — 1863, p. 576. — 1869, p. 87. 1865, p. 159. & 1870, p. 67. Ag. XIV/6. Col.
- Black horse fly, see *Sabanes atratus* (Dip.). Ins. sucks blood of horses man & other animals
 { Ag. Rept. 1872, p. 129. Ag. 11/35. 11/40. Ins 11/15 (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 & 5. injures Wheat rice maize
 { 1849, p. 355. — 1858, p. 28. — 1866, p. 61. destroyed by *Mexopronis graminicola* (Hym.) Calamita oryzae.
 { Ag. XIV/1. (Col.)
- Black weevil, name *Akwis* applied to *Sitophilus granarius*. see *Calamita granarius* var. *tupudata*
 { Ag. XIV/2. (Col.) Ag. 11/2.

- Blattamericae (Orth.) Ag. Rep. 1862 p. 374, fig. 467. (Pathworn) remedies, parasites &c
 { American Cockroach. said to be active, eats books, clothing, & utensils & is fast & feeds upon almost all animal & vegetable substances when hungry. See Pentaplaneta SS 1/23. (Orth.)
- Blatta germanica (Orth.) Croton lug., eats Animal, & vegetable substances, books, clothing, paper, leather, bread &c &c. "Small Cockroach" Ag. Rep. 1870, p. 77. — 1874 p. 132, fig. 3. remedies &c: see Ecobia germanica. SS 1/4. (Orth.)
- Blatta orientalis (Orth. Ag. Rep. (Pathworn) 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: Pyrrothrum, & root of Poté weed Phytolacca decandra, recommended Ag. Rep. 1874 p. 133, fig. 4, see Synlaryngis orientalis. SS 1/66. & VII/12. (Orth.)
- Blatta pensylvanica (Orth.) habits & food same as the above. see Blattamodes. SS 1/3. (Orth.)
- Blattaria. — Ag. Rep. 1874 p. 131 &c. (Horn.)
- Blight, Cotton. with few figures Ag. Rep. 1857, p. 126.
- Blissus (Hct.) latest name for Microchus leucopterus, see Sist. of Hemipt. of the region west of the Mississippi river, by J. B. Walker, 1876.
- Blister flies, native, 2 species, Cantharis Nuttalli, (Cantharis Epicauta cinerea is the old Cantharis marginata.) (Cantharis Epicauta pensylvanica is the old Cantharis atrata & Cantharis Epicauta vittata is the old Cantharis vittata 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 norbosa, Ag. Rep., 1863, p. 572.
- Blood sucking cone nose (Hct.) Ins. sucks blood of mankind, & also said to kill wood bugs, Ag. Rep. 1875
 { — fig. 48. Conothus variegatus SS III/19. Hct.
- Blow flies, or meat flies, see Callyphora Lucida, Sarcophaga &c Ag. Rep. 1872, p. 132 &c. (Sep.)
- Boarmia (Sep.) Ag. Rep. 1855 p. 92, pl. VII, fig. 4. eats cotton foliage, probably the larger species — worm of A. B.
- Boehmeria nivea, a plant producing fibre. Ag. Rep. 1865 p. 23. & 1866 p. 21.
- Bolothragus (Bolothorus) cornutus (Col.) frequent, unsp. Ag. Rep. 1868 p. 100, fig. 164, see Bolothorus bifurcus, SS XX/18. (Col.)
- Bolothorus bifurcus, syn. Bolothragus cornutus (Col.) SS XXV/8. (Col.)
- Bomby: (Attacus) arionida (Sep.) native of Bengal & British India, food Castor oil plant.
 { Ag. Rep. 1861, p. 375, & 1868 p. 284. food. Vaccinus, or palma Christi, resembles Attacus Cynthia in many respects. (Sep.)
- x Bombus terrestris Humble or Bumble bee. (Beyn) beneficial as fertilizing certain flowers, & injurious by eating holes in the calyx &c. Ag. Rep. 1849, p. 338.
- Bombycidae. (Sep.) Ag. Rep. 1868 p. 314.
- Bombyliaria (Sep.) Ag. Rep. 1865 p. 45.
- Bombyliidae — Bee flies, Sep. Ag. Rep. 1868 p. 317.
- Bombyx (Attacus) bauhinia (or Faidherbia) Hal. Africa, feeds on plant Bauhinia, Ag. Rep. 1865, p. 92, & 1866 p. 38. SS CXI/11. (Sep.)
- Bombyx (Attacus) ceropria (Sep.) Ag. Rep. 1864, p. 223. Horn. 1865/93, 1866/36. 41. — 1867, p. 74, 1868 p. 284. see Platysamia ceropria SS, SS CC. VII/5, XXII/5, XXXVII/11. (Sep.) food Alphit. Palm &c.
- Bombyx (Attacus) damic Cynthia, Alamitus Silk worm. (Sep.) food, Alamitus, &c. see. Ag. Rep. 1861 p. 374, 1862 p. 390 — 1864 p. 542, 557. — 1865 p. 35, 92. — 1866 p. 37 — 1867 p. 74 — 1868 p. 284, 1870 p. 81. see Samia SS, SS L.P. CC. XXII/4 (Sep.) (food also Castor oil plant?)
- Bombyx Faidherbia. see Attacus bauhinia (Sep.) above
- Bombyx madrona (Sep.) feeds on Arbutus & other trees in South America & makes silken nests composed of distinct separate layers Ag. Rep. 1866 p. 37. (Sep.)
- Bombyx mytila (Sep.) Tussock Silk worm, mild in Bengal, feeds on leaves of Typha tree, & failed in being reproduced in France. Ag. Rep. 1868 p. 284. (Syn Anthracae parthua L.P. I. SS, CXIII/1, (Sep.) flower

- Bombyx mori*. (*Sexicornia* Syn) (Lep.) 1864 p. 465. 543. Fed on esage orange (*Maclura aurantiaca*) 1865 p. 93 m.m. — 1866 p. 35. destroyed by a fungoid growth *Botrytis bassiana*. & fed on the esage orange. Mulberry *Morus multicaulis*. *M. morelli*. *M. alba*. Bois d'arc. or esage orange. & - raised successfully on Crage Orange. 1867 p. 74. — 1868 p. 234. — 1869. p. 626. — 1870 p. 82. Successful experiment of raising silk worms on Crage orange leaves. by Mr Comaday of Utah. Territory. — 1871 p. 7. D.G. S.F. Co. XXI fig. 12 & 16. S. 163/1 (Lep)
- Bombyx* (*Anthracae*) *paphia*. a syn of *B. mylitta*. Ag. Rep. 1869. p. 284.
- Bombyx* (*Anthracae*) *gamma* mai. Lep. Japanese silk worm, feeds on Apple Oak. Ag. Rep. 1865 p. 92. 1866 p. 58. 1868 p. 234. — 1870 p. 81. see *Anthracae* also D.G. C.IX. fig. 3. (Lep.)
- Bordered soldier bug. (Het) *Sticticus umbratus*. destroys Colorado potato bug, & other insects. Ag. Rep. 1874 p. 123. & 1875 p. 119. fig. 11. D.G. S. 1/20. (Het)
- Bostrichidae*. (Col) Ag. Rep. 1865 p. 91. & 1868 p. 99. &
- Bostrichini*. (Col) Ag. Rep. 1868 p. 99.
- Bostrichus*. (*Cyate*) *aperforatus*. (Col) in pith of Hickory branches. Ag. Rep. 1865/91 — 1867/71. — 1868/99 (Col)
- Bostrichus*. (*Bostrychus*?) *leucodatus*. (Col) Apple twig borer. I. in wood of Apple twigs, with remedies. Ag. Rep. (Utah) 1860 p. 321. & 1868 p. 99. fig. 156 (2a) see *Amphicerus*. D.G. XII/2. (Col)
- Bostrichus*. (Col) Europe. shown at the Paris exposition (1865 p. 91) as being destroyed by *Dioloma*? D.G. I. 1/34. D.G. 1/11. S. VIII/22. (20 p)
- Bot. Skin*. of Cattle. *Hypodermia bovis*. (Dip) S. lines in or under skin of Cattle. form very open ulcers. or sores. Ag. Rep. 1872 p. 129. fig. 184. (see also Syn *Cestus*) *Hypodermia* Ag. VIII/21. D.G. 1/34. 2/3
- Bot. Stomach*. of horses. mules &c. *Gastrophilus equi*. Dip. I. live in the stomach. Ag. Rep. 1872 p. 130. D.G. 1/34. 2/3
- Bot. head*. of sheep *Citrus Ovis* Dip. 1862 p. 353. (Ag. Rep., remedy, & 1872. p. 129. fig. 17. Larvae live in frontal sinus of sheep. see *Cephalomyia ovis*. D.G. VII/36. (Dip.)
- Botrytis bassiana*. a fungoid growth destroying silk worms. Ag. Rep. 1866 p. 26.
- Braches*. group. (Col) 1868 p. 92. Ag. Rep. (Col)
- x *Bombardier*. beetle (Col) see *Brachinus fumans*. Ag. Rep. 1868 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.G. 1/4 (Col)
- Brachys terminans* (Col) m.m. Ag. Rep. 1868 p. 92. fig. 104. see *Brachys aenea* D.G. XI/36 (Col)
- Braconidae*. (*Hym*) *kleunomon*. 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.G. 1/31. (Hym)
- Brachyterus varius*. (Europe) (Col) destroys the cocoon on pine. Ag. Rep. 1865 p. 91. D.G. Lar. Europ. D/2. (Col)
- Broad necked *Prionus*. (Col) *Prionus laticollis*. Ag. Rep. (Rathvon) 1861 p. 612. figs. 68, 69. Larvae eat wood of decaying poplar. D.G. Lar. D/4 Ins. XXI/5 (supra) Prionicornis
- Brochymena arborea*. (Het) a plant bug very common here that sucks the sap of trees. Ag. Rep. 1875 p. 117 fig. 4. D.G. 1/16 (Het)
- Broctus planatus*. (Col) Europe. said to destroy bark beetles. *Scolytus* & *Bostrichus*. Ag. Rep. 1865 p. 91.
- Brosicus cephalotes*. (Col) Europe. Ins gnaws the stem of wheat. L. said to burrow in pith. Ag. Rep. 1865 p. 88. (Col.)
- Bruchus fabae*. (Col) Bean blight, habits &c. Ag. Rep. 1871. 375. (Col.)
- " *flummarus* mere mention Ag. Rep. 1869. p. 360. (Col.)
- Bruchus granarius*. (Col) Ins. fragments flowers. I. destroy beans peas &c. Ag. Rep. 1849. p. 240. 1870. p. 71. fig. 20. see *Mylobris*. D.G. XVI/12. (Col)
- Bruchus obsolatus*. (Col) field bean. Ag. Rep. 1870 p. 72. (Col)
- Bruchus pisi*. (Col) pea weevil. Ag. Rep. 1849 p. 238. 1863 p. 574. p. 574. Remedies &c. — 1870 p. 71. fig. 21. Europe. mere mention in peas. — 1871 p. 375. eggs deposited on the surface of pods, fastened by a viscid substance, & remedies. — 1872 p. 123. Localities injured. see *Mylobris*. D.G. XVI/6. (Col)

- Bruchus. snuatis* (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. xxx/5 (Col)
- Buffalo tree hopper* (Hom) see *Ceresa butalis*. Ag. Rept. 1864. p. 360. & 1876. fig. 16. 3 sucks sap of
 { Apple, peach, grape & willow. IS. 1/29 & 2/32 (H. om)
- Buprestidae* (Col.) Ag. Rept. (Rathvon) 1861 p. 607. 8. Lar. fig. 52, 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* (*Ameglochira*) *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. xv/13 (Col)
- Buprestis* (*Ameglochira*) *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 Silpha
americana &c. IS. v/15. (Col)
- Butalis* (*Amecampid*) *concabella* (Lep) Angamous moth. *L. in vivo macra* Linn. Wheat, grass seed.
 { Ag. Rept. 1854. p. 67. pl. 4. - 1864. p. 566. &c. &c. see Gelechia Amecampis IS. xvii/1
- Byrrhidae* (Col) full beetles. Ag. Rept. p. 55. Ins. found in excrements of Cattle, horses, &c
 { (example *Byrrhus Cistela americana*) IS. v/11 (Col)
- Byturus tomentosus* (Col) Injures fruit. raspberries, blackberries &c. Ins. frequents flowers.
 { Ag. Rept. 1868. p. 84. 189. 114. IS. larva A/20 (Col)
- Byturus unicolor* (Col) Ins. frequents flowers. Ag. Rept. 1868. p. 84. 190. fig 47. see Sixagus IS. xxxii/16 (Col)
- Cabbage bug* (Holt.) See *Strachia* (*Murgantia*) *historioncha*, or Harlequin bug. Ag. Rept. 1867. p. 71. fig
 { 150. 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* (Holt.) see Strachia Murgantia
historioncha. IS. 11/22 (Holt)
- Cabbage* butterfly or worm (Lep) European. see *Pieris rapae*. Ag. Rept. 1870. p. 79. fig. 36. - 1874. 22. fig 15.
 { IS. 2. P. C/18. Ins. 3/14 Ins. 20/2. (Lep)
- Cabbage butterfly* of the north & East. (Lep.) see *Pieris* (*Pontia*) *oleracea*. pothens Pontica or white
 { butterfly. Feeds cabbages, pothens, turnips, &c. Ag. Rept. 1870. p. 79. fig 37. IS. L. xcix/15. -
 { L.P. cv/28. - I. xxvii/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. L. p. 11/6 Ins. xxxvii/11. 12. Lep.
- Cabbage* butterfly (Lep) *Pontia brassica*? of Rathvon Ag. Rept. 1861. p. 592. is destroyed by a canabus.
 { (Col). (is probably *Pieris oleracea*, as above mentioned?)
- Cabbage* flea beetle (Col) see *Haltica* (*Phylloneta*) *striolata* see Orchestes vittata IS. xxiv/8 (Col)
- Cabbage* fly, or maggot. (Dip) see *Anthomyia brassicae*. IS. xxv/9. (Dip) (injures root Cabbage)
- Cabinet*. Report of. see *Museum* Ag. Rept. 1864 p. 540
- Cadelle*. French name for *Trogosita* (Col) Ag. Rept. 1864 p. 540. - 1865. p. 91. - 1866. p. 83. - 1870. p. 66. see
 { *Trogosita mauritanica*. *Catella*. 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*.
Tenebroides mauritanica. IS. xxxi/1. (Col)
- Caeicgenae* (Holt.) Ag. Rept. 1875. p. 123. IS. fig 40
- Caliodes inaequalis* (Col) Grape fruit curculio. injures grapes Ag. Rept. 1867. p. 72. see Maecetes
 { IS. xxxvi/42. (Col)
- Calamobius gracilis* (Col) Europe (I. called to *Saperda*) pierces stem, boring through joints, &
 { 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 (*Trogon*). - may prove
 { to be *Rhyssophora* (*Zimmermanni*) orientalis. of Erich. ? IS. xiii/21. (Col) IS. lxxv

- Calamusa granarius*. (*Sitophilus granarius*) (Col.) Grain weevil. *L. injures* Wheat, & other grains.
 { Ag. Rept. 1849 p. 335. — 1854 p. 71. — 1858 p. 23. — 1861 p. 603. — 1863 p. 573. remedies. &c.
 } sa *Calamanda remota* punctata. (syn. *granarius*) SS. XIV/2. (Col.)
- Calandra oryzae*. (*Sitophilus*) (Col.) Rice weevil. Ag. Rept. 1849 p. 553. & 335. 1854 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.
- Calathus latus* (Col.) Europe. said to injure young wheat. Ag. Rept. 1868 p. 80. (Col.)
- Calphragon barbatorum*. (Col.) (Psephenidae) Brazil. large size being 3 inches in length. Rathwon. in
 { Ag. Rept. 1861 p. 611.
- Callidium* (Carpus error) *vajulus*. (Col.) Ag. Rept. (Rathwon) 1861 p. 616. *L. fed* on wood. of Oak & pine.
 { said to be able to bore through lead. see *Hydrotrupes vajulus*. SS. XVI/3. (Col.)
- Callidium violaceum*. (Col.) (Rathwon) in Ag. Rept. 1861 p. 616. fig. 75. 76. found in pine wood. and
 { under bark. sa *C. antennatum*. SS. XVI/4. (Col.)
- Callimone*. (Hym.) parasitic in *Diplosis indicis* Ag. Rept. 1872 p. 127. (Hym.)
- Calliphora vomitoria*. (Dip.) *L. injures* meat by depositing eggs on it. which hatching to maggots.
 { destroy it rapidly. Ag. Rept. 1872 p. 132. fig. 20. SS. V/21. (Dip.)
- Calosorus*. (*Carpus*) *bimaculatus*. (Hom.) common on weeds in Maryland. Ag. Rept. 1875 p. 125. fig. 32.
 { SS. 1/10 (Hom.)
- Caloptenus*. (*Abrudium*) *femur rubrum*. (Orth.) Red legged grasshopper of the eastern States.
 { very destructive to garden, & field crops, when numerous. injures fruit trees, grasses.
 } Ag. Rept. 1866 p. 29. — 1867 p. 65. fig. — 1872 p. 76. fig. 32. fruit trees. — 1874 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.)
- Calopterus*. *spendus*. (Orth.) Hatful — Rocky mountain, or Western grasshopper Ag. Rept. 1864 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. 136. fig. 9. Localities injured, Colorado, Neb. Kans. Tex. &c. latest remedies, habits
 } History, &c. SS. VIII/1 & young XIII/15. (Orth.)
- Calopterus femur rubrum*. &c. is attacked by a small red mite. see *Aetomus leucostomum*.
 { Ag. Rept. 1874 p. 38 (see also *atomus*)
- Calosoma* ? (Col.) *L. ins. predaceous*. Ag. Rept. 1865 p. 91. (Col.)
- Calosoma calidum*. (Col.) Rathwon in Ag. Rept. 1861 p. 591. I & 2. fig. 6. destroy caterpillars & other
 { insects. — 1866 p. 39. — 1868 p. 79. fig. 3. destroys army worm *Scenecania unipuncta*)
 } extranea. — 1874 p. 123. destroys Colorado potato bug *Chrysomela (L. oryphora)*
 { decomensale. SS. I/3. 170. 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 Michoisi*. (Col.) Rathwon in Ag. Rept. 1861 p. 592. m. m. (Col.)
- Calosoma* (Col.) (Europe) destroy other insects. Ag. Rept. 1865 p. 91. (Col.)
- Comptotherium* (Col.) error! should be *Comptosium*. (*Omalothia*) seneca (Col.)
- Camel Crickets. see Mantidae. (Orth.) Ag. Rept. 1874 p. 133. Orth. SS. 11 plate
- Campyloneura*. (*Carpus*) *virgipennis*. (Hem.) destroy the grape vine leaf hopper. in correctly called
 { the grape vine thicket. *Erythrocnema ulis* (see Hom.) Ag. Rept. 1871 p. 237. found on Oak
 } but destroys the grape vine leaf hopper. — 1875 p. 125. fig. 30. SS. VIII/3. (Hem.)
- Canker worm. *Oniscophora venata*. (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. I XVIII/7. Ins. LXV/16. (Lep.)
- Cantharidae. Cantharides. Col. Blister or potato flea (Col.) some of our native species are used for
 { blisters (see Blister) see also Cantharis. *Epicaute*. *Sylla*. *Macrolasia*. *Pomphodora* &c.
 } remedies used Ag. Rept. 1859 p. 103. — 1863 p. 275. & 569. — 1866 p. 39. — 1868 p. 105. SS. 1/3. (Col.)

- Ceratonia amyntor*, (*quadricornis*, Syn) (Lef.) Royal Walnut moth, the caterpillar feeds on Elm & Linden. It is infested with small *Schnaemon* flies the larvae of which make cocoons agglutinated together like honey comb. Ag. Rep. 1876, p. 41 (Hym.) C. amyntor Ag. Rep. 1876, p. 41 (Lep.)
 see Ag. Rep. 1866 p. 42.
- Cercopis bicincta*, (Hom) found on weeds, Brambles, and grass. Ag. Rep. 1876 fig 23 Ag. 1/43 (Hom)
- Cercopis obtusa*, (Hom) frequents black alder. Ag. Rep. 1876 p. 29. see Clastoptera. Ag. 11/15 (Hom).
- Cercopis proteus*, (Hom) frequents cranberry. & Black-berry, larch. Ag. Rep. 1876, fig 22. see Clastoptera
Ag. 11/15 (Hom)
- Cercopis quadrangularis* (Hom) frequents grass & brambles. Ag. rep. 1876, fig 24 see Althosphora.
Ag. 1/35 (Hom)
- Cerastoma brassicella*, see *Platella limbipennis*. (Lep.) caterpillar, eat Cabbage. It is itself destroyed by a small *Schnaemon* fly. Ag. Report. 1866 p. 41 (Hym.). feeds on Cabbage. 1877 p. 92, fig 16.
 { *Platella limbipennis*. Ag. XX/25. & LXVIII/30. 31. (Lep.)
- Cesusa bubalus* (Hom) Buffalo tree hopper, perforates a row of small holes, lengthwise of the twig in fruit trees. Ag. Rep. 1866 p. 560. — injures twigs of Apple, peach, grapes, & willow.
Ag. 1/27. 11/32. (Hom)
- Cesusa discors* (Hom) injures twigs of apple, Peach, & grape, as above. Ag. Rep. 1876 fig 16. Ag. 1/27 (Hom)
- Cetonia nax*, (Col) Ag. Rep. 1861, p. 601. & 1863 p. 274. *Cetoniini*, (Col) min. Ag. Rep. 1862 p. 89. (Col)
- Cetonia* (Col) Ag. Rep. 1861, p. 601. & 1863, p. 278. (Col.)
- Cetonia hirta* (Col) Europe. Ag. Rep. 1868 p. 90 injures of Apricot
- Cetonia* (*Euryomia*) *inda*, (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*. Ag. 10/29 (Col)
- Cetonia* (*Euryomia*) *melancholica*, (Col) dark shaded *Cetonia* of D. J. B. on Cotton bolls. Ag. rep. 1856, p. 61.
 { 1855 p. 96 pl. VIII fig 9. & 1865 p. 89. frequent bolls of cotton. see *Euryomia melancholica* Ag. 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 culicles of the leaf. Ag. Rep. 1870, p. 68, fig 11. Ag. XLII/8. (Col) (Pupa formed in cocoon).
- Cutorhynchus macula alba*, (Col) Europe. found in poppy heads. Ag. Rep. 1868, fig 90. (Col)
- Chaffers*, see *Sachnosterna*, *Melolontha*, &c. (Col)
- Chalcididae*, (Hym) on Orange Coccus, or scale insect. Ag. Rep. 1862, p. 122. &c. (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*. Ag. XI/7 (Col)
 " — destroys, Cranberry gn. *Cecidomyia*, Ag. rep. 1868, p. 172 m. v. 1869, p. 207. (Hym)
 " } " *Anthonomus suluralis*, (Col) on Cranberry weevil Ag. Rep. 1869 p. 207 "
 { example *Chalcis flavipes*. Ag. III/22. (Hym)
- Chalcis* ? Parasitic in *Cecidomyia*, *destructor*. or *Hessian* fly (Ship) Ag. Rep. 1872, p. 126. (Hym.)
- Chalcophora liberta*, (Col) L. feed in Pine wood. Ag. Rep. 1868, p. 91, 113. Ag. XI/9 (Col)
- Chalcophora virginica*, (*virginensis*) (Col) Ag. Rep. (Hatchers) 1864, 53, fig 53. injures wood of Pine. — 1866 p. 91. fig 89. — *C. virginensis*. Ag. XI/19 (Col)
- Charangon*, *d'argente*, (Col) French common name for *Polydrosus sericeus*. Ag. Rep. 1868, p. 90. (Col)
 " *de grosseller*, (Col) " " *Polydrosus planifrons* " " "
 { destroys *grosberris*. (Col):
- Chauleognathus americanus*, (*syn pennsylvanicus*) Ag. Rep. XI/12, 31: see *C. pennsylvanicus* the old and more common name. (Col) *C. americanus* Ag. XI/12 (Col) of *Oratek*
- Chauleognathus 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. 56. Ag. XI/12 (Col)
- Chauleognathus pennsylvanicus* (Col) I. frequents flowers of cotton &c. fading on Robin. Ag. Rep. 1854, p. 60.
 { 1855, p. 89, pl. VII, fig 9. — 1868, p. 96, fig 129. C. americanus. Ag. XII/11 (Col)
- Chermes* see *Coccus ileici*, used as a dyeing material. (Hom) feeds on Evergreen Oak (Europe)
Ag. Rep. 1866 p. 33 example *Chermes coccineus* 11/43. (Hom)
- Chermes*, Pear. (Hom) see *Psylla pyri*. Ag. Rep. (Chier) 1860, p. 314. Ag. 11/10. 39000

- Cherry, or Pear, slug, *L. injures* the foliage. Remedies. Ag. Rep. 1864, p. 547. see Selandria
 { *ceresi*. Ag. Rep. 1860, p. 35. eats parenchyma of leaf of Pear & honey. — 1870, p. 78.
 fig 36 *L. injures* fol. of pear & cherry. see Selandria cerasi §§. IX/139. (Hym)
- Chestnut weevil, (Col) Ag. Rep. (Rathvon) 1861, p. 505. *L. feeds* in Chestnuts. & see Balaninus
 { *Sayii nasus*. §§. XIV/10. (Col)
- Chigger, or Tigger, see Sarcopteryla penetrans. a species of flea, the larvae 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 Sarcopteryla
penetrans. §§. XIV/10. (Dip.)
- Chilocorus (Coccinella) bivulvatus. (Col) destroys the coccus of the Orange. & Aspidictus Gloveri.
 { v. Ag. Rep. 1858, p. 261. — 1863, p. 579. — 1865, p. 91. destroys bark or scale insects on
 pine. (Aspidictus punifoliae (Horn.) 1866, p. 39. destroys bark lice. see Chilocorus
bivulvatus §§. XXV/36. (Col)
- Church bug, (Hol) see Microopus. (Blasius) Leucopterus. §§. II/16.17. (Hol)
- Chinese method of taking honey. Ag. Rep. 1860, p. 91.
- Chion (garganicum). canetis. (Col) — Richardson (Rathvon) Ag. Rep. 1861, p. 674. *L. eat*
 { wood of Hickory, Apple, & is said to have even eaten through lead. see Chion
canetis §§. X/3. (Col)
- Chloactis. — seripennis. (Orth) Ag. Rep. (Rathvon) 1862, p. 387. feed grass & herbage, see
 { Stenobothrus. §§. VI/15. (Orth) (Some resemble immature specimens.)
- Chlorops. ? (Dip) *L. injures* grain wheat, Barley, rye. & Ag. Rep. 1872, p. 184. — in Europe injures
 { grain by destroying the central shoot. 1872, p. 134. (Dip)
- Chlorops fulv. Europe (Dip) injures Barley in Northern Europe to the amount of \$100,000 in
 { one year the larvae live in the grain causing it to shrivel up. Ag. Rep. 1872, p. 134 (Dip)
- Chlorops taeniopus. (Ew) (Dip) *L. injures* wheat, & Barley, causing a swelling of the joint,
 { called "Gout" & is destroyed by Celinius niger. (Hym) Chlorops taeniopus. §§. X/1. (Hym)
- Chlorops. *lays* in Europe is destroyed by a Platomalus (Hym)
- Chrysobothris calcarata. — (Col) — see C. florivola (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 florivola §§. XI/7. (Col) (food, also, wood of white oak)
- Chrysobothris dentipes (Col) *L. feed* in Oak wood, "Tooth legged Buprestis" Ag. Rep. 1868, p. 92
 { §§. XI/18. (Col)
- Chrysobothris femoralis. (Col) Ag. Rep. 1861, p. 608. m.m. Apple Buprestis, or thick legged Buprestis.
 { Ag. Rep. (Uhler) 1860, p. 319. *L. bor* into the wood of Apple. — with remedies &
 { 1866, p. 42. in Oak & apple wood & is destroyed by a Chalcis. (Hym) — 1868, p. 92 fig. 97
 { in wood of Apple, peach, & oak. (Thick legged Buprestis. — 1870, p. 67. Chrysobothris
femoralis §§. Sur C/5. XI/15 as var Alabama. & XVI/12. (Col)
- Chrysobothris Harrisii. (Col) *L. feed* in White pine wood. Ag. Rep. 1868, p. 92. §§. XXXIII/33. (Col)
 " in Maple (Col) in Maple Ag. Rep. 1870, p. 67. Remedy soap. (Col)
- fulviquintata. (Col) see Melanophila, Ag. Rep. 1868, p. 97. *L. prob* feed in wood of white pine
 { §§. XI/9. (Col)
- Chrysomela (Col) Europe. *L. feed* on foliage of trees shrubs, & herbage. & Ag. Rep. 1855, p. 91. — 1863, p. 308 (Col)
- Chrysomela decimlineata (Col) British see Doryphora 10. lineata. or the Colorado Potatoes bug.
 { 10 lined sp. German &
- Chrysope. or Lace wing fly. (New) Larvae feed on Aphides, or plant lice. & Ag. Rep. 1864, p. 555
 { example. §§. V/3. (New) (also 1866, p. 40.)
- Chrysopea. (New) *L. destroy* the eggs of Anthonomyia ceparum. (Eastern Onion fly) (Ag. Rep. 1872, p. 133, New)
- Chrysopea. plumivanda. ? once mention. Ag. Rep. 1870, p. 514. once mention. (New)
- Chrysope. (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. — *Ins sting* or bite
 { horses & it sucks their blood. Ag. Rep. 1872, p. 129. fig. 16. example Chrysopea irritata
§§. XI/18. (Dip.)

- Cicada*? (Horn) said to produce the manna of the druggists, by puncturing the flowering oak.
 Ag. Rep. 1866, p. 38. — 1864 p. 43. M. m. (Horn)
- Cicada*. or harvest fly, erroneously called Locust. Ag. Rep. (Rathvon) 1862, p. 386. — is destroyed
 & succumb to its nest, or hole, by a hornet, (*Stirax Speciosus*, Hyem. 11/19 JG) to serve as food
 for its larvae, Ag. Rep. 1866, p. 43. — It is also destroyed by *Anabrus simplex*,
 or the Utah cricket, 1871, p. 79, fig. 13. (Orth.) JG, XIV/5. —
- Cicada*. The Yolk of eggs of poultry are said to be nearly white, when fed on Cicadas — Ag. Rep. 1867, p. 70.
 — 1862, p. 35. preservation as specimens. — 1869 p. 544. good history in V. Mo. Ag. Rep.
 — 1872, p. 123 in Va. m. m. — 1855, p. 70. — 1862, p. 386. 17 years. m. m. (Orth.)
- Cicada*. *pruinosa* (Orth.) common Harvest fly, vulgarly called Locust. Lar. live 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 upon roots. Ag. Rep. 1876, p. 1. — JG V/51. 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. pruinosa*, & it injures Fruit, & forest trees, by making incisions in the
 twigs, in which to deposit its eggs. — 1864, p. 557. — 1862, p. 386. — 1866, p. 29.
 1867, p. 67, fig. with full article. — 1868, p. 456. — 1876, fig. 2. L. — JG V/50. Horn
- Cicindela* (Col) L & S destroy other insects. Ag. Rep. 1854, p. 62. habits predaceous. 1866, p. 79.
- Cicindelidae*. (Col) food, habits, &c. Ag. Rep. 1861, p. 589. — 1863 p. 274. — 1866, p. 91. — 1862, p. 79, 114, (Col)
- Example, *Cicindela vulgaris*. JG V/19. (Col)
- Cicindela dorsalis*. (Col) Ag. Rep. (Rathvon) 1861, p. 590. destroys other insects. frequents coasts of bays.
 Its seed, color almost white, or very light. JG V/15. (Col)
- * *punctulata*. (Col) habits predaceous, feeding on other insects, Ag. Rep. 1861, p. 590. JG V/16. (Col)
 - * *sexguttata*. (Col) Ag. Rep. (Rathvon) 1861, p. 590. destroys insects. JG V/20
 - * *vulgaris*. (Col) Ag. Rep. (Rathvon) 1861, p. 589, fig. 1. " " 1868, p. 79, fig. 1. JG V/19. (Col)
 - " ? (Col) Ag. Rep. 1854, p. 62, pl. 8. destroys insects in Cotton fields. (Col)
 - * Larva 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 pass over their burrows, or fall into it. see *Tetrachia (Cicindela) virginica*
 ~ JG V/22, 23, 24. (Col)
- Conax*. *lectularius*, see *Acanthia*. (Col) common bed bug. Ag. Rep. 1865, p. 127, fig. 3 & somewhat magnified
 JG III/9. (Col) (see also *Amnicidae* 1868/316)
- Cistela ceramboides* (Col) Europe L. live in oak. Ag. Rep. 1866 p. 101. Col
- Cistela senicæ*. (Col) Ins frequents flowers. Ag. Rep. 1866 p. 101, fig. 165. see *Cytilis*, JG, XIV/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. 82, 8, 101. (Col)
- Clastoptera*. (*Cercopus*) *obtusus* (Horn) Ag. Rep. 1876 fig. 29. frequents Black Alder JG V/118. (Horn)
- Clastoptera* (*Crocopus*) *proteus*. (Horn) sucks sap of plants. — (by some called spittle insect). Ag. Rep.
 1869, p. 207. — 1876, fig. 28. frequents cranberry & blueberry. *Clastoptera* JG V/116 (Horn)
- Cleonymus chisocampa*. (Horn) destroys Calcepillons of *Cleocampa* (decipiens) americana (Col)
 Ag. Rep. 1866 p. 42. (Horn)
- Clerid*. (Col) Ag. Rep. 1868, p. 97, 8, 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 of wood eating insects. 1861, p. 98. — 1866, p. 39. — 1865, p. 97, 109, 114, 207
- Clerus*. (Col) frequent flowers feeding on honey L. feed upon the larvae of bees & are very
 destructive. Ag. Rep. 1868, p. 97, 8, 106.
- Clerus alvearius* (Col) Europe destroy mason bees (Horn) Ag. Rep. 1866 p. 97, 114. JG law A 35 (Col)
- " *apivorus* " " " hive bees " " " " "
- Clerus*. (*Thamesinus*) *formicarius*. Eu (Col) L. feed on the grubs of wood boring insects. in Eu
 Ag. Rep. 1868 p. 97. JG law.

- Coccus citricola. Hom. see Aspidiotus. injures foliage of Orange Lemon & see Aspidiotus. IS PLV (Hom)
- Coccus conchiformis. see Aspidiotus. Appetitive shell bark louse. — scale insect. or Oyster shell bark louse. injures Apples. Apricot. Elac. 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 biveinervis. Col. Ag. Rep. 1863. p. 579.
- Coccus harrisii (Hom) native Apple bark louse or scale insect. (Hom) Ag. Rep. 1867. fig. 50. see Aspidiotus harrisii IS III/7. Hom.
- Coccus hesperidum (Hom) injures foliage of Orange, & Lemon trees. Ag. Rep. 1876. fig. 53.
 { see Secanium hesperidum. IS. pl. VI. (Hom)
- Coccus ilicis (Hom) — see Ag. Rep. 1855. p. 6. (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 tumour like mamma by puncturing Jamaruk trees. near Mount Sinai. & elsewhere. Ag. Rep. 1870. p. 184. (Hom)
- Coccus pericortis. (Hom) Ag. Rep. 1876. fig. 52 a white scale on tuags &c. 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 (P.S.) (Hom) is destroyed by Chilocorus biveinervis. (Col. Ag. Rep. 1863. p. 579. IS. XXV/56)
 { Ag. Rep. 1865. p. 91. see Aspidiotus pinifoliae IS III/23. (Hom)
- Coccus polonicus (Eu.) Hom) feeds on Conygonum. & 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 Formosa. Fla. (Hom) IS III/24. +
- Cockchafer. see Melolontha. Sachnotorna. Phyllophaga. &c.
- Cockroach. see Blatta. Ectobius. Paniphaneta. &c. (Orth)
- " destroyed by Sphex. Schneumon. & Eulophus. (Hym) Ag. Rep. 1862. p. 376. (Rathvon) by excoites
 { (Orth) 1862. p. 355. & poisoned by Phytolacca decandra. (Poke root) Ag. Rep. 1873. p. 157.
 { for other remedies see p. 1866. 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/3. S LXVIII/7. 8. &c.
- Colletes (Jassid) subfasciata. (Hom) frequents black alder. and blackberry. Ag. Rep. 1876. fig. 3.
 { see Colletes. IS. II/36. (Hom)
- Colletes iniqualis (Col) injures the fruit of the grape vine. by eating into it. Ag. Rep. 1867. p. 72.
 { 1870 p. 70 fig. 12. see Megacetes IS XXXVI/12. (Col)
- x Colinus niger (Hym) destroys Chlorops tenuifolius. a fly causing a swelling in the joint of wheat.
 { barley. called gout. (Europe). (Dip) See 1872. p. 134. (Hym)
- Caenocara oculata. (Col) Dorcotoma similis Say. Sym. Im found on fungi. puff balls. Ag. Rep. 1868. p. 79.
 { see Caenocara oculata IS XXXIII/8. (Col)
- Caenocarus niger. (Hym) destroys the seed of Aegonia Trochilium apiculiformis. the currant cover Sep
 { Ag. Rep. 1866. p. 41. (Hym). (Aegonia Trochiliformis. Sep. IS. XLIII/1. (Sep)
- Colaspis lapidis strigosa of Rehn (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)
- Colastes semitectus. (Col) in decayed cotton bolls. "probably fed on minute insects." IS IV/12. (Col)
 { " " in Cotton bolls, & decaying ears of maize. Ag. Rep. 1868. p. 83. fig. 30. " " " "
- Coloptera. (or beetles) Ag. Rep. 1864. p. 216. — 1861. p. 588. — 1862. p. 572. — 1863. p. 274.
 { 1865. p. 89. — 1866. p. 164. 168. 306. — 1869. p. 266. see Sisal hemp. — 1872. p. 127. (Col)
- x Colopt? an insect (order & fam? not mentioned) feeds upon young leaves of Juncquen. or Sisal
 { hemp of Yucatan. — (placed provisionally amongst Coloptera), as one is mentioned
 { in the same article. in Ag. Rep. 1869. p. 266. in "the enemies of the Sisal hemp"
 { IS Colong.
- Coloptera remus Ag. Rep. 1863. p. 565

Colias (Lep.) Caterpillars feed on Clover, Ag. Rep., 1864, p. 578. example Colias Philodice. JG.

See 117. In XXXII/1. G. 11. Hill war. J/S (Lep.)

Collops quadrimaculatus (Col) Ino frequens flowers, Ag. Rep. 1868, p. 96, fig. 131. JG. XII/25.

Colorado potato bug (properly beetle, or ten lined sparrowman) see Chrysomelae (Chrysomelidae)

decem lineata. feeds on Potatoes. Solanum. Egg plant, &c. see Ag. Rep. 1866, p. 43.
1871, p. 74, fig. 4. Origin history, in creeds & remedies. 1863, p. 578 - 1864, p. 571. - 1866, p. 27.
1867, p. 63. - 1866, p. 79, fig. 6. 43 & 501. - 1869, p. 536. - 1874, p. 65, 75 - 1874, 76. - 1872, p. 120, 121. - 1874, 74

Colorado potato beetle - false, see Chrysomela (Doryphora) juncta (Col) Ag. Rep. 1874, p. 123, fig. 23.
1874, 122. - 1875, p. 118. 130 & 85. see Chrysomela (Doryphora) 10 lineata JG. XXII/12 (Col)

Colydiidae (Col) found, under bark, in earth, or fungi. Ag. Rep. 1868, p. 63, 105. example Colydium.
lineola. JG. XXII/4 (Col)

Colydium, see also Actinonum. Ag. Rep. 1868, p. 82. (Col)

Columbarcher gnath. (Lep.) see Simulium columbarcherense. Ag. Rep. 1872, p. 128. I killed horses, Cattle.
see in Hungary by their poisonous bites, see Simulium. JG. I, p. A. 36. In. XII/5. (Lep)

Comptosia (Andropis) respertina (Col) I injure foliage of Sweet brier, & rose. Ag. Rep. 1868.
p. 87, fig. 68. see Derisio respertina. JG. IX/17. (Col)

Conocerhalus, virgiger (Orth) mere mention. Ag. Rep. 1871, p. 80. JG. IV/12. (Orth)

Conorhous (sanguinea) variegata (Hes) big bed bug. Insect stings or pierces flesh of man & kind.
also astroyis gemine bed bugs. (Acanthia laticornis) (Hes) JG. p. III, fig. 9. 2. Ag. Rep. 1875, p. 127.

see Conorhous variegatus. 1875, p. 131. fig. 18. & JG. III/19. (Hes)

Conotrachelus (Olychnaceus) nemophor (Col) or Plum weevil, or Curculio. Ag. Rep. 1862, p. 84, fig. 7.
1855, p. 211. - Ag. Rep. (Wheeler) 1860, p. 314, makes small crescent shaped incisions, in fruit,

in which to deposit its egg, which hatching into a small footless maggot, like larvae.
forming a small head, eats its way to the stone, & destroys the fruit, & is exceedingly
injurious to plum orchards. - Ag. Rep. (Rathwood) 1861, p. 605, fig. 87. plum weevil.
injures fruit of plum, apple, & cherry. - 1862, p. 570. injures plum, nectarine, peach
apple, pear, cherry, quince & walnut, & remedies recommended - 1868, p. 490. Conotrachelus
shells resemble in destructive habits & manner of injury, resembles somewhat Chrychites
cupreus 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. &
1871, p. 374. 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.

forming 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.

(Poley). - 1871, p. 47. remedies suggested. & parasites mentioned. Sigalphus curculionis
(Hym) - & Ponirion conotracheli (Hym). - 1872, p. 123. remedies, dust, flowers
with road dust, & sulphur. - burn leather? - The Plum weevil said to be
destroyed by a Hymenopterous insect. Niphelodes lundeyi (Evagoras viridis) JG. XIV/5 (Col)

Coprophora cornuta. Orth. Hesh. Para. mere mention. Ag. Rep. 1871, p. 81. (Orth)

" " gracilis (Orth) Hesh. Nepo. Maranon. " " " " " "

Coprophora (Copiphora) micronata (Orth) new species taken alive in the greenhouse of the
Department of Ag. Ag. Rep. 1871, p. 80, fig. 14. JG. XIII/14

Copris (Col.) (by some called Stumble bug) Ag. Rep. 1868, p. 307.

injures carnation (Col) Ag. Rep. (Rathwood) 1861, p. 600, fig. 38. form balls of excrement in which
to deposit eggs. & feed, on animal excrement. JG. XIII/17 (Col)

Coprocera (Hes) plant bugs. Ag. Rep. 1868, p. 315. (Hes)

Coraus (Donocorus) tristis (Hes) squash bug. injure squashes & other cucurbitaceae by sucking
sap, & blighting plants. Ag. Rep. 1870, p. 79. - 1875, p. 122, fig. 18. see Amasus JG. III/14 (Hes)

Covinelema (Hes) injures grapes cherries & raspberries & other fruits see Ag. Rep.
1875, p. 116, fig. 1. example Covinelema atra. JG. IX/16. Hes. JG. lower

- Corticaria fumorata* (Hbst.) eggs used as food for mankind, Ag. Rep. 1866, p. 33. habitus aequalis. (Hbst.)
 " " or mercenaria (Hbst.) Hab. Mexico. Ag. Rep. 1875 p. 134 aequalis in habitis. & the eggs when made into cakes under the name of *Huante*, used by the Mexicans as an article of food. (Hbst.)
Corticaria interrupta (Hbst.) aequalis. Ag. Rep. 1875, p. 61. *distroy* other insects frequently water. -
 S.S. V/7. (Hbst.)
- Corn. (Indian) see *Maire*, & sometimes used in a general sense as when speaking of wheat. (Rep.)
 Corn moth. (grain) Lep. - *Hoff* or grain moth. see *Tinea granella* Ag. Rep. 1855, p. 536, remedy 1847 p. 332. & erroneously named *Heliothis* by D. J. B. Ag. Rep. 1855 p. 98 p. 114 fig. 3. S.S. C/12. (Lep.)
 Corn worm. (Lep.) injures maize, & cotton bolls, & known to the planters also as the Boll worm.
 of Cotton. Ag. Rep. 1852, p. 69, pl. 4. *Heliothis armigera*. - 1866, p. 554. Remedies.
Heliothis armigera (Syn *unobrosus*) 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* S.S. I/13, XI/21. I. S.S. 2/2. (Lep.)
- Corynetes (Cec) mere mention Ag. Rep. 1863, p. 97. see also *Tecrobia*
- Corynetes, (*Tecrobia*) *rufipes* (Cec) feeds on Cheese Ag. Rep. 1866 p. 97, fig. 143. *Corynetes*. S.S. XII/23. (Cec.)
 Cassus, (Lep) Larva used as food for mankind. Ag. Rep. 1866 p. 38. (Lep.)
- Colacra, (*Onoclea*) *lanigera*. (Cec) mostly *Onoclea*. (Why some as *Goleusmilla* beetle). It eats roots
 & I feeds on foliage of Forest Fruit trees Elm, pear, Poplar, Hackberry, Oak, Yellow, &c
 Ag. Rep. (Lithon) 1860, p. 315, 349. & 1868, p. 89, fig. 77. *Colacra lanigera* S.S. VII/17. (Cec.)
- Cotinis *Allothrina utida* (Cec) June bug of the middle states & Sig. eater of Florida. insects
 feed on the sweet saps of maple beech & other trees also eat into ripe fruits figs &c
 Ag. Rep. 1868 p. 94 fig. 82. *Allothrina*. S.S. VII/14. (Cec.)
- Cotton caterpillar, or Army worm. Lep. see *Anomis xyloanae*, or later, *Aletia orgyllacea*. 1870 role
 also injures foliage of Cotton. *Aletia orgyllacea* S.S. XXIV/4. XIX/8. (Lep.)
- Cotton, arctic, of D. J. B. Lep. is closely allied to *Arctia lator* Ag. Rep. 1855 p. 54 fig. 2, p. 111
 eats foliage of Cotton plants.
- Cotton, blight. a disease of Cotton in certain lands in Mississippi, affecting the whole plant
 by injuring the centre portion of the stalk caused probably by the root-kennings
 into cold wet 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. 1856 p. 39. - 1855 p. 64 to 115.
- Cotton, louse. (Hom) see *Aphis gossypii*. suck sap of plant. Ag. Rep. 1855, p. 68, p. 111, fig. 2. S.S. XI/11 (Hom)
- Cotton, stainer or Red bug (Hbst) see *Pyrausta nictitans* (*Dysdercus*) *sulcivellus* (cotton stainer) stains
 cotton, when ripe on the boll, so as to damage its sale or manufacture. Ag. Rep. 1855 p. 272
 1875, p. 124, fig. 99. *Dysdercus sutinellus*. S.S. I/11 (Hbst)
- Cotton by free labor. by Mel. Sanctor. Helena, Miss. - wood cut of cotton caterpillar taken from flowers
 Report but entirely wrong as it represents a true *Geometra* figured in Rep. 1864 p. 90.
- Coupe bougeon French local name for *Rhynchulus latialis*, Ag. Rep. 1865 p. 59. (Cec.)
- *Craneberry insects injurious to the same, & fruit. by Wm. Fish. Ag. Rep. 1869 p. 207.
- " (Cec) found injuring the fruit. Ag. Rep. 1870 p. 86, fig. 51. (caterpillar only fig. 51) (Lep.)
 " culture. by J. A. P. White, Insect Remedies, Ag. Rep. 1870 p. 326.
 " fly or gnat. (Dip) *Acadomyia* injures the minute tender leaves at the cuts of lungs. Ag. Rep. 1869 p. 207.
 " stem fly. *Prostiphora idemildam* injures foliage. Ag. Rep. 1869 p. 207.
 " leaf hopper. *Chaloptera proteus* injures vines somewhat Ag. Rep. 1869 p. 207. S.S. VI/4 (Hom.)
 " weevil. *Anthonomus sativatus* (Cec) injures blossoms & buds. Ag. Rep. 1870, p. 207. (Cec.)
 " worm or caterpillar injures plants.
 " fine worm, or Craneberry worm. Lep. *Anchylopera vacciniana* Ag. Rep. 1869 p. 207.
 as fine worm. - 1870 p. 85 fig. 50. S.S. C/1. (Lep.)
- Crane fly. (Ev) (Dip) see *Sipula alarosa*. feeds on roots of grass &c S.S. LXXVII/10. IX/24. (Dip.)
- Cratonychia*. *brunneicollis* ? (Cec) hab. *Melanotus communis*. Ag. Rep. (Rathvon) 1861, p. 600.
 & fig. 59. 60. *Melanotus communis*. S.S. X/4. S.S. over.

- Cucumber flea beetle (Col) eat holes in young plants of cucumbers, Volves Cucurbitaceae? Habitica
 for Crepidodera fuscescens (Syn) see Epitrix cucumeris. IS xiv/2 (Col)
- Cucumber moth, see Phaenocarpa nivalis (Lep) injures Melon, squash, cucumber fruit by boring holes
 in them. Feeding on the inside is 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. Larva on
 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 "Bellybugs" history & remedies Ag Rep 1872
 p 125. fig 9. IS i/122. (Lep)
- Culicidae. Ag Rep 1868 p 317.
- Cybes concolor. (Cicada of Say) (Col). I found under bark. frequents old frame houses. Ag Rep 1868, p 172, fig 148.
IS xiii/13. Col.
- Cyrtocidae. (Col) Ag Rep p 78. more mention. (Col)
- Cyrtus. { on plum weevil (Col) Ag Rep 1861 p 303. Col. See also Conotrachelus Rhynchaenus &
 see Conotrachelus rennhar for habits history remedies? IS xv/5 Col.
- Cyrtus, catcher, (new) machine for catching Cyrtus. Ag Rep 1872 p 451. invented by F. Hull. (Col) Am Ent 16720.
- Cyrtus. { various 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)
- Cyrtocoridae. (Col) (Rathvon) Ag Rep 1861, p 603. — 1865, 89 — 1868 p. 305. &. (Col)
- Current borer. (Lep). L. borers in pith of stalks & roots, of currant bushes. Ulysses Trochilium
 { typical formis. Remedies. Ag Rep 1864, p 520. — 1866, & st. Algeria. IS xlviii/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 Psittiphora grossulariana
- Current or Gooseberry caterpillar, or moth. (Lep) L. eats foliage. see Ellopius (Abnaxia) ribourae.
 { IS xviii/14. I Lvi/5. lxxvii/24. IS. Ell. p. 1. Lep.
- Cursonia. Orth Runners. Cockroaches &. 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 274. — 1864, p 553. remedies IS Examples IS xix/11. 3. lvi/8. u. 16. 13. &
- " " { of onion. see Agrotis.
- Cyrtone notivinae. (Col) Locust borer. see also syn. Clytus pictus. C flexuosus. Arrhopalus pictus
 { A. robiniae & L. injures wood of Locust. as Cyrtone IS xviii/25.
- Cymatodora. (Villus) und. elata. (Col.) hibernata under bark of trees. Ag Rep 1868, p 97, fig 133.
 { IS xii/20. xlv/44. (Col).
- Cynipidae. (Hym) Ag Rep 1863. p 276. (Hym)
- Cynips peduncul. or Fig wasp. (Hym) and fertilizes 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. &. Ag Rep
 { 1855, p. lii
- Cynips quercifolia. (Hym) Diplolepis gallae tinctoria. (Hym) which produces the Aleppo galls
 { of commerce. feeds on the Oak, & is used for dyeing. Ag Rep 1866, p 35. (Hym)
- Cynips. { their 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)
- Cyphos glaterina. see Pithecoctylus (Col) feeds probably on Oak. Ag Rep 1868, p 94, & 112. &
 { fig. 120 Pithecoctylus glaterina. IS xxxii/28. (Col) 39 lower.

Cyphon pallidus (Col) Europe. hibernates on the stems of reeds. Ag Rep. 1868, p. 96. (Col.)
Cyphon (Col) Ix. frequens flowers. Ag. Rep. 1868 p. 95.
Cyrtocantharis (Orth.) see *icridulum americanum*, (Orth.) JG. 1/15 (Col.)
Cyrtophylax concavus (Orth.) Kalydis. feeds on foliage of trees. Ag. Rep. 1874 p. 141. fig 126. (Orth.)

JG. 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. — Shomer. 1870 p. 87. fig. 56. gall. JG. plate 10, fig 26 see in Diptera. *Dactylospheera* see *Pomphigus bellulicæ* JG. 10 fig 26. (Hom)

Laddy long legs of Europe. Ag. Rep. 1872 p. 128 is *Styruia olivacea*. Dip JG. X/27. L. f.
 " " of U.S. is *Phalangium a spinosum*
 Darning needles. Devils. New. *Sibellulidae* or dragon flies. Ag. Rep. 1862 p. 545. New. Ex. JG. 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. 144. Ex. *Ladiscolor* JG. 11/21 (Dip.)
Dasytes (Col) see also *Odontomyx*. Ag. Rep. 1868 p. 94. fig 118. Ex. *Odontomyx* *Frondilis* JG. XX/17 (Col.)
Dasytes (Col) Europe injures raspberries. Ag. Rep. 1865 p. 94. (Col.)
Dasytes flavipes (Col) Europe. said to destroy *Bostimichidae*? Ag. Rep. 1865 p. 91. (Col.)
 " niger (Col) Europe. cuts off blossoms of raspberry. Ag. Rep. 1868 p. 114. (Col.)

Day fly (New) see *Ephemera*. ex. *Palirigenia limbata*. exceeding abundant in Washington
 {DC. & sometimes called May fly. JG. V/15. New. (May fly Syn)

Death watch. (Col) see *Anobium tuberculatum* & *strivatorum* Ag. Rep. 1868 p. 99. (Col.)
 Decortication. recommended for the destruction of wood boring insects. by Mr Eugene Prudent.
 { Ag. Rep. 1863 p. 92.

Deopoea *Utchusa bella* (Lep) or the beautiful *Diopoea*. I said to feed on Lupines, but found feeding in hole of *Crotalaria*. or rattle box. on the seeds. Ag. Rep. 1867 p. 72. { 1878 p. 80. fig 41. *Utchusa bella*. JG. LI, 32. XXXVI/5 (Lep)

Delphax arvensis (Hom) Ag. Rep. 1876. no fig. (Hom)
Delphax carinata (Hom) Ag. Rep. 1876 fig 6. found on grass & frequents young junces. (Hew)
 { *Delphax tricornata*. JG. 11/23 3. (Hom)

Dimorpha French name for the Dragon fly. *Sibellula*. (New) Ag. Rep. 1866 p. 40. (New)
Dinorthis canadensis (Col) *Pyrrochroa dendroidea* Ag. Rep. 1868 p. 101. *abundoides*. JG. XXXVI/4. (Col.)
Dormestidae (Col) destroy specimens of nat Hist. skins bones. fur. feathers took almost all animal
 { remains & are exceedingly destructive in museums of nat hist. (Col) Ag. Rep. 1868 p. 84. (Col) 1861 p. 396. (Col)

Dormestes caninus (Col) see *C. nubilis*. destructive to animal substances. Ex. *C. nubilis*. JG. V/17. (Col.)
Dormestes canarius (Col) Bacon Beetle. Col. Ag. Rep. 1856 p. 29. Ag. Rep. Bathorn. 1861 p. 395. { ngs 22, 23, 24 destroys Books peltry meat bread horns hoops. Col. nat hist almost insects 1863 p. 569. — Bacon. Jans. 95 — 1868 p. 84 fig 49. JG. V/27. Lar A/23.

Dormestes maculatus. syn. *nubilis*. see below
Dormestes nubilis. *maculatus*. (Col) injures skins cork. cell of nat Hist Ent 9^c see *Dormestes*
 " *maculatus*. JG. XXXIV/14. (Col.) (Ag. Rep. 1868 p. 47. fig 48.)

Dorobrachys (Col) Bathorn Ag. Rep. 1861 p. 613. more mentioned. (Col.)
Dorodentatus (Col) frequent fungus. under bark. Ag. Rep. 1868 p. 84. m. m. Ex. *Dorodentes maculatus*.
 { JG. XXXII/72. V/1.

Dosmia maculata. (Lep) Lar injure foliage of the grape. Ag. Rep. 1854 p. 78 pl. 4. JG. XXV/4 (Lep.)
Dosmoscus cranus. *pallidus*. (Lep) Bathorn. 1861 Ag. Rep. p. 628. fig 85. L. in Elder. Toros in putr.
 { *D. pallidus*. JG. XXV/3. (Col.)

Devils horse see *Prionoxystus cristatus*. Ag. Rep. 1875. fig 41. destroys other insects. (See also *Reduncus novemarius* *Prionoxystus cristatus* III/14. (Hob.)

Devils darning needles. see *Sibellula* & *Agrom. civile* JG. 11/10. (New) JG lower
 x *Diabrotica quadricompunctata* see *Faleruca* Col. Dep. Ag. 1854 p. 60. 1855 p. 90 p. VII. fig 1 *Diabrotica*
 JG. XXV/24. (Col)

- Diabrotica (Haltica) vittata* (Col) Striped cucumber beetle. Remedies. Ag Rep 1863 p 577. C^o
 { S. bank of cucumber. ♂ & ♀ frequently hollow cut lower part of stems. I feeds on foliage of
 Cucumber. Melon, Squash & destroy blossoms of Bar. cherry &c - habits & remedies Ag. Rep
 1870. p. 74. fig 28. on Squashes & Pumpkins, - remedy after first leave some fruits to collect
 the insects & then destroy them. Diabrotica. IS. IX/40. Ins XXIV/3.
- Daphneromera* (Syn Spectrum & Phasma) Emorata (Orth) feed on buds, shoots & foliage of Sassafras.
 { ♂ of various trees & shrubs. Ag. Rep 1874. p. 135. fig 6. Insects resemble twigs, -
Daphneromera. IS. IX/7 (Orth).
- Diapria agromyzae*. (Hym) destroys *Agromyza tritici*. a fly injuring wheat. Ag Rep. 1872. p. 134. (Hym)
- Nicaelus dilatatus*. (Col) (Rathvon) Ag Rep. 1861 p. 573. fig 10. IS. XLIV/23 (Col)
- Dicorca (Stenurus) divanata* (Col) (Rathvon) Ag Rep. 1861. p. 607. fig 56. I. eat. wood of Apple.
 { Beach, Cherry, Peach Plum. wild & Cult? &c - 1868. p. 91. fig 91. & 1870. p. 67. fig 6. - remedy -
Dicorca. IS. XI/5 (Col)
- Dicorca lundevi* (Col) Lar. live in wood of Hickory. Ag. Rep. 1868. p. 91. IS. XI/11 (Col)
- Dicorca punctulata*. (Col) I. eat wood of pitch pine. Ag. Rep. 1868 p. 91. IS. XI/17 (Col)
- Dichelomycha hexagona*. *longatula* (Col) I feeds on foliage of huckle. Ag Rep. 1868 p. 87.
 { see D. linearis. IS. IX/13 (Col)
- Dichelomycha linearis*. see above. (just linear fork claw?)
- Dichelomycha subvittata* (Linear fork claw?) Ins. feeds on foliage of huckle. Ag Rep. 1868. p. 87 (Col)
- Diedrocephala (Stegionia) quadrivittata* (Hom) frequents Blackberry Ag Rep 1876 fig 34
 { see Diedrocephala coccinea IS. V 53. & 11/27. (Hom)
- Dineutes (Synusis) 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/111 (Col)
- Diplodus luvius* (*Eragonius aeneus*) (HGT) said to destroy the plum weevil, or Cuniculus
 { Conotrachelus nemophilus and other insects. Ag. Rep. 1875. p. 181. fig 50. -
Diplodus luvius. IS. IX/19 (HGT)
- Diphlolepis galleae tinctoria* (Hym) (Eal. Asia) see also *Cynips quercifolia*. Ag. Rep. 1866. p. 35.
 { produces the "Alpho galls" used in dyeing. &c (Hym)
- Diphlosis* (Error) *Cecidomyia destructor*. Ag. Rep. 1872. p. 125. fig 10. IS. I/89. (Dip)
- Diphlosis tritici*. error in Rep as *destructor*. Ag. Rep. 1872. p. 126. fig 11. IS. I/10. 11 (Dip)
- Diphlosis (Cecidomyia) tritici* (Dip) Wheat midge. Red weevil. injured grain of wheat, barley.
 { Ryge. Grass. &c Ag. Rep. 1868. p. 562. remedies. See also under Cecidomyia. - 1866 p. 42.
 Wheat midge destroyed by Sachymorus calibrator Hym - 1866 p. 45 destroyed by
 Thrips (Orth) - 1867 p. 71 destroyed by Mormidea typhaxa. (HGT)
 1872 p. 126. fig 11. Error in Rep as Cecidomyia destructor. Diphlosis tritici. IS. I/10. 11 (Dip)
- Diphlosis* (*Cecidomyia*) *tritici* (Dip) Wheat midge. Red weevil. Habus. Testony. remedies. Parasites
 { Thrips (Orth) - Coccinella. (Col) - Callimene. Macroglenes. Platygasler. (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
Diphlosis tritici. IS. I/10. 11 (Dip)
- Diploptaxis (Metolontha) sordida* (Col) I. eat foliage of Forest & fruit trees. Ag. Rep 1868 p. 87.
 { fig 66. Diploptaxis. IS. IX/3. (Col)
- Diptera*. Remedies Ag. Rep. 1864. p. 561.
 " predaceous. " p. 44
 " notes on. Remedies &c Ag. Rep 1863 p. 274 - 1868 p. 316 - 1872 p. 123. 124. Remedies
- Diroma onenata* (Col) Europe. said to destroy Botrichus. 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. I. feed on wood of Mulberry. IS. XI/5. (Col)
- + *Dichelomycha albicollis*. (Col) white necked pine beetle. I feeds on fol. of white pine. Ag. Rep. 1868. p. 87.
IS. IX/3 (Col)

Loricatomia similis (Col) see *Carocera*. Ag Rep. 1868, p. 98. SS XXXVIII. (Col)
For beetles, see *Melolontha* *Lachnosterna*. &c. (Col)

Doryphora, *Corysoma* (*Paucicornis*) *decombinata*. Ten lined sparrow, western or Colorado potato beetle, or leaf. Ag. Rep. 1868, p. 573. — remedies. — 1866, p. 54. in m. — 1866 p. 27, remedy. — 1867, p. 53. full article and figures, & is destroyed by *Melyras cinctus*, *Lebia grandis*. &c. — 1868, p. 79. fig. 6. destroyed by *Lebia grandis* (Col) — 1868 p. 434. 561. experiments for destroying with *Parus* *graculus*. — 1869, p. 536. mere mention, 1870 p. 65. destroyed by larva of *Tetracha virginica* (Col) — 1870 p. 75. L feeds on foliage of *Potato*. *Sonata*. egg plants. Horse nettle. Jamestown: *umb. ground cherry*. long article. poisoning with *pois* *green* recommended. — 1871, p. 74 fig. 4. Origin history, habits, remedies, &c. Insect enemies destroying it. plant bugs. *Anna*, *Stenopacton* &c. (Holt) *Lebia* & *coccinella* (Col) & a *Tachina* (Dip.) — 1872, p. 120. Localities injured. 1873, p. 154. first occurrence in Washington. DC. & eggs carried by a *Coccinella*. 1874, p. 123 fig. 1. 'habits, remedies, localities & parasites, destroying it *Hippodamia convergens*, *maculata*, & *quinque notata*, *Coccinella murda*, & *novem notata*. *Tetracha virginica*, *Carosoma calidum*, *Staphylinus caliginosus*, *Pygmaeus elongatus*, *Lebia grandis*, (all Coleoptera) *Anna spinosa*, & *grandis*. *Melyras* (*Stenopacton*) *cinctus* *Euschistus*, *junctipes*. *Stenotus*, *Limbricatus* (*Heteroptera*) — *Tachina doryphorae* — *Siphona*. — *Stelidius submarginatus* (*Stymonobola*) — *Epicauta pennsylvanica* *ana macrobasis*, *Fabricii* (Col) — 1875 destroyed by *Stenotus* *limbricatus* *podalis cyricus*, *Melyras cinctus*, &c. (Dart) *Chrysomela*, *decombinata*, SS XXIX/32 (Col)

Doryphora? (Col) destroying potatoe, in Cal. 1875, p. 154.

Doryphora, *intermedia* *Macaron* *St. decombinata*. ? *D. juncta*. Ag. Rep. 1874 p. 123 fig. 2. SS XXIX/33 (Col)

Doryphora *viridis* *Chrysomela* *Polygonum* (Col) Ag. Rep. 1867, p. 53. fig. 1. feeds on Horse nettle. *Solanum carolinense*. *persea*, & *any plants*. — 1870, p. 76, fig. 30. — 1871, p. 74, fig. 5. as the false Colorado potato beetle, feeds on *Solanum involucre*, injures the potatoe, somewhat & eats Egg plants: 1873, p. 153. Larva, described, — 1874 p. 123 fig. 2. *Chrysomela* *viridis*. SS XXIX/34 (Col)

Dorthesia cataphracta (Horn) Ag. Rep. 1875. — fig. SS III/26. (Horn) & Europe

Dragon fly. *Demisella* (*France*) *brun* *removing* *nettle* (Horn) *Libinia* *Agriion* &c. L.P.S. *prey* upon other insects but in or frequentation, *waters*.

Depressaria ontariensis. (*horachia* *Dip*; *Lept*) *D.* destroy the seed of *potato* *ceasing* & other *summit* *erectum* *plant*. *Thomodes* &c. Ag. Rep. 1864 p. 566. SS XXI/11 (*Lept*)

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

Drop worms. see *Orthocentrus* or *Arctia* *virginiana* (*Lept*) see *Dryocampa* *viridis* *Ephemera* *formis*. SS XII/1 to 5 (*Lept*)

Dryocampa imparialis (Cates) (*Lept*) *Treat* *plane* *tree* or *interior* *moth*. *pot.* *ol.* *Orch.* *Flora* & (*3rd* *Cates*)

Dryocampa Anisota senatoriæ (*Lept*). L. feed on foliage of oak. Ag. Rep. 1870 p. 83. fig. 43. (Has destroyed by *Scenomon* *flæs* *typ.* Ag. Rep. 1866 p. 18. *Anisota*, *senatoriæ*. SS Lar VII/5, 6. In LXIII/15. 18-1 (*Lept*). (See also 1869, p. 536)

Dung beetles. see *Cepus*; *Pachanus*. &c. Col.

Dyeing material, from *Dryocampa sutinella*, article by Dr Jackson. Boston, see *Dysdercus sutinella*. Ag. Rep. 1858 p. 272

Dynastes tenebrus (Col) L. found feeding on the wood of *Cherry*, *Willow*, & *oak*. Ag. Rep. 1868, p. 64. fig. 80. SS L.D/31 *Ins* VIII/16 (Col) (one of our largest native beetles):

Dynastidae (Col) L. in decaying wood. beetles with *stronger* *nostrils* on head or thorax *Leop.* *formed* in *agreeable* *mod.* Ag. Rep. 1868, p. 47. 57. 17. (Col)

Dysdercus sutinellus. (*Dysdercus* *sp.*) *Hell*. *Bottom* *stomach*. or *stomach* *bag*. L.P.S. *same*. fibre of *cellulose* when in the opening hole. Ag. Rep. 1858, p. 271. 1875 p. 124. fig. 29. *Dysdercus*. SS I/11 (18-1) see also article on *Dyeing* material. Ag. Rep. 1858 p. 272.

- Dytiscus fusciventris*, (Col.) (Rathvon) Ag. Rep. 1861, p. 543, fig. 11, 12. Aquatic, & carnivorous, feeding on worms, & insects of IS. 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. 1868. - 80, fig. 14. see Hydrophilus IS. III/7. (Col.)
- Eacles*. (Agrocampa) *imperialis*, (Lep.) Imperial moth, or Great plane tree moth. I feed on foliage of *Q. t. plana*, pine, sweet gum, &c. &c. I have destroyed by the larva of - *Tachinus viridis*. (Dip.) *Eacles*. IS. LCVI/23. 11/7. 11/7. 8. Ins. 1/10 (Lep.)
- Earwig of the west. see *Chrysoch. nitidus* (Lep.) so called from attacking horses principally about the ears or head. Ag. rep. 1863. p. 276. - 1872. p. 124. fig. 16. IS. XLI/18 (Lep.)
- Earth worm. see *Lumbricus*? & Japanese earth worm. see *Megaceler* Ag. Rep. 1871. p. 82.
- Earwig see in *Euplexoptera*. (Rathvon) Ag. Rep. 1864. *Torficulidæ*. Traps to catch them of pulmo weeds, of ox hoofs, &c. eggs laid under stones, on the ground. Hatched over like a hen, by the female. - 1864. p. 238. Rathvon. preyed upon by a *Cucero* fly? (Hym.) 1864. p. 564. remedies. - 1872. p. 127. Earwig destroys, wheat, maize. (*Diplosis tritici*) & a Hawk preying wheat plants. (see also *Torficula*, example - *Sonficula* IS. VI/19. (Orth.) 79)
- Earwig. see also *Sonficula*. Ag. Rep. 1874. p. 131. (Orth.) *Labia*. 1862. p. 373. *Lalidura*. 1862. p. 373.
- Ecobius* (*Blatta*) *germanica*, (Orth.) *Croton* bug, small german cockroach, or vulgarly Toach very destructive, especially in dwellings heated by hot water pipes, destroys Animal & 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. Ecobius IS. II/14. (Orth.)
- Ectemnodia*. (*Ectemnodia*) *cruciatæ*, (Hct.) probably carnivorous, & destroys other insects. Ag. Rep. 1875. p. 130. fig. 16. IS. III/17. (Hct.)
- Egyptian Bee. (Hym.) see *Apis*. *fasciata*. (Hym.)
- Eight spotted Forester (Lep.) *Olypiæ maculata*. I feeds on foliage of Grape. Ag. Rep. 1874. p. 129. IS. LXXXIII/2 & 11 Ins. XLVI/14, 15, 16.
- Elaphidion alternatum*, (Col.) (Rathvon) Ag. Rep. mere mention 1861. p. 618, fig. 74. (Col.)
- Elaphidion putator*. (Cullouson) (Col.) Rathvon. Ag. Rep. 1861. p. 615. I. lives in Oak twigs. (Col.) ..
- Elaphidion ulmatorum*, (Col.) Oak pruner. Ag. Rep. 1868. p. 576. Remedies. 1871. p. 72. fig. 2. *Stenomorus pulator* (peck). Syn. I cuts off twigs of Oak, Ash, pine, peach, Hickory, chestnut, &c. IS. L. 33/13. Ins. 7/13. (Col.)
- Elatridæ*. (Col.) (Rathvon) Ag. Rep. 1861. p. 608. I. are wood borers, & also feed on roots under the earth. the perfect insects are known by the name of Scraping bugs, Step 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. *Elaton nigricollis* IS. XI/23. (Col.)
- Elatridæ*. 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. -
- Elaton* (Col.) Ag. Rep. 1861. p. 606. - 1873. p. 162. mere mention in connexion with *Melanactes* which has probably a luminous larva. *Melanactes*. 1873. p. 163. fig. 10 example of insect *Melanactes moria*. IS. XI/20. (Col.)
- Elaton obscurus*, (Ev.) (Col.) Insect of an European wire worm. Ag. Rep. 1868. p. 93. 110 &c. (Col.)
- Elder, borer. (Lep.) see *Desmocerus (cyanus) palliatus* Ag. Rep. 1861. p. 620 IS. XXI/3 (Col.)
- Ellichinus* (*Photinus*) *cornutus*, (Col.) Lightning bug, or fire fly. Ag. Rep. 1868. p. 96. fig. 125. Larvae said to be predaceous. & found in Maryland hibernating, under bark of trees. *Photinus cornutus*. IS. XII/5. (Col.)
- Ellipodampis* (*Photinus*) *pyralis*, (Col.) Larvae feed on Earth worms. Ag. Rep. 1868. p. 95. fig. 126 *Photinus*. IS. L. C/33? Ins. XII/6. (Col.)

- Elophia*. (*Altraxos ribana*. (Lep.) Goodeney, Span. worm, or Currant worm. L. 2nd ed, pl. 147 of *Strobil.*, and Currant. *Elophia* L. C. VII/14. J. L. III/5. LXXVII/221 (Lep.)
- Elm tree beetle. *Galeruca calmarensis* (*Galerucinus xanthochlousna*) L. feed on the leaves of the Elm. eating the inner substance; the leaf, leaving the middle & veins untouched, causing the tree to assume a brown & burnt up appearance. Ag. Rep. 1863, p. 578. & 1870 p. 40. remedies. Habits. *Galerucella xanthomelaena*. JS. XXIV/5. XL1/33
- Elongated, fork claw (see *Lichelomyia elongata*) *Lencius*. Ag. Rep. 1868, p. 67, fig. 60. JS. IX/13 (Col.)
- Emmonedia saysi. (*Phylloborus leucos*) Ag. Rep. 1868 p. 102, fig. 175. on flowers JS. XXVI/1 (Col.)
- Emusa longipes* (Steb.) probably feed on other insects. Ag. Rep. 1875, p. 131, fig. 52. JS. IV/25. (Col.)
- Emphyas maculatus* (Hym.) Strawberry Saw fly. Ag. Rep. 1876 p. 73. injures foliage. (Hym.)
- Empusa*. (*Spondonome*) musca. a fungoid growth parasitic in flies. eventually killing them Ag. Rep. 1872 p. 132.
- Enochopa* (*Membracis*) *linolata*. Ag. Rep. 1876. fig. 11. frequent. Buttercup, Hop trees & Locust. JS. 42. (Horn)
- Endecatomis* (Col.) mere mention. Ag. Rep. 1868, p. 99. (Col.)
- Endecatomis rugosus* (Col.) in fungi. found under bark of Sulis poplar. Ag. Rep. 1868, p. 94, fig. 156. JS. XXXIII/17. (Col.)
- Ennomos subignaria* (Lep.) New York was wing worm. (Lep.) L. feed on foliage of Elm, poplar. Linden &c. Ag. Rep. 1864 p. 554. remedies JS. XVIII/6. (Lep.)
- Enoplum thoracicum*. Say. *Orthopleura damicornis*. (Col.) L. feed in wood. Md. Ag. Rep. 1863, p. 77, fig. 142. *Orthopleura damicornis*. JS. XII/26. (Col.)
- Entilia* (*Membracis*) *Telamona*. *concaea*. (Horn) frequents weeds. Ag. Rep. 1876, fig. 13. *Entilia* JS. I/1. (Horn)
- Entilia* (*Membracis*) *carinata* (Horn) frequents the Potato plant. Ag. Rep. 1876 fig. 14. *Entilia* JS. I/24 (Horn)
- Entomological Reports. Uhler. Ag. Rep. 1860 p. 312.
- " " Rathvon. Lancaster, Pa. part 1. Ag. Rep. 1861 p. 535. — 2^a 1862. p. 571.
- " classification JS. Ag. Rep. 1863. p. 563.
- " Report of Paris Exposition des Sciences. Aug. Sep. 1865. p. 88.
- Entomological division, history & museum. Ag. Rep. 1868, p. 10.
- Entomology "practical for farmers sons." by C. H. Dodge. Ag. Rep. 1868, p. 395.
- ... in Michigan (1st spoken of. *Doryphora 10 lineata* - *Doryphora senecionis*.
- Carpocapsa pomonella* (Lep.) *aspidiclus conchiformis* (Holtz) Ag. Rep. 1869, p. 536.
- Entomological science. Application of * by Prof. S. S. Smith. Ag. Rep. 1872, p. 448.
- Ephemera. May or May fly. Ag. Rep. 1864, p. 545. Food for fish. L. live in water. Example.
- Ephialtes* { *Salixenia* (*Ephemerella*) *limitata* JS. V/5 (Horn) (very abundant in Washington D. C.)
 { irritator (Hym.) L. destroys small wood boring larvae Ag. Rep. 1866 p. 41.
 JS. 1/20 q VII/13 ♂ (Hym)
- Epicærus imbricatus* (Col.) injure foliage of Apple & Cherry trees. Ag. Rep. 1870, p. 71. JS. XXXVI/18 (Col.)
- Epicærus fallax*? (probably *vadosus* var) see *Graphorhinus*. (Col.) v. eats cabbage. Cowsl. cherry, Apple. Goodeney JS. Ag. Rep. 1863, p. 578. — 1865 p. 40. (Col.)
- Epicærus*. *Graphorhinus* *vadosus* (Col.) injure leaves of Cabbage, Clover &c. Ag. Rep. 1870, p. 71, fig. 18.
- Epicærus* { *Graphorhinus* JS. XIII/25. Col.
 { *atrola*. *pennsylvanica* (Col.) Ag. Rep. 1868, p. 103. L. eats flowers of China aster. fol. of protots. (frequent flowers of Golden rod, 1868, p. 107. (*Cantharis atrata* of Harris) see *Epicærus pennsylvanica*. JS. XXXVII/5. (Col.)
- Epicærus atrata*. *pennsylvanica* (Col.) Ag. Rep. 1868, p. 103. L. eats flowers of China aster. fol. of protots. (frequent flowers of Golden rod, 1868, p. 107. (*Cantharis atrata* of Harris) see *Epicærus pennsylvanica*. JS. XXXVII/5. (Col.)
- Epicærus cinerea*. (*Cantharis marginata* of Harris) (Col.) food. Clematis. Buttercup &c. (Ag. Rep. 1868, p. 103, fig. 181. — 1871 p. 77. eats butter-cups potatoes? & Egg plants *Epicærus cinerea* JS. XXVIII/9. (Col.)
- Epicærus cornuta*. Col. injures potatoes in Kansas. Ag. Rep. 1870, p. 68, fig. 5. JS. XI/25. (Col.)
- Epicærus annicata* Col. injures potatoes. mere mention, 1871, p. 76 fig. 7 Ag. Rep. remedies, poisons green effects. *subtilis*. JS. XXVII/8 JS. 1900

- Epicauta marginata*, see *E. cinerea*. ulom. Ag Rep. 1862, p. 106. -- 1871, 70. IS XXVII (6) (C)
- Epicauta pennsylvanica* (Col.) (*Cantharis atrata* Horn) eats flowers of *Solidago* & *Asclepias tuberosa* & frequently flowers of *Soldan Rod.* (*Solidago*) Ag Rep. 1863, p. 103, fig. 184. *E. pennsylvanica* IS XXVII (5) (C)
- Epicauta pennsylvanica* & *Macrodactylus (Glabrius) unicolor* are said to destroy *Empetrum virginicum* & *U. lincata* on the Colorado potato bug or beetle. Ag Rep. 1874, p. 123. (C)
- Epicauta strigosa* (Col.) I. injures flowers of the cotton. Ag Rep. 1855, p. 152, pl. 2, fig. 25. IS XXVII (11) (Col)
- Epicauta Cantharis vittata* (Col.) 1854, p. 60. Ag Rep. m. m. 1867, p. 64. -- 1871, h. 103, fig. 182. *E. vittata* injures foliage of Potatoes, vegetable & flowers. -- 1871, p. 76, fig. 7. injures potatoes, remedy, Paris green effects, substitutes. IS XXVII (12) (Col)
- Epilachna borealis* (Col.) spotted squash beetle, or lady bug; I. injure foliage of Squashes, & others Cucurbitae
 { lae. Remedies, habits, &c. Ag Rep. 1863, p. 579. -- 1866, p. 91. -- 1866, p. 42. is destroyed by a bug (*Stenotus (S. anchorago) Syn. diama* (Holt) IS XXI 22, V/20, V/25.) *Epilachna*, IS XXIX (35) (C); see also Ag Rep. 1875, p. 118 fig. 10. for *Stenotus* destroying Squash beetle (*Epilachna*) Col.
- Er. x. (strip) carnivorous. feeds on other insects, Ag Rep. 1866, p. 44. example *Er. aestivans* IS III (34) (strip)
- Eriosoma umbricalor* (Hom) Ag Rep. 1876, fig. 42. frequent leach. IS III (17) (Hom)
- Eriosoma lanigera*, Apple blight. (Hom) Ag Rep. 1876, fig. 41. -- 1864, p. 86. see also *Raphis* (Syn) woolly Eriosoma IS III (21) (Hom)
- Eriosoma* (*Pemphigus*) *pyrali* (Hom) a woolly Aphis on the root of Pear. Ag Rep. 1870, p. 86, fig. 54. (see also *Pemphigus*, page 7) (Hom)
- Eriosoma tessellata* (Hom), Ag. Rep. 1876, fig. 43. frequent Birch. IS III (12) (Hom)
- Eurhynchus (Cetonia) unda* (Col) I feeds on sap of Collon bolts, mussel stalks, & Coast trees, &c. injures ripe peaches, figs, pumpkins, &c. frequently Golden rosb flowers, &c. Ag Rep. 1862, p. 90. 107. see. *Euryomyia* (Syn. *Euphoria* also) *unda*. IS IX, 24 (Col)
- Eurythrona* (*Teligonia*?) Hom. Leaf hopper, & in correcter strips, injures grape vine. Ag Rep. 1854, p. 77, pl. 6. -- 1864, p. 559. remedies, &c. -- 6. vides? 1871, p. 155. Grape leaf hopper, (fig 19) habits remedies &c. & destroyed by a true thrips (Hom) & here called *Eurythrona vitis* 1874, p. 145. -- 1875, is destroyed by *Camptylomera viticenis*, (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 *Eurythrona* (*Teligonia*) *vitis*, many of them appearing to be merely varieties of *Eurythrona basilianis*, we have classed all those feeding on the grape vine leaf under the head of *Eurythrona*.
- Eurythrona basilianis* (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*? *Ebasillaris* -- 1876, p. 33 IS III (5) (37, 38) (Hom) (a new sp. or var. is figured at 1/5 (Hom) p)
- Euchaeta* egle. Lep. a moth feeding on the *Andromeda*, is destroyed by plant bugs. *Lycycaea*, *Taraxacum*, & *L. fasciatum*. Hct. *Euchaeta*, IS XC (11) 22, 31, XI, V/22, & LVIII (14) (Lep)
- Euenemidae* (Col) see also *Throscidae* (Col) Ag Rep. 1863, p. 92, 112. Col.
- Eucnemis amaericornis* (Col.) found on leaves or under bark of trees Ag. Rep. 1863, p. 92, fig. 106 see *Deltometopus amaericornis* IS XII (38) (Col)
- Eulophus* (Hym) (*Dathon*) Ag. Rep. 1862, p. 376. destroy eggs of Cockroaches (Blattellae) (Hym)
- Eumotopoma (Diatana) miniata* (Lep.) Handmaid moth, or Yellow necked Apple worm caterpillars cluster together, & when alarmed hold up both ends of body. feed upon pears, or Apple, Cherry, Oak, &c. &c. Ag Rep. 1858, p. 339. *Diatana miniata*. IS XI (1) (Lep)
- 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. 63. it destroys Larvae of *Anisopteryx variata*, or Canker worm. IS XXVIII (XXI) (17) (Lep) & is itself destroyed by *Loxophora*. IS V (35) (Lep) -- 1870, p. 78, fig. 25. *Eumenes fraterna*. IS III (27, 28) (Lep) (V/35 see in *Loxophora*, "nest")
- Euphorbia* (*Euryomyia*) *melancholica* (Col) see *Euryomyia*. IS XXXIV (30) (Col)
- Euphorbia* (*Euryomyia*) *unda*. Col. see *Euryomyia*. IS IX (29) (Col)

- Eupithecia miserulata* Lk., probably the small span worm on cotton, &c. Ag. Rep. 1855, p. 100, fig. 3. Ag. Rep. LXIV, p. 21. Ins. LXI/23 & LXXIII/168 (p.) found also on the w.
- Eurixoptera* (Hatrison) Ag. Rep. 1862, p. 373. Order containing *Emomyia*, but here placed in *Oreopteris*.
- Eupithecia*. *Islandia* (*Argynnis columbiana*) Lep. L. feeds on the wild passion vine. (see *Tragop.*)
found in Cotton fields. Ag. Rep. LXXXVI/1. (Lep.)
- Euryomyia* (*Eurhopia* & *Cetonia*) *inda*. (Co.) Ins. frequent flowers of *Solidago*. (Golden Rod) &c.
{ it feeds on the exuding sap of cotton bolls when injured. also on sap of *Maize Locust* &c.
{ & injures: ripe peaches, pumpkins, figs, &c. Ag. Rep. 1868 p. 90. fig. 86. Euryomyia. inda
Ag. Rep. 1864/34 (Co.)
- Euryomyia* (*Eurhopia*, *Cetonia*) *melancholica*. (Co.) Ag. Rep. 1863, p. 90. Ins. frequent flowers, feeds on sap
{ of diseased or injured cotton bolls. Euryomyia melancholica. Ag. Rep. LXXXIV/30 (Co.)
- Eurytoma*. (*Isosoma*) *hordei*. (Hym.) joint worm of wheat, &c. L. feeds on the stalk, causing the
{ joints to swell & become brittle & hard. - injures Barley, wheat, Rye &c. Ag. Rep. 1854, p. 6, p. 5.
{ - 1866, p. 82. - 1864, p. 7. - & is destroyed by *Phoronax*, or *Staly* gaster. Ag. Rep. 1864, p. 82.
{ - 1864, p. 547. Isosoma hordei. Ag. Rep. 1864/10 (Hym.)
- Euschistus* (*Pentatomus*) *punctatus* (Hbst.) gray Plant bug, of L. & G. Ag. Rep. 1855, p. 93. pl. VII, fig. 6.
{ 1874, p. 133. destroys the larva of the Colorado potato beetle. *Chrysomela* (*Doryphora*)
{ *lineata*. 1875, p. 118, fig. 7. & frequents Thistles & Indian - Euschistus. Ag. Rep. 1875/112 (Hbst.)
{ sometimes probably also sucks sap of trees & shrubs.
- Evagonus* *viridius* (Hbst.) Ag. Rep. 1858, p. 266 destroys the Orange Aphid, or plant louse. - 1866, p. 25.
{ also destroys other insects. - 1857, p. 133, fig. 29. Ag. Rep. 1858/118 (Hbst.)
- Evagonus* *viridis* see *Diplodus curvidens* (Hbst.) said to destroy the Curculio or *Pisum* weevil, & other
{ insects. Ag. Rep. 1875, p. 131, fig. 50. Diplodus, curvidens. Ag. Rep. 1875/111 (Hbst.)
- Exochomus* *Quasi* (Lac.) (*contusatus*,rotch p. 50) (Co.) dwells on the cocoon, on the orange trees.
{ Ag. Rep. 1858, p. 261. - 1865, p. 91. - 1866, p. 89. (Co.)
- Faidherbia*. (*Bombyx*) *Baulemia* Lep. see *Bombyx*. Ag. Rep. 1865, p. 93. - 1866, p. 38.
{ feeds on plant *Baehinia*. Ag. Rep. 1865/11 (Lep.)
- Fibres*, Textile. &c. Paris exposition of Ind. &c., 1865, p. 95. Ag. Rep.
{ " *Boehmeria nivea*. *Phormium tenax* &c. Ag. Rep. 1865, p. 32. 1866, p. 21.
- Fidea* *minima* (Co.) I. injures grape foliage Ag. Rep. 1867, p. 71. Ag. Rep. 1867/28. 29. & (Co.)
{ fig. cater. see *Alchorina* (*Gymnetis*) *nitida* (Co.) Ag. Rep. 1863, p. 596. - 1868, p. 94, fig. 82
{ Alchorina. Ag. Rep. 1863/119 (Co.)
- Fire blight*, a disease of the pear tree, Ag. Rep. 1863, p. 57, 4.
- Fire fly*. first appearance in the spring, Ag. Rep. 1854, p. 137
- Fire fly* (or lightning bugs, of the United States. see *Elleisma* *Elleismus* *Photuris* *Lampyrus*
{ &c. Ag. Rep. 1866, p. 95. (Co.)
{ " of the West Indies. (Co.) see *Pyrophorus noctilucus*, Ag. Rep. 1866, p. 93. (Co.)
{ " of Florida. (Co.) see *Pyrophorus physiderus*. full account Ag. Rep. 1873, p. 106. fig. 3.
{ Ag. Rep. 1873/21 (Co.)
- Fire worm* *Branchyura* (Lep.) *L. Anchylipora vacciniana*. destroy tender shoot, & foliage Ag. Rep.
{ 1870, p. 80. Ag. Rep. 1870/11 (Lep.)
- Flata* *viridula* (Hom.) frequents Brambles & Grass. see *Amphiscopa* *viridula*, Ag. Rep. 1867/147 (Hom.)
- Flata* (*Cicada*) *limbata* (Hom.) (China) *Himmelaya* *Wax* insect. Ag. Rep. 1851, p. 57. (re ca.)
{ This yields a white wax. } *Flata nigricollis* (Hom.) see *limbata* Ag. Rep. 1851, p. 57.
{ (*Homoptera*).
- Flea*. *Pulex irritans* (Lep.) bite & suck blood, of mankind, animals, & birds, &c. remedies.
{ 1864, p. 362. Ag. Rep. 2, see 1874, p. 577. Ag. Rep. 1864/11 (Lep.)
- Flea beetle*. *Crepidodera pubescens* &c. (Co.) Ins. eats small holes in young leaves &
{ sometimes totally destroy young plants. see *Epitrix cucumeris*. Ag. Rep. 1864/2 (Co.)
- Flea garden* Orth Ag. Rep. 1874, p. 155. see *Podura* *velutaria* Ag. Rep. 1874/16 (Orth)
- Flesh flies* (Dip.) see *Calliphora*. *Lucilia*. *Sarcophaga*. destroy fresh meat. & lay their eggs on young
{ larvae (*Sarcophaga*. *viriparvus*) on carrion. pulv. worms. &c. Ag. Rep. 1872, p. 132, 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, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 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.

- Flies. any destroyed by wasps, or hornets. Ag. Rep. 1866. p. 43. (64 p.) Yponalidia. Buccid
 { Meloe inquinatellid. in their bodies. Ag. Rep. 1868. p. 102 (Meloe S.S.D 22.23. Im XXXVII/22. (Cae)
 Fly. the larva of a species of fly in Mono lake, is eaten by the Inducyus. Ag. Rep. 1870. p. 226. (44 p.)
 Flies. . . one destroyed by Bombex. Asafa. Chalcis. & also by a parasitic growth Empusa
 { Spicronidroma } 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. S.S.V 23 (44 p.)
 Food of Coleoptera, or Beetles. See "Vegetable and animal substances destroyed by Coleoptera"
 { Ag. rep. 1868. p. 104. (Cae)
 Forest fly. golden eyed. see Chrysops. vitatus. Ag. Rep. 1863. p. 276. — 1872. p. 129. fig. 16. S.S.XV 18 (24 p.)
 Forester eight spotted see Alypia octomaculata (Lep.) It feeds on foliage of grape
 { S.S. See letter Cor number 123/2. C or 100 p. Ins XIV 1. & VI 16. (Lep.)
 Forficulicida. gigantea. (Orth) (Cuplex. Rathum.) Ag. Rep. 1862. p. 373. fig. 1. S.S.X 2. (Orth.)
 Forficulicida (Orth) (Rathum) Ag. Rep. 1862. p. 373. Earnig. 1868. p. 208. — 1872. p. 132. fig. 2. S.S.VI 10 (14 p.)
 Forficulicida (Orth) Canung. (Eunose) Heabus. bod. eat young plants, injure young grain by
 { eating the pollen. gnaw the cholla of flowers. eat holes in grapes, Peaches, & other fruit.
 { but said by some, to be beneficial, by eating the wheat midge. (Diphosis trilici)
 { plant lice. & probably the Stirps. Ag. Rep. 1874. p. 131. fig. 2. Forficulicida S.S.VI 19. Fig. (Orth)
 Forficulicida uniculata. Europe (Orth) (Rathum) Ag. Rep. 1862. p. 372. fig. 2 & 3. — destroy fruit.
 { flowers. cabbage &c. (Orth)
 Forficulicidae. Ag. Rep. 1862. p. 373. — 1868. p. 305. — 1874. p. 130. (Orth)
 Formica (Hym) See ant.
 Formax. (Col) in old Oak stumps. Ag. Rep. 1865. p. 92. example. Formax (Dromaeolus) cylindricollis.
 { S.S. XXXVI 25. (Col)
 Four humped carculi. (Col) Anthonomus. quadrinquebibus. eats round holes in Apples, & plums.
 { Ag. Rep. 1870. p. 70. fig. 14. S.S. XXXVI 44. 45 XXXVII 28-29. (Col)
 Fowl &c in garden of acclimation. Fowls. description. Ag. Rep. 1865. p. 95.
 Frog spit or Froth insects (Hym) Aphrophora &c Ag. Rep. 1866. p. 589. — 1876. fig. 25. Froth. S.S. VI 11 (Hym)
 Fulgora salicifera (Hym) frequents branches, twigs, Ag. Rep. 1876. fig. 4. see Scotard. culicatus. S.S. 730 (Hym)
 Fungi. origin of. Ag. Rep. 1864. p. 529. See also Comanite &c
 Galt. (Hym) or horse fly (Dipt) see Tabanus atratus stings & torments horses &c S.S. VI 15. LX 35 (64 p.)
 Galerita. americana. Col. Rathum. Ag. Rep. 1861. p. 691. destroys other insects. (See fig. 3. 2.) See Galerita bicolor.
 { S.S. VI 11. (Col)
 Galerita. dissecta. punctata (Col) Ag. Rep. 1854. p. 60. — 1855. p. 90. See VIII fig. 1. I eats holes in Cotton & other
 { plants. very troublesome in gardens. see Diabrotica 12 humelata. S.S. XXV 24. (Cae)
 Galerita. californiensis Galerucella. xanthomelaena. (Col) Elm tree beetle. It destroys foliage of
 { Elm trees, eating the inner substance of the leaves, leaving the midrib & veins untouched
 { causing the whole tree to present a scorched or burnt appearance. — remedies
 { 1863. p. 578. — full article & fig 1867. p. 63. — 1870. p. 74. fig. 27 (Hym)
 { Galerucella xanthomelaena. S.S. XXII 5. XVI 103. (Col)
 Galerucella xanthomelaena. (Crotch let.) see above. under Galeruca.
 Galgulis caulatus (Hed.) Ag. Rep. 1875. p. 132. fig. 55. probably destroy other insects. amongst which
 { Mr Thomas says is Xva Tridachylus terminalis (S.S. III 6. (Orth)) Galgulis S.S. V 2. (rest)
 Gall making larvae. destroyed by Stirps. Ag. Rep. 1874. p. 145. (Hym) (Stirps (Orth))
 Gall quat. see Acadomyia. & (Lep.)
 Gall nuts. Ag. Rep. 1855. li. lv. Oak formed by Agrius. 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 lobe. 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. 87. fig. 56. see Pemphigus. reticulata (Hym) S.S. X 26. (64 p.)
 { Blow.
 } Blow.

- Galleria cerasana*, (Lep) Bee or Wax moth. Eat the wax in beehives, & form siphon tubes, in the comb, to protect themselves from the bees. remedies, &c. Ag. Rep. 1864, p. 555.
 { *Galleria*. 38. III/4. LXXXVII/7. (Lep.)
- Garnasus*, a white trifoliate *Nectophorus*. (Col) Ag. Rep. 1868, p. 82.
 Garden of Acclimation, Paris. Ag. Rep. 1865, p. 95. Animals. Cattle, goats, sheep, horses, swine, &c.
 { Fowls, &c. &c.
- Garden/Lead. see *Smynturus*. & sometimes *Podura*. feed round the holes made in the leaf by *Phyllobela striolata* & other insects, see *Orchestis vittata*. 38. XXIV/8. Ag. Rep. 1874, p. 145.
 { *Smynturus*. 39. VII/7a. (Orth.)
- Gasterophilus*. (*Gastrius*) equi. Dip. Stomach bot of the horse, history, habits, & remedies. Ag. Rep. 1873, p. 130. India archedeck or pride of China berries mentioned.
 { *Gasterophilus*. 38. L. VII/34. IV/2. VIII/23. (Dip.)
- Gastus*, equi, see *Gasterophilus*, above.
- Selechia*, cerebelli, see also *Amacampsis* & *Butalis*. Angoumois, moth. L. injures corn, maize, grain, & wheat, &c. Ag. Rep. 1852, p. 67, pl. 4. — 1864, p. 566, for remedy. — 1858, p. 23, m. n.
 { *Selechia*. 38. XXIII/1. (Lep.) see also *Amacampsis*.
- Geocossae*. Earth bugs. Het. 1875, p. 116. Bugs living on the land or earth, in contradistinction to the *Hydroscoriceae*, or bugs frequenting water.
- Geomtrax* 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*.
- Geomyssidae*, (Col), more mention. Ag. Rep. 1868, p. 85. example *Geomyssus pusillus*. 38. XX/10 (Col)
- Geotrupes splendens*, (Col) food excrement, manure, &c. Ag. Rep. 1868, p. 86, fig 57. 38. XX/10 (Col)
- Geotrupini* Ag. Rep. 1868, p. 86. (Col)
- German Cockroach. Orth. see *Ecotelia germanica*, (also *Croton* bug of 1844.) 38. I/10 (Orth)
- Gerris conformis* (Het) water skimmer. aquatic in habits & destroys other insects. Ag. Rep. 1873, p. 132, fig 53. — 38. V/6. (Het)
- Gerris lacustris* (Het) carnivorous, & eats other insects. Ag. Rep. 1870, p. 132, fig 64. 38. V/10 (Het)
- Gerris*, Europe. Egg & Ins destroyed by *Selecia*? (Tern) Ag. Rep. 1873, p. 132. (Het)
- Glady winged, Soldier bug. see *Campyloneura vitivivensis*, destroys the grape vine, leaf hopper.
 { *Erythronera vitis*? Ag. Rep. 1873, p. 123, fig 30. 38. Campyloneur. VI/8.
- Grow worm, see *Somphryx*. Ag. Rep. 1869, p. 98. (Col)
- Golden eyed Forest fly. See *Chrysops* (New) Ag. Rep. 1864, p. 545. ear fly of the work, Ag. Rep. 1872, p. 129, fig 16. 38. XI/18. (Lep.)
- Gold fringe moth, & clover worm. *Asopia costalis*. *Pyraus disparis*, eat clover in stacks or barns, &c. Ag. Rep. 1867, p. 73 — 1870, p. 54, fig 48. *Asopia costalis*. 38. LXXIII/25-XX/14. &c.
 { see Clover worm. (Lep)
- Golden ground beetle, (Col) (Lep) destroys other insects, see *Carabus curvatus*. (Col)
- Goldsmith beetle see *Allorhina nitida*, (Rafinesq) in Ag. Rep. 1861, p. 601. 38. III/9.
 — " — " but voracious. see *Cotalpa lanigera*, or the woolly Arecia, Ag. Rep. 1866, p. 87, fig 71. 38. VIII/19. (Col)
- Gonocerus*. (*Anasa*) tristes, 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 tristes* 38. I/14 (Het)
- + Gooseberry midge. see *Acidomyia* (*Asphondylia*) *grossularia*. injures fruit of Gooseberry.
 { Ag. Rep. 1872, p. 127. 38. XI/28. (Lep.)
- Gooseberry (or Currant) saw fly, (Imported) see *Nematus ventricosus*, (Tern) remedies. 1864, p. 546.
 { 1870, p. 77, fig 33. 38. 0. The native currant worm or fly is *Pristiphora grossularica*.
 { Ag. Rep. 1870, p. 77. 38. 0.
- Gooseberry. Spain worms, (Lep) *Ellipica* (*Alanax*) *nileana*. L eats fol of Currant, & gooseberry.
 { 38. L. CVIII/14. L. III/15. LXXXVII/24. (Lep.) 38. 0.

- Sortiana nitida* (Lep.) bores into the field of white, silver, potato, Tomato, col. of maize.
 { various fruits, usually known as the spindle worm, or stalk borer. Ag. Rep. 1867, p. 64.
 } IS. XCVIII/26. CIV/12. IXV/13. (Lep.)
- Gout, a disease in wheat, & barley (in Europe) consisting of an enlargement, or swelling of the joint. Ag. Rep. 1872, p. 184.
- Grain moth, or Wolf, see *Tinea granellus* (Lep.) destroys grain, maize, Cotton bolls, &c. 1856, p. 65, & 4, 1856 (cont. of S.T.B. as *Heliothis*) 1858, p. 98, pt. 1, fig. 3. 1864, p. 556. IS. IX/1 (Lep.)
- Grain Weevil, (Col.) *Sitophilus granarius* (Rathvon) Ag. Rep. 1861, p. 603. It destroys Grain, Wheat. Maize, &c. see *Calandra remotipunctata*. IS. XXV/2 (Col.)
- Grape disease in Europe, Mexico, fungus, &c. fig. 1863, p. 311, & 1864, p. 311.
- Grape berry moth, (Lep.) see *Penthina vitivorana*, L. eats into the berry, or fruit. Ag. Rep. 1870, p. 86, fig. 32. IS. XCVII/3. XCIV/2. (Lep.)
- Grape root borer, (Lep.) *Algoria (Drosophila) polidiformis* (Lep.) L. injures root, & lower part of stem, of grape vines, Ag. Rep. 1862, p. 80, pt. IV. — 1867, p. 72, fig., — 1870, p. 72. IS. XVII/5. (Lep.)
- Grape seed curculio, or weevil, (Col.) *Ceolodes inaequalis*, injures fruit of grape, by eating into it. Ag. Rep. 1867, p. 72. — 1868, p. 83. — 1870, p. 70, fig. 12, see *Megastotes* 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. *Graptoidea* IS. XXV/9 (Col.)
- Grape vine leaf gall louse, (Hom.) see *Empfigus vitifoliae* (*Dactylophara*) 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. — 1870, p. 67, fig. 56. — 1871, p. 87, fig. 23. (Hom.) IS. X/26 (see on *Diplo. va*)
- Grape leaf hopper (Hom.) *Empthoneura (Tettigonia) vitis* &c. injure foliage of grape. see example *Empthoneura basileoides* IS. III/37 (Hom.) (see Ag. Rep. 1874, p. 146)
- Grape process, Lep. *Uroclitrus Porcus americanus*. L. eat the foliage of the grape vine. Ag. Rep. 1854, p. 76, pt. 6, 1866, p. 549. — Remedy, 1870, p. 81. IS. XVII/3. (Lep.)
- Grape root gall louse, *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. 87, fig. 55. — 1871, 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. 160. — 1874, p. 127, 422, &c. — 1876, fig. 46. see article on *Phylloxera* (Hom.)
- Grape vine saw fly, (Hom.) *Selandria vitis*, remedies, &c. Ag. Rep. 1864, p. 556. IS. IX/86 (Hym.)
- Graptoidea (Haltica) chalybea*, (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. *Graptoidea* XXXV/9 (Col.)
- Grass army worm of the north, & west, *Leucania, extranea, unipuncta*. L. feeds on grass of grain, &c. Ag. Rep. 1870, p. 83, fig. 46. IS. XCVIII/22. LXI/16. LXV/7. (Lep.)
- Grass worm or caterpillar (Southern) Lep. in cotton fields where it eats the grass & weeds between the rows of cotton. & resembles *Lophrygma frugiperda* of Smith & Abbott. Ag. Rep. 1855, p. 77, Pl. VI fig. 6. — destroyed by ants, (Hom.) 1866, p. 43. — figured & compared with the Cotton army worm, *Anomis xylinae, argyllacea*, 1867, p. 59. see *Lophrygma macra* IS. XXVIII/5 (Lep.)
- Grasshoppers, ♀ in cotton fields, see *Locusta*, S.T.B. Ag. Rep. 1855, p. 69, pt. VII, fig. 3. (Orth.)
- Grasshoppers, Ag. Rep. 1866, p. 37. — eaten by Indians, 1870, p. 426. — very destructive in Texas & California, 1838. 1846, 1855, 1828, &c. see article in Ag. Rep. 1874, p. 139. (Orth.)
- Grasshoppers, machine for killing grasshoppers, in Salt Lake city. Ag. Rep. 1871, p. 80.
- Green Girdler, (Col.) a worm feeding in palm trees, it is used as food for man kind & esteemed as a great luxury by the negroes in the west Indies. Ag. Rep. 1866, p. 38. *Stauria of calandera palmarum* (Rathvon) Ag. Rep. 1861, p. 604, feeds also on Palms, & *Rhyacophora orientalis Zimmermani* was found abundantly, on Florida in decayed Palmetto wood. IS. XIII/21 (Col.) J. Glover

- Gnossinia*. (Fam) *Mathews*. (Orth) *Manitidae*. Ag Rep 1874 p. 130. (Orth)
- Ground beetle. see *Cambidula*. (Col) (Rathvon) Ag Rep. 1861 p. 591. (Col)
- Grouse locust. see *Tetrix*. *Tetrix* (Orth) *Fletcher*. 1862 p. 387. (Orth)
- Grouse locust. black sided. (Orth) *Tetrix* (*Tetrix*) later clid. Ag Rep. 1862 p. 387 JS. V. 7. VIII. 12. (Orth)
- Grub in head of sheep see *Desinus* *Ovis* (Orth) Ag Rep. 1864 p. 263. *Cephalomyia*. JS. VII. 36. (Orth)
- Grub white, is the Larva of *Phyllophaga*. *Lachnospira*. En. Lar. of *Phyllophaga*. JS. C. 10. (Col)
- Grubs destroyed by sowing coarse salt. Ag Rep 1869 p. 296. (Col)
- Grubs in stems of plants (Europe, destroyed by *Malachius* *caesus*. Ag Rep 1865 p. 291. (Col)
- Gryllidae*. Ag Rep 1868 p. 308 1874 p. 142. (Orth)
- Gryllotalpa*. mole cricket (Orth) *Promedes*. Ag Rep. 1864 p. 544. 1868 p. 308. (Orth)
- Gryllotalpa*. (*brevipennis*) *bonalis*. Orth. (Rathvon) Ag Rep. 1862 p. 378. 19 12. injures & destroys roots of plants. — shows winged male cricket. injures potatoes, &c. green sod vegetables. &c. Ag Rep. 1874 p. 144 fig 17. *Gryllotalpa bonalis* JS. VII. 13. (Orth)
- Gryllotalpa didactyla* (Orth) said to injure sugar canes in the West Indies (Rathvon) Ag Rep 1862 p. 378. 1874 p. 144 JS. XVI. 4. (Orth)
- Gryllotalpinae*. (Orth) Mole crickets. feed on both vegetable & animal substances. 1874 p. 143.
- Gryllus*. *centurio*. see *Romalea*. *microptera* injures vegetables, peas, figs, & orange-trees, & melon. commonly known in Florida as the "lubber" grasshopper. (Ag Rep. 1868 p. 265 1862 p. 384. — 1872 p. 116 fig 6. 7. *Romalea microptera*. JS. III. 4. (Orth)
- Gryllus*. *chesteri* *domestici* (Sw & US. (Orth) domestic or house crickets. feed on animal & vegetable substances. Ag Rep. 1874 p. 142. fig 15. JS. VI. 27. (Orth)
- Gryllus*. (*locusta*) *migratorius*. *Cedipoda* Migratory locust of Europe, Sweden, France, &c. &c. and India. more mention (Rathvon) Ag Rep. 1869 p. 385. see *Pachylus*. *migratorius*. JS. XIV. 10. (Orth). (*Cedipoda migratoria* JS. XIV. 10. *Acridium poracrinum* JS. XIV. 11 we said to be the true) *Pulte Society*.)
- Gulls, destroy *Anabus simplex*, or the Utah cricket. in Utah. Ag Rep. 1871 p. 79. This cricket is said to injure grass, wheat & is wingless. JS. XIV. 15. (Orth)
- Gymnetis nitida*. June beetle. *Allothuna nitida*. known in Florida as the fig eater from its habit of eating into ripe figs. (Ag Rep. 1863 p. 569. — *Intern*. 1868 p. 94 fig 82. *Allothuna nitida*. JS. VIII. 19. (Col)
- Gymnelis 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. *Allothuna nitida*. JS. VIII. 19. (Col)
- Gyrinidae*. (Col) little black beetles, seen crawling 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*. *natalis* (Col) Ag Rep. 1864 p. 489. habits as above. (Col)
- Gyrinus*. *americanus*. Col. Ag Rep. 1868 p. 81. *G. swinis* in curves or circles, on the surface of still ponds. feeds on dead insects. JS. III. 14. see *Dinectes* (Col)
- Haltica*. *Gnaptodera*. *chelybea*. (Col) see *Gnaptodera*. Ag Rep. 1863 p. 576. & 1870 p. 74 fig 29. *Gnaptodera* JS. XXV. 4. (Col)
- Haltica* (*Phyllobota*) *sinicola* (Col) Cabbage flea beetle. *H.* eats minute holes in leaves of Cabbage & Ag Rep. 1865 p. 289 see *Anchistinus vittata*. JS. XXV. 8. (Col)
- Hammateus*. (*Nabis*) *fuscus*. Hel. *detroy* other insects Ag Rep. 1875 p. 130. fig 4. JS. III. 6. (Col)
- Hanneton (Col) Europe French common name for May bugs or cockchafers. Ag Rep 1865 p. 89. (Col)
- Haouite, cakes made from the eggs of *Lorixa*. in Mexico. see *Lorixa femorata* or *mexicana* {example of *Lorixa inornata* (R.S.) JS. V. 7. Hel.
- Harlequin Cabbage bug. *Stenobothrus* *Murgantia* *nitens* *nitens* injures Cabbage, radishes, mustard & Turnips, foliage & other Cruciferae. Ag Rep. 1867 p. 71. fig. — 1870 p. 90. — 1871 p. 84 fig. 18 1875 p. 116 fig 3. *Murgantia* JS. III. 22. (Hel)
- Hemipter. (*Miris*) *caesus* (Col) destroys *Doryphora* *Chrysomela* *10 lineata*. *Tortrix* of *Aphis* {prod rosaceana} & other insects. Ag Rep. 1867 p. 63. 1874 p. 123. 1875 p. 130. fig 14. *Miris caesus* JS. III. 12. Hel.

- Harpalidæ* (Col) (Rathvon) *Ag. Rep.* 1861, p. 892. "one or two species are said to feed in the perfect state, on young grass & grass seeds & upon the roots in the larva state." (Col)
- Harpalus* (Col) *Ag. Rep.* 1854, p. 87, p. 88. feed upon various insects. (Col)
- Harpalus*. *pressing beetle*. L. 113. Col. *Ag. Rep.* 1865, p. 110, p. 2. destroys, other insects, in latter fields. (Col)
- Harpalus* (*Pangus*) *calycinosus* (Col) supposed to feed on wheat & grass seeds, & probably on other insects also. *Ag. Rep.* 1868, p. 80, fig. 10. — & destroys. *Doryphora* (*Chrysomela*) *10 lineata*. or Colorado potato beetle. *Ag. Rep.* 1874, p. 128. *SS. 179.* (Col)
- Harpalus*. *herbivagus* (Say) (Col) (Rathvon) *Ag. Rep.* 1861, p. 892. said to be a vegetable feeder. (Col)
- Harpalus* *majoricornis* (Europe) (Coe) said to eat grain. *Ag. Rep.* 1863, p. 463. (Col)
- Harpalus* grass hopper, see *Calopliemus* species. *SS. XIII* 15. VIII 1. (Orth)
- " " " " *Ag. Rep.* 1867, p. 65. 1874, p. 187 99. Ent.
- Horned fly (Hom) see Cicada. *Ag. Rep.* 1866. (Locust) carried off by *Stenus speciosus* (Hym.)
- Horned moth, see Sphingidæ. *Macrosila* ♀? ex. *Macrosila* *XII* 2. (Lep)
- Head maggot of Sheep, see *Aphatomyia* ous. *Ag. Rep.* 1872, p. 129. see *Aphatomyia*. VII 36. (Lep)
- Locust worm of cabbage. (Lep) *Rovis* *Rafae*, injures also Cabbag Cauliflower, Mustard, turnip & other cruciferae, (European) but now imported & naturalized. *Ag. Rep.* 1870, p. 79, fig. 36. *SS. 18* Ins. 70 or 133/2. & 3 or 139/14.
- Helcomenus* *maculatus* (Coe) 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. LXVIII* 18. (Lep) *Ag. Rep.* 1867, p. 74
- Heliothis armigera* (umbrosus) Corn worm or mame. & boll worm of cotton. *Ag. Rep.* 1854, p. 64, 17, 11, 14. { *Lep. injures* Cotton bolls. makes when growing on the cob. green feed. *purpurina*, & — }
{ *fruit* of the Tomato. (*Heliothis* error of D. & B.) should be *Linna* *arvella* 1855, p. 98, p. 118, fig. 3.) }
{ see *Linna* — 1864, p. 534. remedies. — 1865, p. 43 — 1866, p. 30. — 1870. remedies. *Habit* & 2. p. 54 }
{ *SS. I. P. J.* XIX 21. 17/12 (Lep). }
{ & 1871. p. 54 — }
- Helicoverpa*. *Veratrum album*. powder. & used to poison native & imported currant worms. { see *Proclitophora grossulariæ* & *Nematodes verticillatus*. (Hym)
- Helops*. *missans* (Col) Ins. found in cavities under bark of Oak wood, in winter & spring. { *Ag. Rep.* 1868, p. 101 fig. 147. see *Platydoma* *SS. XXVI* 116. (Col) }
{ *Lep. injures* Cotton bolls. makes when growing on the cob. green feed. *purpurina*, & — }
{ *fruit* of the Tomato. (*Heliothis* error of D. & B.) should be *Linna* *arvella* 1855, p. 98, p. 118, fig. 3.) }
{ see *Linna* — 1864, p. 534. remedies. — 1865, p. 43 — 1866, p. 30. — 1870. remedies. *Habit* & 2. p. 54 }
{ *SS. I. P. J.* XIX 21. 17/12 (Lep). }
{ & 1871. p. 54 — }
- Homocidus*. Lace wing, fly. (Coe) I. destroys cotton aphid. *Ag. Rep.* 1854, p. 63, p. 8. — { 1855, p. 115. p. 10, fig. 7. — 1863, p. 10 — example *H. hyalinus* *SS. 113*. New }
- Hemiptera*, or half winged insects includes *Heteroptera* or plant bugs & *Homoptera*. (cicada { *plant loose* &) 1864, p. 122 *Ag. Rep.* — 1862, p. 387. — 1864, p. 274. — 1866, p. 40 — 1869, p. 207 — 1874, p. 144 }
{ 1875, p. 1154. }
- Hon. lice*. (see in *Mallophaga*) (Orth). Biting hind lice, remedies. *Ag. Rep.* 1874, p. 146. (Orth)
- Hesperidae*. Lep *Ag. Rep.* 1868, p. 314. (*Skipper*). example. *Hesperia cernis* *SS. XXVI* 116. (Lep)
- Hesperiæ* (Lep) see *Cecidomyia destructor*. L. injures wheat. & *Ag. Rep.* 1865, 562. & 7. { see *Cecidomyia destructor* *SS. 118*. 9. (Lep) }
- Heteroceridae* (Col) *mea* monitor. *Ag. Rep.* 1863, p. 85. (Coe)
- Heteroptera*, or plant bugs. *Ag. Rep.* 1863, p. 563. — remedies. 1864, p. 557. — 1866, p. 43. 1865, p. 315. { 1875, long article with figures p. 116 to 140. }
- Hickory boxer* (Col) see *Chion abietis* (*garganicum*) *SS. X* 18. (Col)
- Hippodamia*, convergens, (Col) (*Coconella*) I. destroys plant lice. & *Ag. Rep.* 1874, p. 129. *SS. XXV* 23. 32. (Coe) { & also destroys — the Colorado potato beetle. *Doryphora*. (*Chrysomela*, *10 punctata*. }
- Hippodamia*, *decim punctata*. *Brachyacantha* *10 punctata*. destroys plant lice. & *citrus* { the Colorado potato beetle. *Ag. Rep.* 1874, p. 128. *Brachyacantha*. *SS. XXVI* 21. (Col.) }
- Hippodamia*, (*Megilla*) *maculata*. Co. *Ag. Rep.* 1866, p. 44. is destroyed by an *Ichneumon* 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. 73. *Megilla* *SS. XXVI* 65. (Coe) }
- Hippodamia*. *quadriceimpunctata* (Col) destroys the potato beetle. *Ag. Rep.* 1874, p. 73. — *J. Glover*

Hippoboscidae. House fly. Ag. rept. 1872, p. 133.

Hippobosca equina. (Lw) (Dip.) House louse fly. Ag. Rept. 1872. 133. fig. 25. In. torment horses
 { IG. 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. 23. 104.

Example, Hister unicolor. IG. V/19. 22. (Col)

x Hesperidae. (Col) 1863, p. 275. Example. Hesper (Microhepala) serena IG. XXXVIII/10. Col.

{ vegetable feeders.

Hesius. Dierons. see hui. with figures & other hui explained. Ag. Rept. 1860, p. 294 & 7.

Holotrichia. coronata. (col) Ag. Rept. 1868, p. 52. 104. 113. L. feeds on roots of grass &c. In. feeds on

{ foliage of forest & forest trees. see Phyllophaga. IG. VII/15 (Col)

Homonium. Ag. Rept. numbers &c. 1864, p. 534. — 1862, p. 387. — 1863, p. 563, 1868, p. 315.

{ 1876. long article with figures.

v Holmes. See article on Birds. Ag. Rept. 1856, p. 111. to 116.

Honey. Curious mode of taking honey. Garrigations with dry stems of Artemisia. Hornwood

{ Ag. Rept. 1860, p. 91. Honey see also Bee. Afis. Honey produced by bees. see

{ Megacorymbus mexicanus (Hym) Ag. Rept. 1864, p. 63. IG. IX/34 (Hym)

Hoplitis debilis. (Col) has frequent flowers of Pear & other small trees in blossom. Found also on

{ Solanum. Ag. Rept. 1868, p. 87. fig. 59. IG. IX/27 (Col)

Hoptrochala. lucorum. (Col) found under bark of trees. in Polonia &c. Ag. Rept. 1868, p. 100. fig. 165.

{ IG. XXV/4. (Col)

Hoplophora quadrivittata. (Tom) Ag. Rept. 1876, fig. 22. found on bark. IG. II/12 (Hom)

Horiadae. Ag. Rept. 1868, p. 106. Col.

Horia maculata. (Col) larva destroys the larvae of a wood bee. (Dylecopia Hym) by feeding

{ upon the food stored up for the progeny of wood bee (Dylecopia) itself.

{ Ag. Rept. 1868, p. 103. (Col)

Horia. (see Diagramia) sanguinipennis. L. probably parasitic on some other insect.

{ Ag. rept. 1868, p. 103. fig. 173. Fig. 178. IG. XXVII/17. (Col)

Horn bug. (Col) see. Lucanus dama. L. in decaying wood of Oak. Willow. Apple. cherry.

{ L. feeds on sap of trees. Honey dew. & sometimes on soft bodied insects.

{ Ag. Rept. L. capreales. syn. L. dama 1860, p. 320 — 1868, p. 86. fig. 51. Lucanus dama

{ IG. X/16. (Col)

x " " Lucanus capreales. Uhler. Ag. Rept. 1860, p. 320. see L. dama IG. X/16 (Col)

Hornets. (Hym) Vespa. &c. feed on fruit of pear (Uhler.) Ag. Rept. 1860, p. 316. — eat.

{ young tobacco worms. (Macrosila Carolina (Dip) 1872, p. 123. (Hym.)

Hornets hard to destroy. & remedies. Ag. Rept. 1864, p. 547. (Hym.)

Horn tail. Hood wasp. see Urocerus. in Uroceridae. Ag. rept. 1863, p. 276. example Urocerus

{ capricornis. IG. VIII/36. 38. (Hym.)

Horses. worms in. Uscarides 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. 363. — 1872, p. 131. Habit, remedies &c.

{ IG. VI/23 (Dip)

x 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. IG. IV/10 (Dip)

Horse louse fly. (Dip) Hippobosca equina Ag. Rept. 1872, p. 133. fig. 25 Some's horses sheltering

{ themselves under the hair. when disturbed. IG. VII/40 (Dip)

How to collect & preserve insects. C.R. Lodge. Ag. Rept. 1866, p. 305.

Hulls curculio catcher. old machine "American Ent. 1/p. 220" — new machine Ag. Rept. 1872, p. 451.

Hunter weevil. (Col) (resembles Sphenophorus carosus) Bill bug, or corn borer which

{ also injures maize by puncturing the stem &c. Ag. Rept. 1863, p. 573. IG. XIII/16. (Col)

Hydra terminalis (Orsh) said to be destroyed by *Palpulus* (Hed) Ag. Rep. 1875, p. 132. 33 v/2, 11c

{ *Hydra* see *Dridactylus*. 33, III/6. (Orsh)

Hydrocera (Clerus) *humeralis* (Col) *menes* mentioned 1868, p. 97. fig 141. Ag. Rep. 33 XII/30 (Col)

Hydrocoris (Hed) water bugs. Ag. Rep. 1875, p. 132.

Hydroscaphidae Water measurers. (Hed) from running on surface of water. Ag. Rep. 1868, p. 315.

Hydrophilidae (Col) Ag. Rep. (Rathvon) 1861 p. 593. — *L. piceus*. Insects feed on decaying vegetables. Ag. Rep. 1868, p. 81. 307. (Col)

Hydrophilus piceus (Col) (Eu) feeds on plants & aquatic mollusks. Ag. Rep. 1868 p. 81. (Col.)

Hydrophilus tunicularis (Col) Ag. Rep. 1868, p. 81 fig 14. aquatic in habits. 33 III/18

Hydrophilus &c water beetles in aquaria. Ag. Rep. 1864 p. 459. (Col)

Hydrous piceus (Col) is a harmful beetle & suited for an aquarium Ag. Rep. 1864 p. 469 (Col)

Hydrinus aculeatus (Col) a wood boring beetle. The larva of which is destroyed by *Thanasius*

nigriceps. 33 XII/10 see *Thanasius aculeatus* Ag. Rep. 1868, p. 97. 33 XXXVII/17 (Col)

* *Hydratus americanus* (Col) L. wood of Oak & Forest trees. Ag. Rep. 1868 p. 98. ex *Hydratus lauguris*. 33, XLIII/14 (Col)

Hylobius piceus (Col) (Rathvon) Ag. Rep. 1861, p. 605. fig 43, 49, 50. L. cal wood of pitch pine. 33 XII/10

Hylobius piceivorus (Col) eats under bark wood of pine. Remedies, & Ag. Rep. 1863, p. 573.

{ 33, XVI/14

Hylostropus vagulus (Col) eats through lead & zinc, food prob pine. Callidium & incorrelly.

{ *Cuculus* of Rathvon. 1861, p. 616. *Hylostropus vagulus*. 33, XVII/3. (Col)

* *Hyphantes*. (Arctea) tent. Fall web worm. Weaver, &c. forms cobweb like nests on ends of large limbs. of Persimmon, apple, cherry, elm, plum, &c. &c. lives in society as Caterpillars. 33, S. VIII/5, s. 16 3 LIV/13. 18. (Lep)

Hymenoptera - remedies &c Ag. Rep. 1862, p. 388. — 1864 p. 530. — 1866 p. 40. — 1868 p. 309.

Hyposiderus loricatus (Lep) skin bot fly of the ox — normal. holes made by larvae Ag. Rep. 1872, p. 129. fig 18. habits vermiform. 33, - LVII/35 S. VIII/21. (Lep)

Hyphophloeus bicolor (Eu) (Col) L said to destroy the larvae of wood eating insects.?

{ Ag. Rep. 1865, p. 91. (Col)

Hyphophloeus corticivorus (Col), L in wood of junce (Col) Ag. Rep. 1868, p. 100. fig 166.

{ *Corticivorus*. 33, XXVII/3. (Col)

Hyphyphyllum a spider destroying young caterpillars, of *Pteris Rapae*. or the European

{ cabbage butterfly. Ag. Rep. 1875, p. 82. 83.

Hyposygea (Hymenoptera) (Lep) see *Asopia corticalis*, or the clover worm. 33, LXXII/25 (Lep)

Schnemann fly (Hym) destroys aphides. (Plant lice) & other insects Ag. Rep. 1854 p. 84 p. 8 (Hym)

Schnemann fly (Hym) destroys cotton plant lice & other insects. Ag. Rep. 1855, p. 112. p. 18, fig 4. — 1857 p. 125. — ? Rathvon Ag. Rep. 1862 p. 376 destroys eggs of Cockroaches —

parasitic in caterpillars & other insects Ag. Rep. 1864 p. 347. — destroys *Hippodamia*

Macgilla maculata (Col) 33 XXX/65. Ag. Rep. 1866, p. 41. — *Cerostomu brassicella* *Platella*

lunifrenella (Lep) on cabbage. 33 XX/28. LXVIII/30, 31. — *Pyrarctia Urtica* *Isabella*

(Lep) 1866 p. 101 33 VIII/910 LVI/7. (Lep)

" destroys *Pissodes Strovi*. Col. 33, XVII/11.

" in eggs of plant lice Aphides. Ag. Rep. 1866 p. 42. — destroys *Aeromyza* Lep. 33, LXIX/28

Agonulus varivialis (Lep) XXXVI/3. — *Anisota senatoria* 33, VI/56. LVII/15. 18. (Lep)

Schnemann (Europe) Hym destroys *Cephus pygmaeus* in stems of wheat 33, LX/8.

" flies making cocoons agglutinated together like a honeycomb. destroy L of *Ceratomia*

quadricornis (Lep) cocoons. 33, V/4. (Hym)

Schnemann forming a large mass of loose woolly cocoons. from *Macrosoma quinque maculata*.

{ 33, VII/6. (Hym) Ag. Rep. 1873 p. 159

Schnemann fly, destroying Aphides. Plant lice. Ag. Rep. 1858 p. 262. (Hym)

Schthyura inclusa. (*Clastera americana*) poplar spinner. injures foliage of Poplars, willows

&c. remedies, &c. — 33, LVI/13. In LVII/3. (Lep)

41.

- Indian. *Cetonia*. *Euryomyia* (*Cetonia* (*Cuphorica*)) *inde*, see *Euryomyia inde*. 39. IX/29
 Indian. Corn. see Maize.
 Indian. East. West. Indian bee. see *Apis acraeaensis* & *labressa*. Ag Rep. 1866. p. 32. (Hym)
 Infericomes. (Holt) Agr Rep. 1858 Jan. 3. p. 121. (Holt)
 Inostemma (Hym) a parasite destroying *Acidomyia destructor*. example *Inostemma insovereis*
 { 39. IX/3. (Hym) Ag Rep. 1872. p. 126.
 Insects destroyed by means of the so called persian insect powder. made from the flowers of
 { *Pyrethrum Willebrandti*, *P. roseum* & *P. rigidum* (Paris exposition) Ag. Rep. 1862. p. 92.
 1861 p. 225.
 Insects destroyed by benzine. Ag Rep. 1861. p. 332. — poisoned by Cobalt. Ag Rep. 1855. p. 65
 " destroyed by *Nichia urederachi*. on inside of China tree Ag ser. 1855. p. 67.
 " to be destroyed by concussion from exposure of powder. Ag Rep. 1871 p. 88. p. 111
 " trap on lantern to allure by light. & entrap. description. Ag Rep. 1855. p. 60.
 Insect. double. scoop net to catch insects, with leg. Ag. Rep. 1874. p. 100. fig. 11.
 Insects. destroyed by *Milyca amatus*. (Holt) (*Conractor* Syn) see *Milyca* 39. III/12.
 Insects. Loss by insects \$100,000,000. per annum. — best allies to destroy them are birds.
 { (by Howard) Ag Rep. 1871. p. 421.
 Insects Amount of losses by depredations of insects. Ag Rep. 1868. p. 305. — 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. 1865. 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. Howard, 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 Howard, whilst the blight & figures' are by J. P. aethio signed D. J. B.
 Insects injurious to cotton. Ag Rep. 1858. p. 271. Insects injurious to vegetation 1858. 256. to 271.
 Insects injurious and beneficial to the Orange tree. Ag Rep. 1858. p. 115.
 Insects injurious to vegetation fruit trees &c by P. P. Walker. 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 Habits, 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 Owon fly. &c
 " how to send specimens. Ag. Rep. 1872. p. 123.
 Insects noxious. Policy. Ag Rep. 1871 p. 374. — 6th Rep. Mo 1874. p. 441. word insecticide, criticised
 Insect anatomy for beginners. Coleopt. figure Ag Rep. 1864. p. 53. (more sketch)
 Insects & their uses (guins, galls, bees, & honey, blister flies) &c. &c. Ag Rep. 1866. p. 29. - 31.
 Sodie & torch used for attracting slugs. Ag Rep. 1861. p. 332.
Ips quadrisignatus. (probably *quadriguttatus*?) (see *Pityophagus*.) (col.) burrows in sweet corn
 { (Maize) Ag Rep. 1868. p. 83. fig. 34. see *Pityophagus quadriguttatus*. 39. IV/14 XXXIV/5?
 { XIV/2. (Col)
Ipini. — Ag. Rep. 1868. p. 105 Col
Ipsosoma *hottelii*. Joint worm in Wheat. (Syn *Eurytoma*) Ag Rep. 1854. p. 76. pt 5. — 1863. p. 42.
 { injures Barley. Rye. Wheat. & causing a swelling & enlargement of joint of stalk
 1864. p. 57. Horn — 1866. p. 42. it is destroyed by a parasite *Promelus* or *Phyllogaster* (Hym)
Ipsosoma hordai 39. I/26. Hym
 Italian Bees (by Parsons) Ag Rep. 1859. p. 543. *Apis ligustica* 1866. p. 32 39. IV/24 Hym
 Itch insect. *Acanus scabei*. Ag Rep. 1864. p. 564 remedy. & 1871. p. 426.
Ithyocera 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.
 like, injures buds & twigs of Pear, plum, cherry, maple. Oak. &c. *Romexis* &c 1863. p. 574
Ithyocera novaeboracensis 39. VII/17. (Col) 39 lower.

- Jackson, Ed. = Chemical researches on coloring matter of *Pyrrhocoris Dysdercus*, suturiculus.
 { or Cotton steamer, (Holt) Ag. Rep. 1858, p. 271. *Dysdercus suturiculus* J.S. 1/11 (Holt)
- Jassus. (*Colidea*) subfasciata. (Rbm.). J. frequent Black alder, & Blackberry, Ag. Rep. 1876, p. 31.
 { J.S. 11/36. (Horn)
- Jenequa, or Sidal hemp, an insect called maax, borrows through the central portion of the
 { plant. & two other insects called cochol, & Pux lush, prey on young leaves. &
 { see remedies. Ag. Rep. 1869. p. 264.
- Japanese earth worm, see *Megacolea*. Ag. Rep. 1871, p. 82.
- Jigger. (also Chigee) see *Sarcopterygia pentherens*, Ag. Rep. 1872, p. 136. (Dip.) a small flea like
 { insect that buries itself in the flesh of mantrid, (frequently under the toe nails)
 { where it lays its eggs in the mound, these when hatched out into little fleas, often
 { 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 mantrid, 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, *Josoma* (*Corytoma*) *hordei*, L. causes hard knotty swellings in the
 { joints of wheat. Ag. Rep. 1854, p. 6. — 1866, p. 42. — 1864, p. 547. J.S. 1/26 (Horn)
- Julidae. *Jalus*, miscalled wire worm, enters by mantrid. (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
 { (*Cotinis* sp.) (*Allorhina* J.S. 11/10 (Col)
- Katydid. *Microcentrum retineris*, & *Phylloptera oblongifolia*, (Orth.) in Florida injure the
 { foliage of the orange trees. J.S. 11/3 & 4. (Orth.)
- Katydid, see also *Platyphylum*, *Cyrtophylus*?, *perspicillatum*? (Orth.) & *Phylloptera*.
 { Ag. Rep. Rathvon. 1862, p. 350.
- Katydid, (Orth.) Habits food &c. Ag. Rep. 1874, p. 161, fig. 12..
- Kennicott. Animals, & birds, with plates. Ag. Rep. 1856, p. 52, to 110..
- Kix lach. an insect attacking Sidal hemp, Ag. Rep. 1869, p. 264.
- Labiæ. (sawwig) Ag. Rep. Rathvon 1862, p. 373. m.m. ex *Labiæ minuta* J.S. 1/10 (Orth)
- Lacidora Ewing (Orth.) m.m. Rathvon Ag. Rep. 1862, p. 378. (Orth)
- Lac insect making shell lac. Stöck, lac. &c. see *Coccus Cacca*. Ag. Rep. 1866, p. 34. (Horn)
- Lac wing fly. See *Hemerobius*, & *Chrysopa*. (New) Ag. Rep. 1866, p. 40 1868, p. 309, 1854, p. 86.
 { p. 8. *Hemerobius*. — 1853, p. 115. p. x. fig. 7. 1866, p. 40. *Hemerobius hyalinus* J.S. 1/13 (New)
 { *Chrysopa* L. feeds on aphides Ag. Rep. 1864, p. 375. — 1866, p. 40 — 1872, p. 133. *Chrysopa*
 { *oculata* J.S. 1/13. (New.)
- Lachnosterna*. see also *Phyllophaga*, (Col.) Ag. Rep. 1865, p. 39. — 1866, p. 3a, 9: 8: (Col)
- Lachnosterna* see *Phyllophaga* (p. 9) generally known as May bugs or beetles, m.m. Ag. Rep. 1873, p. 152.
- Lachnosterna* (*Phyllophaga*) *fusca* (Syn *Phyllophaga quercina* of Horri) May beetles. The
 { larvae are generally known by farmers as "white grubs" The larvae feed on subter-
 { ranean parts 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. 82, fig. 67. 1872, p. 122.
 { 152. 1874, p. 8: — 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*. J.S. VIII/11. XLV/40. MC/10. Larva or white grub. (Col.)
- Lachnosterna horticola* see *Phyllophaga fusca*, L. eats roots, grass, &c. & foliage of fruit &
 { forest trees. see P. *fusca*. Ag. Rep. 1868, p. 88. (Col)
- Lachnosterna*, *Phyllophaga miscans*. Ag. Rep. 1868, p. 88. (Col.) food & habits like P. *fusca*. &c.
 { probably *Phyllophaga olivis*? J.S. XLV/30. (Col)
- Lachnosterna quercina* — Ag. Rep. 1864, p. 363. — 1868, p. 104. see *Phyllophaga fusca*. J.S. as above.
 { J. flower.

- Lachnus caryae* (Hom.) Ag. Rep. 1876, p. 40. frequent Basswood, Hickory, Oak, & Walnut. IS. No. 10 (Hom)
- Lachnus strobi* (Hom.) Ag. Rep. 1876. frequent White Pine. (Hom)
- Lachry moth. (American) (Lep.) *Climacampa americana*. *decipiens*. or Tent caterpillars of the orchards.
 { Form large cabinet like nests in forks of Apple, & Cherry trees. 1858, p. 389. - 1860. 321.
 1866, p. 557. - 1866, p. 29, 42. - 1870. p. 33. fig. 45. ♀ is destroyed by an Ichneumon fly.
Chromyampa elisicampae. 1866, p. 42. *Climacampa americana*. IS. eggs C/19. LXV/p. LXV, C/19 (Lep)
- Lady bird, or Lady bug. see Coccinellidae. (Col)
- Laemophloeus* (*Cucujus*) *modestus*. (Col.) I found eating interior of hemp seed. Ag. Rep. 1868, p. 84, fig. 43.
 { *Laemophloeus*. IS. VI/32 (Col)
- Lagria*. *hirta* (Col) (Cu) feeds on dead Oak leaves. Ag. Rep. 1868, p. 101. IS. Len. A. 50 (Col)
- Lagriidae. Ag. Rep. 1868, p. 101. (Col.)
- Lamellicornia*. (Col.) Ag. Rep. 1861, p. 577. - 1863, p. 566. - 1868, p. 307. 8e. (Col)
- Lampyrus*. (Cu) ♀ glaucous feeds on Snails. Zone snails. 8e. 1868, p. 95.
- Lampyrus* & *Lampyridae*. Ag. Rep. 1868, 98. Lightning weevils. Live fire. Ag. Rep. 1868, p. 93. 166. & 307.
- Lampyrus noctilica*. Fire fly of the Indies. Ag. Rep. 1868, p. 115 said to eat roots of Sugar cane. (Col)
- Laphygma frugiperda*. (Corn bud worm) Injures corn, wheat, & grain (*Phaenara* Syn S & L)
 { IS. S/4 LXVII/11 (Lep)
- Laphygma maera*. Georgia or Southern Grass worm. Lep. probably *Prodenia autumnalis* (VIII/15)
 { (Reby) is only a more northern var. (Fall army worm of the north west. Eats grass
 & weeds in Cotton fields. IS. S. D. XVIII/5. XIX/13. Sep.
- Laphygma maera*. Lep. is destroyed by *Tachina archippivora* (Lep.) & *Exorista tenax* (Lep.)
 + *Lanthea*. Cotton fly) free labor, Ag. Rep. 1866, p. 90.
- Larch chaser. (Lep.) *Tolype laricis*. feeds on Larch, or Tamarisk. Ag. Rep. 1866, p. 41. ♀ is itself destroyed
 by *Phryganea laricis*. (Hom) Solys IS. S. LVII/7.
- Large green tree bug, of Sitch. see *Podisus cynicus*. (*Urmagrandis*) injures foliage Oak, Alder, &
 I also destroy the 10 lined potato bug. *Doryphora Chrysomela*. 10 lined. Ag. rep.
 { 1873, fig. 8 p. 118. *Podisus cynicus*. IS. II/29. (Het)
- Large green tree bug. S. J. P. *Rhaphigaster pennsylvanicus*. *Naxara fulvans*. sucks sap of grape.
 { & Hickory foliage, Forest trees, &c. Ag. Rep. 1875, p. 117. fig. 5. *Naxara fulvans*. IS. IX/4 (Het)
- Langus succinoides*. (Het) prob. a vegetable feeder. Ag. Rep. 1875, p. 124. fig. 28. IS. V/12 (Het)
- Larvada argentata*. (Hym) carries off Crickets. to its nest, to form food for its young. IS. 116. V/29. (Hym)
 { Ag. Rep. 1866, p. 43.
- Lasioptera*. (Lep) 1 m. m. Ag. Rep. 1872. p. 127. ex. IS. XII/4. (D. J.)
- Lathridae* or *Lathridia* (Col) feed on fungi under bark of trees Ag. Rep. 1868, p. 84. ex *Lathridia*
 { *comthasia brata* IS. XXXI/13. (Col)
- Lead, bored through by *Stylobrotes* (*callidum*) *bayulus*. Ag. Rep. (Rathoon) 1861, p. 616. IS. XVI/3. (Col)
 " " " *Chion* (*garganeum*) *unctus* Ag. Rep. 1861/614. *Chion unctus* IS. X/3. (Col)
- Lebia grandis* (Col) destroys *Doryphora Chrysomela* 10 lined, the ten lined weevils, 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* IS. 11/4 (Col)
- Leccanium acicostoides*. (*Coccus*) *acicostoides*, *maculata*? frequent maple, & said to be the same as
 { the coccus infesting the Orange. *Maculata*? Ag. Rep. 1876, fig. 63. IS. I/13. (Hom)
- Leccanium* (*Coccus*) *hesperidum* (Hom.) injures foliage of Orange & Lemon trees, Ag. Rep. 1876, p. 52.
 { IS. pl. VI. (Hom)
- Leccanium pyræ*. (Hom) (Uhlen) Ag. Rep. 1869, injures limbs of Pear trees. (Hom)
- Leoprus xanthozylus* (Col) I undermines bark of prickly ash. Ag. Rep. 1874, p. 73. see *Sternidius xanthozylus*
 { IS. XXIII/13. (Col)
- Lema trilineata* (Col) Three lined potato beetle. I carries a shield of feces over its back & feeds
 { voraciously on foliage of Potato. Ag. Rep. 1871, p. 75. fig. 6. IS. XXVII/10 (Col)
- Lepidoptera*. an order containing Butterflies, Sphingidae, moths or muller v. Ag. Rep. 1869, p. 553.
 { 1862, p. 274. - 1864, p. 348. - 1867, p. 472. 1868, p. 46. 310 & 59. IS. Layer.

Lep.

- Lepisma sacchararia* (affinis) "Silver fish" said to eat holes in leaves & covers of books & on clothes Ag Rep 1868 p 309. — 1876 p 146, fig 20 JG. VI/6. (Orth)
- Lepismatidae* (Orth) fish formed insects, of a silvery bright look (hence name) having long hair like appendages or tails, habits nocturnal. Found behind wall paper. Ag Rep 1874 p 146. (Orth)
- Leptoglossus*, *phyllopus*, *Omsicordi*, *albivinctus*. (Fab) Ins found in cotton fields Ag Rep. 1855, p 94. Fig VIII. & destroys the Harlequin cabbage bug, *Strachia* (*Margaritana*) hisson. Liché. Ag Rep 1875 p 119, fig 12. JG. II/21. (Orth)
- Leptostylus*, *oculicorvis*. (Cox) injures Apple trees between bark & wood. Ag. Rep. 1860. p 319. 1863 p 576 Lacudior JG. XI/11. (Col)
- Leptura*, *vitata* (Col) Woodborer. of (Rathvon) Ag Rep 1861, p 620, not recognized but resembles *Rhagium stenoconus lineatus*. JG. XVI/9. XVII/47. (Col)
- Leucania unipuncta*. (Fabric) 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 53 fig 46. — Localities injured Ag Rep 1872 p 122. 1863 p 275. *Leucania unipuncta* JG L. XXVII/22 J. LXI/16. LXVII/7. (Col)
- Libellula*. (Neuropt) Dragon fly. Larva swarming needle. Horse doctor (Pré) *L. omosella* (F.) destroys other insects. Ag Rep 1866 p 40. & 1868 p 309. ex *Libellula sompasciata* JG. II/4. (Neur)
- Lice*. on head of mankind see *Pediculus humanus, capitea* (Forn.) Ag. Rep. 1876. Fig 57. JG. (Forn) II/46. →
- Lice*, on Plants, see *Aphides*, *Aphis*, &
- Lice*, Biting bird lice, see *Mallivaga*.
- Lightening*. bugs, common name for fire fly. *Lampyris*, *Ellechnia*, *Photuris*, &c (Col) Ag Rep 1868 p 95 &c.
- Lilac*, measuring worm, Lep. see *Procyclus armatonia*, Ag Rep 1871, p 83 (Fep) JG. LXII/11
- Linear fork claw*. *Dichelomycha linearis* (Col) injures fol. of Hales. Ag Rep. 1868 p 57. JG. IX/13.
- Linden*. borer. (Col) *Saperda vesita*. I feed in wood of Linden. (Rathvon) Ag Rep. JG. XVIII/18. (Col)
- Little end plant bug*. see *Dygus lineolaris*. or *Capsus oblineatus* see *Lycus lineolaris* JG. VI/5
- Lixis*, *angustatus*. (Cox) (Col) in pits of beans. Ag Rep 1866 p 90. (Col)
- Lixis*. *concurvus*. (Cox) Ins found burrowing in stalks of *Rhus*-s. Ag. Rep. 1865 p 90. 1870 p 71. Fig 17. JG. XXXI/2. (Col)
- Lixis*. *paraplecticus*. (Cox) (Col) Larvae reside in stems of *Sium* or *Water parsnip*. Ag. Rep. 1870. p 71. (Col)
- Lobesia*, *botrana*. (*Rathvon* *vitivora*) (Lep) Grape berry moth. I feed in fruit & seeds. Ag. Rep. 1870 p 86 fig 52. *Lobesia botrana* JG. XXVIII/3. CIV/2. (Lep)
- Locusts*. & Grasshoppers see *Locusta* & for *Locusts* improperly so called or Harvest flies 1867 p 67 1866 p 43. see *Cicadidae*. — *Locustidae*. — *Katydid* &c. Ag Rep. 1874 p 160. (Orth)
- Locusta*, *gryllus migratoria*. (Rathvon) Ag Rep 1862 p 384 see *Pachyblabus migratorius* JG. 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 J. Broomer, probably is *Caloptenus femur rubrum*, destroys Cotton. Ag. Rep. 1865 p 69; p. VI. Fig 3. JG. V/2. VIII/2. (Orth)
- Locustia*, *carolina*. (Orth) (Rathvon) Ag Rep. 1862 p 386. Fig 26. see *Edipoda* JG. V/3. (Orth)
- Locustia*, *sulphurea*. (Orth) (Rathvon) Ag Rep. 1862 p 386. Fig 27. " " JG. V/6. (Orth)
- Locustia*, *curtipennis* Orth Rathvon Ag Rep 1862 p 386 fig 28. *Chlocallis* R. see *Stenobothrus* JG. X/4. XII/18. (Orth)
- Locusts*. as food for Man. Ag. Rep. 1866. p 38. (Orth) JG. House.

- Locust, red Egg-eater, (Orth) *Catopanes fumus rubrum*, common grass-hopper of the eastern U.S.
Ag. Rep. 1867, p. 75, fig. 7. 1870, p. 76, fig. 32, 33. IS. VI/32. VIII/22. (Orth)
- Locust Wriston or Migratory, (Orth) *Campoplex* species. Ag. Rep. 1874, p. 137. Eggs in Egg sack
destroyed by a species of *Pimpla* (Hym) 1874, p. 138. C. sphaerata, IS. XII/15. XIII/11. (Orth)
- Locust, a large grasshopper (♀ not a Cicada)
- Locust lover *Orthopagus*. *Ulytes pictus* ♀. L. live in wood, of Locust. *Ulytes flexuosus* ♀.
Ag. Rep. 1863, p. 574. — 1870, p. 73, fig. 22. see *Cyrtus rostratus*. IS. I.C/16. 17. I.XXVI/25. (Coe)
- Locust tree, gall gnats see *Acodomyia*, see also, *C. psudulaccae*. IS. XXVI/33. 35. (Coe)
- Songomyia* (Coe) (Orth) 1841, p. 609. — 1863, p. 576. — 1868, p. 308. I. live in wood, *Asca Capri* ♀
{ beetles, 1861, 600. (Coe)
- Long snouted, rat weevil *Belanus nasus*, L. live in Chestnuts, harts nuts, acorns, chinquapin?
Ag. Rep. (Rathvon) 1861, p. 605. fig. 46. — 1870, p. 70, fig. 13. IS. XXIV/10. (Coe)
- Lophyrus albicinctus* (Hym) Pine tree saw fly. *Pimpla*, Ag. Rep. 1864, p. 346. IS. I/32. (Hym)
- Lophyrus Abbotti* (Hym) White pine saw fly, Ins on pine leaves, &c. (Hym)
- Lophyrus Decontei* (Hym) injures, Scotch and American pines, Ag. Rep. 1867, p. 73. (Hym)
Fishes by Insects, Ag. Rep. 1873, p. 4.
- Losses by Cotton insects, Ag. Rep. 1873, p. 164, \$ 25,000,000. (see also use of Paris green in same article)
- Loss, Urli causing galls *Leptogasteria* *Pomphigus ulmioides*, on the underside of a leaf,
{ of grape vine of a small pear, Ag. Rep. 1867, p. 72. see in *Diptera* IS. 27/26. (Horn)
- Loxotamia*, or *Sorotamia rosearum*, var *gossypii*, Ag. Rep. 186. ?., VII/fig. 3. L. injures ?
{ cotton foliage.
- Suber grasshopper, (Orth) *Membrax microptera*, injures foliage of Orange trees, in Florida.
{ *Chalcis*, eats vegetables, &c. Ag. Rep. 1868, p. 265. — 1862, p. 384. injures peaches, figs.
{ melons, &c. 1872, II, fig. 6, 7. — *Sorallia* injured 1872, p. 118. — IS. IX/22. (Orth)
- Lucanus*, *caryocis*, (Lama, Col) (White) Ag. Rep. 1860, p. 320. Horn bug, Stag beetle, ♀. In wood
of Apples. — 1861, p. 598, fig. 25, 29, 30. (Rathvon) L. wood of white Oak, ♀. Ins. Sapp
of trees, & honey dew. — 1868, p. 86, fig. 31. L. wood of Apple, Cherry, oak, hickories, when
damaged, Ins. feeds on Sap of trees, & sometimes on soft bodied insects, *Lucanus*.
{ Lama, IS. X/16. (Coe)
- Lucanidae* (Col) ♀ feed in wood, Ag. Rep. 1861, p. 600. — 1863, p. 274, — 1868, p. 65. (Coe)
- Lucilia caesar* (Lep) meat fly, (Stable or green) destroy fresh meat, cushion &c. (colors metallic)
{ Ag. Rep. 1872, p. 132, fig. 21. IS. VI/20. (Dip)
- Lucinidae*, larva from S. Carolina, (Col) see *Melanaetes*. Ag. Rep. 1873, p. 162, fig. 10. (Coe)
- Limnipes* insects in Florida (Col) see *Pyrophorus phylaxenus*. experiment with Ag. Rep.
{ Ag. Rep. 1873, p. 158, fig. 4. IS. XI/21. (Coe)
- Limbicæ*, Earth worm. Said to form food of *Photinus pyralis*. IS. I.C/33. I.XII/6. (Coe)
- Lygæus*, on Cotton of D. J. B. is *Anthrenus insidiosus* (Hct) Ag. Rep. 18 p. 36, p. IV/4. IS. I/3. (Hct)
- Lygæus* (Lep) or Cotton Stainer, or Red bug of Florida! (Hct) Ag. Rep. 1850, p. 103. p. IX, fig. 1 (P. Hct)
{ see *Lycidæus satoreoides*. IS. I/1. (Hct)
- Lycus cruentus* (Coe) frequent, flowers, Ag. Rep. 1868, p. 95, fig. 122. — IS. XXXIII/27. (Coe)
- Lycæus leucis* (Hct). Ins. found under bark. Ag. Rep. 1853, p. 122, fig. 23. IS. III/1. (Coe)
- ♂ " fasciatus, (Hct) destroy caterpillars of *Euchætes egle*, (Lep) caterpillars on *Arcyria* on
{ antirrhoeid, Ag. Rep. 1875, p. 121, fig. 21. IS. I/11X. 21/19. (Hct)
- terreus (Hct) destroy caterpillars of *Euchætes egle*, on *Ulex*, milk or such used, Ag. Rep.
{ 1875, p. 122, fig. 22. IS. I/16. (Hct)
- Lygaeidae*, (Hct) Insects found on plants, on roots or ground some of them feed on other insects
{ Ag. Rep. 1875. (Hct)
- Lygus*, *lineolaris* (Hct) *Lygus oblineatus*, or *linearis*, little lined plant bug, injures Peas, twigs,
{ grape vines, Potatoes, strawberries, fruit Guine, & frequent flowers of Cabbage, &c. —
{ and it said also to destroy the eggs of the 10 lined Colorado potato beetle, & other
insects. Ag. Rep. 1875, p. 126, fig. 34. Lygus lineolaris IS. VI/15. (Hct) IS. 208

Ligus lineatus (1046) *Capsus* & *Phytoconis*, quadrivittatus, injures fol. of Currants, & Raspberries, must.
{ *Megelia*, *Deutria*, *Rhithosia*, *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. XXVII* (p. Col)
Lymexylon soriceum, (Col) Injures wood of Oak & other forest trees. Sickly timber beetle Ag. Rep.
{ 1868, p. 98. fig. 146. (Col) *IS. XXX/2a* (Co)

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

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

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

Lytta fulgifer (Col) see *L. pyrrivora*. (Uhlen) Ag. Rep. 1860, p. 315. (not *Epicauta* (Col))

Lytta pyrrivora (Col) prob same as *Lytta fulgifer* (Uhlen) Ag. Rep. 1860 p. 315. injures leaves
{ of Pear. prob *Epicauta* Col.

Lytta Epicauta, *vittata*, (Col) Blister flies. Eaten by Toads. Ag. Rep. 1872 p. 91. — 1866 p. 34.
{ 1869, p. 531. 1870, p. 90. *IS. XXVII/12* (Co) see *Epicauta*.

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

Max. Biscaton an insect belonging to genus *Scarabaeus*, which ... through the cotyledons
{ part of the basal stem, & is pernicious. Ag. Rep. 1869, p. 264.

Macrobasis Fabricii, *Epicauta*, or *Cantharis cinerea* (Harris) (Col) feeds on foliage of Honey
{ 4. common Locusts, Wild Indigo, Potato, Peas, fruit of Apple &c. Ag. Rep. 1868, p. 103, fig. 179.
injures Potato potato. fol. & is said to destroy *Doryphora Chrysomelae* & *linaria* Ag. Rep.
{ 1874 p. 123, see *Macrobasis unicolor* *IS. XXVII/9*, (Col)

Macrobasis unicolor, (Col) see *M. cinerea*, *debelis*, & *micronis*, *Syncaemus*, Ag. Rep. 1867 p. 64. —
{ *IS. XXVII/9* Co

Macroderes, *subpinus*, Ag. Rep. (Pathwon) 1861, p. 602. fig. 61, 62. L. feed on underground
{ roots, & destroy hedges Rose, Grape, & blossoms Cherry, &c. — 1863, p. 267, Rose.
remedies. "Rose bug" — is poisoned by blossoms of *citiranthus*, 1865, p. 89.
1866 p. 29. injures. — 1867 p. 71. 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, &c. fact this insect is almost
omnivorous, — 1874, p. 125. in Kansas, *IS. IX/23*, (Co)

Macroglanis, (Hym) parasite, in *Acidomyia* destructor, a fly injurious Wood &c. Ag. Rep.
{ 1872, p. 126. Example *Macroglanis penetrans*, *IS. IX/2*, (Hym)

Macrosia, *Carolina*, (Lep) L. infested with parasitic, *Johnnemon* flies, which spin small oval
{ cocoons, on its body. (*Microgaster congregata* (Hym)) Ag. Rep. 1866 p. 42. — 1870, p. 427.
Larvae or young caterpillars destroyed by wasps, hornets, 1872, 123.
Common names, Tobacco worm, or moth, horn blower, Ag. Rep. 1870, p. 158. 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. II/2*, (Hk)
{ (Syn. also *Sphinx*) mere mention 1874 p. 127. (Hk)

Macrosia (Sphinx) *quinquemaculata*, (Claus) (Hk) Tomato, or potato worm. Ag. Rep. 1870, p. 40.
{ L. feeds on Tobacco folds & tomato fol. habit; same as above common in
the northern states, whilst in Carolina, is more common in the south, both however
are found in Maryland. in the tobacco fields 1870, p. 80 fig. 39. The popular fallacy
is to 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, rays of loose woolly cocoons. (*IS. VII/18* Hym) Ag. Rep. 1873, p. 159. — 1874 p. 80
Macrosia quinquemaculata, (Claus) *IS. IV/5* *Im. XI/6*, (Hk) *J. Glover*

Malachidae (Col) frequent flowers, & feed on other insects. Ag. Rep. 1864, p. 96. (Col)
Malachus aeneus. (Col)(Eu) 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 das 48111.
§§. XVIII/10. (Col)

x Maise. plant, showing the oil starch. gluten. &c Ag. Rep. 1863. p. 100.
Mallephaga. (Orth) Biting Bird Loe. (miscalled by some "Dicks") on various Birds and animals.
{ feed on feathers, hair, skin, scales, &c. remedies, &c. Ag. Rep. 1874 p. 146., 130. &c.
example Nimus angulus, §§. XII/1. (Orth).

Mammology, & ornithology of New England, &c. E. Samuels. Ag. Rep. 1863. p. 265.

Manna, produced by the punctures of a cicada on the flowering ash. Ag. Rep. 1866 p. 38. (Horn)

Mantidae. (Orth) Prantoris. Camelcricket, praying Mantid. 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. 234. — 1866 p. 40. & 1874 p. 188. habits nat. Hist.
§§. 46/11 (Orth) (see also 1863 p. 275)

May Beetle (US Col) see Phyllophaga, Lachnosterna, Diphloxia, (Col)

" " (Eu Col) or cockchafer. (Harmetow French) see Melolontha (Col) Ag. Rep. 1865 p. 89.

" " (Rathvon) Ag. Rep. Phyllophaga. queviana Fusca. §§. VII/5-11. & 24/10 (Col.)

May fly Ephemeræ (New) Palingenia, (Ephemera). lumbata. appear in Washington D. C.
{ about May & June, some times in great numbers, & frequent. miscalled shad flies.
by the Fishermen. §§. V/5. (New) (Ag. Rep. 1868 p. 309.)

Meal worms. The larvae of Tenebrio, Tenebrionellus, moitor, &c. destroy meal, flour, &c.
{ but form a very good food for soft billed birds, such as Mocking birds, &c. remedies 1863.
§§. 13/3 Larva & fly XXV/15. (Col) 569.

Measuring worms. (New York) Exanoms. submarginaria. Ag. Rep. 1864, p. 554. injures foliage of
{ Elm, poplar, Linden, & other trees. §§. XVIII/16 (Sep)

Medal gold. at Ent. Exhibition in Paris, awarded to §§. 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 Nectarcha. §§. 124. (Col)

Megacolex. (Pterichæta) 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. §§. XI/20. (Col)

Melanomyidae. Ag. Rep. 1863. p. 103 (Col) Melanomyia (Col) L under bark, Ag. Rep. 1869 p. 101. (Col)

Melanomyia. umbrosa. (Col) in rotten Oak stumps. Ag. Rep. 1863 p. 101. (Col)

Melanostictus. (Pirates) fuscipes. (Holt) destroys other insects. Ag. Rep. 1875 p. 134 fig. 42. Melanostictus
{ §§. 18/1. (Holt)

Melanotus (Cratonychus) communis. (Col) L in rotten wood, also feeds on vegetable roots. Ag. Rep.
{ 1868, p. 94, fig. 114. §§. X/4 (Col)

Melanophilus (Chrysolobus) fulvopictata. (Col) L probably feeds on white pine. Ag. Rep. 1868.
{ p. 91 fig. 96. Melanophilus §§. 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.

Melidææ. phæton. (Sep.) L feeds on Arrow wood. (Biburnum) "Baltimore fritillary"
{ Ag. Rep. 1867. p. 72. §§. I. R. XXII/6. I. XXX/6 (Sep)

Meloe angusticollis. (Col) S. feeds on Buttercups & rotals the larvae are parasitic in the
{ bodies of Wasps, was flies (Syrphidae & Muscæ Ag. Rep. 1868 p. 102. fig. 17.
§§. XXXVII/22. (Col)

Meloidææ. Plectroflis (Col) mere mention. Ag. Rep. 1863 p. 102. (Col)

- Melolontha*. (Col.) Ag^l Report 1861, p. 590. (Rathvon) destructive to roots, in the larva state.
 { to Fruit & foliage as perfect insect. Larvae destroyed by *Cecidellidae*. larvae.
 Ag Rep. 1861, p. 590. (Col) *variolosa* (Col) see below.
- x *Melolontha variolosa* (Polyphylla) (scarred *Melolontha*) I destroy foliage of Elm maple
 { Oak apple plum & other Fruit Forest trees. Ag Rep 1868 p 88 see Macronoxia
 { 39 VII/18 (Col)
- Melolontha vulgaris* (Sw) (Col) Ckchaffer of Europe, I. feed on roots. Ins on foliage of trees.
 { {shrubs, Ag. Rep. 1868. p 88. — damage done in Picardy 1869 p 632. (Col.)
Melolontha (Col) (Rathvon) Ag rep. 1861, p. 590, I destroyed by *Q* of *Cecidella*. (Col)
- Melolonthidae* (Col) feed on vegetable matter. Ag Rep, 1868, p. 87. (Col)
- Melophagus ovinus* (Lep.) sheep tick, or louse fly, with remedies. Ag. Rep. 1872. p. 133, fig 26.
 { 39. VI/45 (Lep)
- Membracitidae*. (Hom) Ag. Rep. 1868. p. 315. —
- Membracia* (Hom) (Rathvon) Ag Rep 1862. p. 387. resembles *Tetania* (Orth) when young. Forms
 { a connecting link between Orth. & Homopt. (Rathvon)
- Membracia benecata*. frequents Butternut, hop tree. Locust. & weeds. Ag. Rep. 1876. fig 11.
 see Enchenopa. 39. 1/22 (Hom)
- Membracia carinata*. (Hom) frequents the potato plants. Ag^l Rep 1876. fig 14. see Entilia.
 39. 1/26. (Hom).
- Membracia concava*. (Hom) frequents weeds. Ag^l Rep^t 1876. fig 13. see Entilia. 39. 1/1. (Hom)
- Membracia innervata* (Hom) frequent Oak & Chestnut. Ag Rep 1876 fig 18 see Smilia 39. 11/26 (Hom)
- Membracia parallela* (Hom) frequents white pine & covers itself with a froth like liquid. by some
 { called frog spittle. Ag Rep. 1876. fig 26. see Aphrophora. 39. 1/34. (Hom) in Aphrophora
Membracia quadrinotata (Hom) frequents white pine as above Ag Rep 1876 p 27. { 39. 11/33 (Hom) }
- x *Membracia rava*. (Hom) frequents Hickory, walnut Oak. Ag Rep 1876 fig 20. see Smilia 11/31. Hom
- Metaphidius femoratus*. see Acanthosphaera. (Hbet) 39. 1/20. (Hbet)
- 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 *Macrosida carolina*, or *M. quinque maculata*, 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. Form 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. Perisomalus tabacum. Ag Rep 1873 p 158. Microgaster
 { 39. 4/22. (Hyman)
- Michener*. 66. Ag^l Ornithology Ag Rep. 1863. p 287. 307.
- Microcentrum retinervis* (Orth) Fla. injure the foliage of Orange trees. Ag. Rep 1858. p. 275.
 { 39. IV/3. 16. (Orth)
- Micropus*. Phytoschromus. (Blissus) 'devastator'. leucopterus. Chinche bug. (Hct) injures vegetables
 { grass. maize. Grass. Wheat. Oats. potatoes, sorghum, buds of Pear &c &c — Ag. Rep.
 1864. p. 533. remedies. — 1869 p 537. — 1870. p. 57. 59. — 1874 p 127. localities
 injured. — 1875 p 122 fig 26. substances injured. see Phleiss Micropus leucopterus.
 { 39. 11/16. 17. (Hct)
- Midas*. (Lep) feeds on other insects. Ag Rep. 1866. p 44. Ex *Midas clavatus* 39. 11/20 (Lep)
- Migratory Locusts*. of the U.S. see Caloptenus spretus, & ? Edipoda atrox. (Orth)
 { of Co. Asia & Africa Acridium peregrinum. A. tartaricum. & Edipoda
 { migratoria. (Orth)
- Midges*. see Simulicidae. Ag. Rep. 1872. p 128. (Lep).
- Milyas* (Hemipter) eneticus. (Hbet) destroys other insects. Longiflora (Chrysomela), decem.
 { eneticus. Apph. Tortrix. F. & C.
 { 39. Milyas eneticus. 11/12 (Hbet)
- x *Microponis graminicola*. (Hym) destroys Calandra (Sitophilus) oryzae. Ag. Rep. 1849 p 332 p 1866
 { 39.

- Minks, business, by Swanton, Tennessee. Ag Rep 1869 p 429.
 Minks, Feasibility & profits of raising, by H. Besigue. Ag Rep 1873 p 653.
 Mites causing scab on Sheep. Ag Rep. 1864. p 563. remedies, &c
 Mites, red, spiders, on plants. (see *Acarus taraxaci* of Saunders report. Ag Rep. 1871 p 109. (on *Ligustrum*)
 } — remedy. Ag Rep. 1864. p 564.
 Mites or Grasshoppers — *Aspilota locustarum*. Ag Rep. 1867 p 67. — 1874 p 138. as *Acarus*
 } *Rabruon* (Ag Rep. 1862. 389.
 Mites on Necrophorina (Col) see *Damasus*. (*Colopteronum*?) Ag Rep. 1868. p 82. ?
 Mite of the Pear. see *Typhlodromus pyri*. injures leaf of the pear. Ag Rep 1872 p 113, fig 2.
 Mite infesting crane fly *Tipula denata* (Eu) see *Ocyptus rubra*. Ag Rep. 1872. p 128.
 " " common fly. *Asiloma urachnidiae*? Am Ent 1. 249. Ag Rep 0. — & *Urophora*
 Mocha Stone moth, Std (Lep) see *Scathophaga incusa* *Clastera americana*. L. feeds on Poplar.
 } *Quilao*. (Poplar & Juniper) Ag Rep. 1864 p 532. *Scathophaga incusa*. JS. L. vii/13 Ins VIII/3. (Lep)
 Mucorries. final exhibition at the Paris exposition Ag Rep. 1865 p 92. (13 Cases)
 Mole crickets. (Orth). see *Gryllotalpa*. Remedies. Ag Rep. 1864 p 543. (Orth). JS. vii/13. (Orth)
Molobrus mali. "apple worm or midge". see *Sciara mali* (Lep) L found in apples, injured by
 } the codlin moth. *Carpocapsa pomonella*. Ag Rep. 1872. p 116.
Monochamus dentator, *tetralator* (Col) Loblbing beetle. (Blatton) Ag Rep. 1861 p 613. L. feeds.
 } on wood of pine. JS. xiv/1. (Col)
 Monotomidae. (Col) mere mention. Ag Rep. 1868. p 83. (Col)
 Mordellidae. (Col) m. m. Ag Rep. 1863. p 101. (Col)
Mordella octopunctata (Col) frequents flowers. Ag Rep. 1868. p 101. fig. 174. JS. xxx/16. (Col)
Mordella fusilla (Eu) (Col) found in stems of horehound, (*Marrubium vulgare*). Ag Rep. 1868. p 101 (Col)
 → *Morus*. L. J. G. Baltimore. *Acanthus* silk worm. *Samia cynthia* (Lep) Introduction
 } habits, culture, experiments. Ag Rep 1861. p 874, p 382. additional observations, &c
 } with figures 1862 p 390. *Samia cynthia*. JS. L.P.C. xxi/5 Lxvii/5. (Lep). (Bombyx Syn)
 x *Mormonidae* *Abalis typhaceus* (Hct) accused of feeding upon ears of wheat but probably feed
 } on the wheat midge. (*Diplosis tritici*) *Oebalus* JS. ii/7 (Hct)
 Mosquito, or Musquito, see *Culex acicatus*. &c JS. L.P.C. Culex p. vii/1. Ins. v/1 (sometimes *Mosquito*)
 Mosquito, hawk. (New). *Libellula*. or dragon fly. L.P.C. p. 382. (New) Ag Rep. 1864. p 545.
 → Moth the chrysalis of a moth was destroyed by an Anthrax Ag Rep 1866 p 44 JS. Ins. iii/11. (Lep.)
Muscardinidae (Col) one species said to live in old rice. Ag Rep 1868 p 53 (Col)
Muscardis, ovalis, (Eu) Col found in grain (rice) Ag Rep. 1868. p 114. Col
Musca caesar. (Lep) Carrion & flesh. remedies. Ag Rep. 1864. p 563. — found in stomach
 } of wood pewee. 1865. p 39. (Lep.) JS. Lucilia v/20. (Lep)
Musca corvina — (Lep) L 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
 } JS. iv/23. (Lep.)
 x *Murgantia*. (*Strachia*) *histrionicha*. injures cabbage. Turnips. & other cruciferas. & it itself
 } destroyed by *Lepidoglossus phyllorhis*. Cabbage bug. "Harlequin Cabbage bug". see also
 } *Strachia*. Ag. Rep. 1867. p 71. fig. 85 *Murgantia*. *Strachia histrionicha*. JS. ii/22. (Hct)
Muscivora Dip Ag Rep. 1868. p 102. 307 fig 85. Lep.
 Museum, Agricultural. short hist of bean &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. Paris. 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 persicae* (Lep) Peach *Mycetobia*. L. found in burrow filled with frass, &c
 } gum, made by *Algonia exciosa*, in the Peach tree burrow. Lep. Ag Rep. 1872 p 116. fig 4.
 } JS. xii/13. (Lep.) JS. L. vii/13. (Lep.)

- Mycetobia*, (Dipr.) feed on Fungi, one mentioned by Dr Packard. feed in prutescent sap: under
 {bank of Elm. Ag. Rep. 1872, p. 115. (Dipr.)
- Mycetophagidae*, (Col.) fungi, under bark. mere mention. Ag. Rep. 1868. 84. (Dipr.)
- Mycetophilus persiciv* (Dipr.) see *Mycetobia*. Ag. Rep. 1872, p. 115. Fig. 4. (Dipr.) §§. XI/13.
- Mycetophilidae*, (Dipr.) 1868. p. 377.
- Mylabris*, (Cicadae) latest name for *Bruchus pisi*. Ag. Rep. 1849 p. 338. 1863, p. 574. 42. 72. for
 {habits, remedies see *Bruchus*. *Mylabris pisi*, §§. XIV/6. (Col)
- Mylabris sinuata* (Col) Field bean. Ag. Rep. 1870. *Mylabris*, *Bruchus sinuatus* §§. XIV/7. (Col)
- Mylabris granarius*, (Col) Destroyer peas beans &c. Ag. Rep. 1849 p. 340. 1870, p. 71. *Mylabris*, *Bruchus*
 {*granarius*, §§. 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*, §§. XIV/11. (Col)
- Mycetozoa*, (Col) mere mention. Ag. Rep. 1868, p. 104. (Col.)
- Mymecoleon*, (Pleur) Clint lion. Ag. Rep. 1855 p. 107. I dig pit falls to entrap other insects, on which
 {they feed, — 1864, p. 545. (Pleur) ex. §§. V/16. 32. (Pleur)
- Myxia* (Coccinella), 10, punctator, Ag. Rep. 1864, p. 65. It destroys Cotton aphid. See *Amatis*.
 {§§. XXV/37. (Col)
- Nabis* (Het.) feed on other insects. Ag. Rep. 1866 p. 44.
- Nabis varius* (Het.) destroys other insects. Ag. Rep. 1875. p. 130. Fig. 47. see *Hammatocerus* §§. III/6. (Het)
- Nacordis melanura*, (Coccinella) *demera apicalis*? (Col) Its frequent flowers. Ag. Rep. 1868, p. 103. Fig. 187.
 {§§. XXVII/10. (Col)
- Nauconis*, (Het.) aquatic, & destroys insects. Ag. Rep. 1875, p. 132. Fig. 56. §§. V/5, 3, VIII/38. (Het)
- Nausibius* (*Silvanus*) *dentatus*, (Col) I found under bark of trees. It on Sugar. Ag. Rep. 1868, p. 84.
 {§§. VII/23. (Col)
- Naval ship timber beetle, (Col) *Synsylon navale*. It injures wood. Ag. Rep. 1868, p. 98. §§. XXIII/9. (Col)
- Necrobis* (Col) feed on animal matter, carrion &c see also *Corynetes* (Col) Ag. Rep. 1868, p. 97. (Col)
- Necrobis*, *melacens*, (Col) predaceous eat dried meat carrion &c. Ag. Rep. 1868 p. 97, Fig. 143.
 {see *Corynetes*, §§. XI/32. (Col)
- Necrodes*, *sumnamensis*, (Col) (Rathvon) Ag. Rep. 1861, p. 595. Fig. 16. feed on Carrion putrid. Fungus &c.
 {see *Peltis* §§. IV/13. (Col)
- Necrophila*, *helleri* (Americana), feeds on Carrion. Ag. Rep. 1868, p. 82. Fig. 19. (by error) as *Peltis*.
 {*americana* §§. IV/11. (Col)
- Necrophila*, (Col) see *Siphia* also Ag. Rep. (Rathvon) 1861 p. 593 (Col)
- Necrophorus tomentosus* (Rathv) Ag. Rep. 1861 p. 594. Fig. 15. 14. 16. eat small dead carcasses
 {Carrion &c resembles *Siphia* (*Necrophorus*) *velutinus* of §§. 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. Fact as scavenger. (Col)
- Necrophorus americanus* (Col) feeds on carrion, especially on dead snakes. Ag. Rep. 1868, p. 82. Fig. 19.
 {It is infested with a mite (*Samas*) see *Siphia americana*. §§. IV/16. (Col)
- Necrophorus marginalis* (Col) feeds on carrion Ag. Rep. 1868, p. 82. Fig. 17. §§. IV/15. (Col) see *Siphia*.
- Necides*, (*Berytus*) *elegans* (Eu. Het.) found on Beech hollow. "Onion anthers" Ag. Rep. 1875, p. 121 (Het)
- Necides*, (*Berytus*) *spanensis* (Het) Ag. Rep. 1875, p. 121, Fig. 20. §§. III/10. (Het)
- Necides*, (*Berytus*) *apularia* (Eu. Het.) Ag. Rep. 1875, p. 121. common in sand at roots of plants. (Het)
- Nematus univalis*, Say. Black willow saw fly Ag. Rep. 1873, p. 280. worms when young black. &
 {with 4 rows of 12 yellow spots on each side when adult. Heliothone recommended to
 {destroy them. (Hym)
- Nematus venulosus*, (Hym) Imported Currant worm or Saw fly. It injure currant & gooseberry.
 {Foliage. color of worm, green, spotted with black. habits, remedies &c. Ag. Rep.
 {1870, p. 77, Fig. 33. (Hym)
- Nemobius*, (*Achetes*) *bellatus*. Striped cricket. (Rathvon) Ag. Rep. 1862, p. 881. feeds on
 {vegetables, Carrion &c. §§. III/9, 10. (Orth)
- Nemognatha utriusque* see *Zonitis* (Col) taken on flowers. Ag. Rep. 1868, p. 108, Fig. 185. The larvae
 {of certain species in Europe are said to inhabit ants nests, in spring. §§. XXX/25. (Col)
 {§§. XXX/25. (Col)

- Nepra articulata* (Hbst.) water scorpion. *S. carnivorous*, & destroys other insects, Ag Rep. 1875, p. 133, p. 57. SS. VI/10. (Hbst.)
- Net. double insect net. for sweeping grass, Hushes, 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 *Enomus subsignatus*, Ag Rep., 1864, p. 552. L feed on Elm.
 { popular. London. SS. L.P. XXIII/6. (Sep)
- New York weevil. see *Stylocerus novaeboracensis*, *curculionoides* Ag Rep 1860, p. 321.
 { 1861, p. 604, fig. 45. & 48: see *Stylocerus novaeboracensis*, SS. VII/13. (Col)
- Nerara* (*Rhaphigaster*) *pennsylvanica* (Hbst.) green plant bug of N.Y. on Cotton Ag Rep 1855
 { p. 93, p. VIII. fig. 5. — SS. IX/4. (Hbst.) (also later *Nerara hilaris*)
- Nerara hilaris*. (*Rhaphigaster pennsylvanicus*) of Fitch. Ag Rep 1875, p. 117, fig. 5. Nerara hilaris
 { SS. IX/4. (Hbst.)
- Nier. a grease produced by an insect. bearing the same generic name, from Yucatan.
 { Dr Arthur Schott. Ag Rep. 1868. p. 268.
- Nitidulidae*. (*Nitidulina*, Col) feed on decomposing animal & vegetable substances. & found in
 { flowers. Jungi, &c Ag Rep 1868, p. 83. example, *Nitidula behustulata*. SS. VI/24. (Col)
- Noctua Anomis xylinae* Cotton caterpillar or moth. injures plants of the Cotton Ag Rep
 { 1853, p. 71, pl. VI fig. 5. 1856, p. 244. — in "article of cotton by free labor" by M. D. Landon
 the wood cut of *Anomis xylinae* is wrong, having been copied from another insect
 in the Report for 1855, pl. VIII fig. 4. Landon's Report in Ag Rep 1864, p. 88, 90.
Noctua anomis xylinae is now *Atia angulata*. SS. XXVIII/4. (Sep)
- 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 imbricata* Hbst. "water boatman" destroys insects Ag Rep 1870, p. 136, fig. 63
- Notonecta monodon* (Col) frequents Cotton flowers Ag rep 1868, p. 101, fig. 172. SS. XXVII/23. (Col)
- Notonectini* Form 7. Hbst. Ag Rep. 1875, p. 127. Hst
- Notus raphanus desboulter* (Hbst) sucks sap of Raspberries, mulberry, Gallies, cabbage, cruciferous
 { plants, grape potato, & other &c Ag Rep. 1875, p. 132, fig. 25. SS. VIII/9. (Hbst)
- Oak. small horn bug see *Platycerus quercus*. Ag Rep 1870, p. 66. SS. X/9. (Col)
- Oak horn bug. Large. Col. see *Lucanus darna*. Ag Rep. 1861, p. 549, fig. 28, 29, 30 SS. X/16. (Col)
- Oak punner. *Stenocorus putator* (Lac) *Elaeagnidion villosum*. Ag rep 1863, p. 575 remedies &c
 { Eats off twigs from the inside of Oak apple peach hickory chestnut &c
 { *Elaeagnidion villosum*. SS. X/13. Col. (compare with *onitoides angulatus*) which cuts off buds
 of New Hickory &c from the outside hence called the Twig girdler see *Onitoides angulatus*.)
- Olema linearis* (Col) (Ew) L feed in the pits of small branches of hawthorn, & Filbert. Ag Rep.
 { 1865, p. 89. (Col)
- Olema trijunctata*. (Col) Raspberry honor. L. lives on pits of Raspberry, Blackberry, &c
 { Ag Rep 1863, 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 *Perotaenia rosaceana*.
SS. XII/13. L.P. XXIII/4. SS. XIV/20 & XXIV/6, 8, 10. (Sep)
- Oxyptera. subra. a mite infesting. *Tipula barasa* (Ew) crane fly, or "Daddy long legs" Ag Rep.
 { 1872, p. 128.
- Odontomyx*. (*Aspizus*) *trivittis* (Col) mere mention Ag Rep 1868, p. 94, fig. 118. Odontomyx.
 { *trivittis* SS. XX/17. (Col)
- Ocalus* *typhaeus*. pupax. (Hbst) said to injure Wheat? Ag Rep 1867, p. 71. Syn *Mormedua* (u)
 { Figured, p. 71) SS. XI/7. (Hbst) Ocalus.

- Acanthius niveus* (Orth.) Ag. Rep. (Rathvon) 1862 p. 381, fig. 17, 18. White climbing. In cricket. Ins. pierces holes & deposits eggs in Peach leaves. Beats holes in foliage of grapes, and Tobacco. ♀. — 1874 p. 143, fig. 16. Femals. injure & puncture branches. of Apples. (Blackberry, cherry, currant, grape, peach, plum, near raspberry injures grapes & but at the same time they are said to destroy plant lice & other insects. IS. VII/1, 2 (Orth.)
- A. ceticus* (Asiaticus) confusum (Lep.) injures foliage of Cotton, also, Annona vitæ, Starck, London. Hemlock, Maple, Negundo, &c. — 1864 p. 552. Bristle, or brood worm. injures Cedars. Remedies. — 1866 p. 41. see *Styracopterix ekhonoræ formis*. IS. XII/1, to 5 (Lep.).
- Ademeris*. (Col.) frequent univoltinuous plants. Ag. Rep. 1862, p. 103. (Col.)
- Ademera*, aricales, see *Nacentalis melanura* (Col.) Ins. taken on flowers. Ag. Rep., 1868, p. 103. IS. XXVII/2 (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, 13, fig. 10. "Terrible grasshopper" of Calif. Oregon, west of Rocky Mtns. Full account. IS. VIII/3 (Orth.) "note from Thomas list of Orthoptera, in Tr. Deavenport Acad. Nat. Sc. 1876. *Camnula Adipoda pellucida* is said to be a synonym of *Adipoda atrox*, I thought not to be the destructive migratory species of California. Deavenport list of Orthoptera, Thomas, p. 233"
- *Adipoda* (*Camnula*) *pellucida* Scud. (Orth.) resembles *Ad. atrox*, said to be the migratory locust of the Pacific coast. Ag. Rep. 1871, p. 78. *Adipoda*, *Camnula pellucida* IS. XII/20 (Orth.)
- Aëvius* *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 *Hypodermia bovis* IS. VIII/21, VII/86. " ? Head fly of Texas XI/37 (Lep.) (see also 1872 p. 130 fig. 18) (*Aëvius* 1866 p. 317)
- Aëvius* (*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.)
- Aiketicus*. *Aiketicus corivorum* (Lep.) Ag. Rep. 1858 p. 264. injure foliage of Orange. — 1859 p. 553 Ins. on Cotton. (Chambers) with a rough figure. see *Styracopterix ekhonoræ formis* IS. XII/1 to 5 (Lep.).
- Oil beetle. see *Meloe*. eximie. IS. XXXVII/1 p. 22. Ag. Rep. 1866 p. 102, fig. 177. (Col.)
- Olivarius*. ? n. sp. (Hom) frequents Blackberry bushes. Ag. Rep. 1876, p. 7. IS. XI/4, 13. (Hom)
- Omaloplegia*, see *Semica*. Col. ex. *Omaloplegia semica respertana*. IS. IX/17 (Col.)
- Omasus*. (Col. &c.) Ag. Rep. 1865 p. 91 destroys young mice. Ag. Rep. 1866 p. 79, fig. 2. IS. XXXI/9 (Col.)
- Omphron*. *tubiatum*. (Col.) destroys young mice. Ag. Rep. 1866 p. 79, fig. 2. IS. XXXI/9 (Col.)
- Oncideres*. *angulatus* (Col.) Twig girdler. Ins. girdles twigs of Pear, Persimmon, Hickory, Elm. walnut, & Apple trees. Ag. Rep. 1867 p. 72. 1871, 72. — girdles twig before depositing egg. 1873 p. 133. IS. XXII/20 (Col.)
- Onion flies. (Lep.) see *Anthomyia ceparum* of the east, & *Orthia flexa* of the western states, Ag. Rep. IS. VII/33, VIII/18. & VIII/28.
- Onion fly, *Anthomyia ceparum*. Ag. Rep. 1865 p. 239. (Lep.) IS. VII/33, VIII/18. (Lep.) (see also 1867 p. 739 1869 1227.) " *Orthia flexa* Ag. Rep. 1866 p. 563. — 1872 p. 134 fig. 26. (Lep.) IS. VIII/28 (Lep.)
- Oology of some land birds of New England. & means of identifying injurious, & beneficial species. Ag. Rep. 1864, p. 386.
- *Ophiion*. *macrumum* (Hym) air Schneumon fly. destroying *Attacus* (*Semica*) *Cecropia* (Lep.) Ag. Rep. 1866 p. 41. B. Rathvon XII/6. (Lep. m.)
- Ophthalmicus*. (Hct) not a peewee feeder. Ag. Rep. 1875 p. 122 fig. 24. IS. Ophthalmicus piceus 11/2 (Hct.)
- Ophid* *mollis* (Col) (Ew) destroys L. of wood eating insects. Ag. Rep. 1865 p. 91. (Col.)
- Opremalia* (*Opromela* Thomas) (Rathvon) Ag. Rep. 1862 p. 384 m. m. ex. *Opremalia livittata*. IS. VI/24 (Orth.)
- + *Ophiion bimaculatus* (Hym) Ag. Rep. 1866 p. 41. (Hym)
- x *Pedroda migratoria*. (Orth.) see *Pachytypus migratorius*. IS. XIV/10 (Orth.)

- Orange Aphid. or Pear-bloss. (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 *Eucoronus quercu* (cocconella) see *Apididius Gleri* SS p. 14. (Hom)
- Orange tree, basket worm, or tree worm. (Dep.) *Psyche confederata*, see also *Acceus Plataneticus*
 { glaucus. (Pack) Ag. Rep. 1858 p. 264. *Psyche moderata*, SS p. XII/18, SS p. XXXV/26 (Dep.)
- Orange insects, experiments on in Florida, & testimonials of success in destruction of Coccus
 { *Apididius Gleri*, from Dr. H. Moragne's & Judge Forward's Palatka Fla.
 { Ag. Rep. 1855, p. 551 to 554 & Moragne's (1859) p. 570. (Judge Forward)
- Orange tree, re-narrs on the Orange tree, by J. Knowl, taken principally from Michaux.
 { 1858 p. 266.
- Orange and Bayonet (Col) see *Bayonetia imitata*, I feed on tender shoots of pines, I probably
 { lives in wood? Ag. Rep. 1868 p. 91. *Bayonetia lineata* SS XII/13. (Col)
- Orchidimum? injures Cotton by boring slits in stalk in which to deposit eggs. Ag. Rep. 1867 p. 61.
 { figured. (Orth.)
- Orchidimum gracile* (Orth.) Ag. Rep. (Rathvon) 1862 p. 282 fig. 22, eats grass, m. m. see; *Xyphidium*
 { *assatum* SS IV/10. (Orth.)
- Orchidimum vulgare* (Orth.) (Rathvon) Ag. Rep. 1862 p. 282, feeds on grass, & huge spon. *temphylla*
 { *agilis*. Slender meadow grasshopper. SS IV/5, 11, 6. ♀ IV/11. (Orth.)
- * *Orchidimum vulgare* as fig. in Ag. Rep. 1874 p. 164 fig. 13, is wrong as it is the figure of *Acunthus bisulcatus*
 { see SS IV/6. (Orth.) put in by mistake.
- Orchestrin* (Halt.) & *Phyllocera striolata*, Col. "Injures cabbages & young vegetables." Cabbag. & d.
 { Ag. Rep. 1865 p. 282. see *Orchestrin striolata*. SS XXIV/8 (Col)
- Orygia leucostigma* (Dep.) Turnout moth Ag. Rep. 1864 p. 532, fig. Fruit & Forest tree remedies —
 { — is destroyed by a parasitic Hymenoptera. *Trichogramma orygiæ*. 1864 p. 52.
 { *Orygia*. SS X/5 to 10 & XXII/9. LXI/586. (Dep.)
- Oriental, cockroach. (Orth.) see *Platan*. (Rathvon) Ag. Rep. 1862 p. 374. *Stylomyza orientalis*. 1874.
 { p. 130 fig. 4 *Stylomyza* SS I/56. VII/2. (Orth.)
- Ormenis, (*Pecopteris*) *septentrionalis* (Hom) found on grass, & *Podophyllum*. (May apple)
 { Ag. Rep. 1876 fig. 9. SS I/45. (Hom)
- Ornithology, Ag. cultural. by W. Michener. Pa. Ag. Rep. 1863 p. 257 to 307.
 " " of New England by E. A. Samuels. Ag. Rep. 1867 p. 265.
- Ornithological report, notes of contents of stomachs, with insects named, but not catalogued.
 { Ag. Rep. 1865 p. 37.
- Ortalidae (Dep.) L. feed on fruit stems, & leaves of trees, & plants, Ag. Rep. 1872 p. 134.
- Ortal's flea, (*Triptera arcuata*) Western onion fly. (Dep.) Ag. Rep. 1864 p. 563. remedies. —
 { 1872 p. 134 fig. 24. — habits & remedies. SS VIII/28 Dep. (for Eastern onion fly see
 { *Anthomyia ceporum* SS VII/33, 9 VIII/18)
- Orthoptera, damicornis*, *Crotophaga thoracicum* (Col) Larva probably in word, Ag. Rep. 1868 p. 97 fig. 142.
 { SS XII/26. Col. *Orthoptera*
- Orthoptera*. Grass hoppers, Locusts &c. 1864 p. 543. — 1866 p. 40. — 1868 p. 308. — 1874 p. 77. 1872/127. 1874/129.
 " " Rathvon Ag. Rep. 1862 p. 372. as food for man. & remedies. 1862 p. 389. 1863 p. 276
 " { Remedies, &c. 1864 p. 543. one of the principal orders. History & general article. 1874.
 " { p. 129.
- Orthoptera, ambulatoria* (Orth.) walters, as Cockroaches & (Rathvon) 1862 p. 374.
- Orthoptera, ruficornis* (Orth.) graffers, as Man's &c. — 376.
- Orthoptera, saltatoria* & grasshoppers, as Grasshoppers, &c. — p. 378.
- Orthostethus* (Elatr) *infuscatiss*, (Col) I feed on Chestnut wood, Ag. Rep. 1865 p. 94. fig. 11 SS XX/8. (Col)
- Orange orange (*Maclera aurantiaca*) is food for sick worms (*Strobilomyces moris*) with experiments
 { by Mr. Cornaby, Ag. Rep. 1870 p. 82.
- Osceola (Dep.) I feed on grain, wheat barley, &c. Ag. Rep. 1872 p. 134 Example *Osceola grandis*, Europe
 { SS XL X fig. 3. Dep.

- Osmoderma crenicollis* (Col.) smooth *Osmoderma*. (Uhler.) *Ag. Rep.* 1860 p. 320. Eats wood of
 { Apple trees, also like Prussia leather. — 1868 p. 90. It feeds on Sap of trees. Apple
 { Cherry &c. 39 X/2. (Col)
- Osmoderma scabra* (Col.) rough *Osmoderma*. (Uhler.) *Ag. Rep.* 1861 p. 391. Eats decayed wood of Apple.
 { It feeds on foliage of Apple, Oak, Fruit of forest trees. Ins. emits a scent like Prussia
 { leather. 39 X/3. (Col)
- Othniidae*. see fern 67, p. 109. *Crotch.* *Ag. Rep.* 1868, p. 94. (Col.)
- Otiocorus amyotii*. (Horn.) 1876. no fig. I frequents Hickory, & Walnut. (Horn)
- Otiocorus Coquebertii*. (Horn.) *Ag. Rep.* 1876 p. 93. frequents wild grape, Beech, & oak. 39. 1/18 (Horn)
- Oyster shell bark louse, or Apple tree scale insect see *Aspidiotus conchiformis* (*Ag. Rep.* 1867 p. 74
 { 1870 p. 88 39. 11/28 Horn)
- Pachylis gigas*. (Hes.) from Arizona, *Ag. Rep.* 1875. p. 120. fig. 15. 39. VIII/36. VII/23. (Hes.)
- Pachymenus calcitrator*. (Hym.) destroys *Diplosis (Cecidomyia) tritici*. the wheat midge. *Ag. Rep.*
 { 1866. p. 42. (Hym.) 39. 12/9. (Hym.)
- Pachytelus migratorius*, (Orth.) migratory Locust. of Europe. Also Sweden, Frankfurt &
 { *Adipoda migratoria* of Smith's beetle dictionary p. 353. *Pachytelus*. 39. XIV/10. Orth.)
- Pacific coast, migratory locust. see *Adipoda atrax*. *Ag. Rep.* 1874 p. 77 fig. 10. — 1874 p. 137 fig. 10
 { 39. VIII/3. (Orth.)
- Palm weevil*. (Col.) *Rathvon*. *Ag. Rep.* 1861. p. 6p. *Calandra palmarum*? (Col)
- Palmeto* pea, or ocell weevil. see *Coryphus arborescens*. *Ag. Rep.* 1870 p. 71. Eats out interior of
 { seed like the pea bug. 39. XXXIX/4 (Col)
- Palmetto* weevil. (Col.) I. feeds on substance of trunk, near the top of tree, or when cut down.
 { see *Rhynchophora (Lammernanni) orientalis* 39 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* 39. 1/9. (Col)
- Papilio asterias*. "Parsley worm." *Lep.* *Ag. Rep.* 1864 p. 548 I. injures Celery, parsley, Parsnip.
 { carrot, & umbellifera in general. — remedies. — It is destroyed by *Schneumon* *Lep.*
 { *Inogus exosius*. . . . 39 1/18 (Hym.) — 1868 p. 314. — 1868 p. 119 p. 11. It is also destroyed
 { by *Stenelus fimbriatus* (39. 11/30. *Lep.*) *Papilio asterias* 39. 3R/1/1 Ins. XXVI/58. (*Lep.*)
- Papilio Thooi cresphontes*. (*Lep.*) *Ag. Rep.* 1858 p. 264 I. eat foliage of orange & Prickly Ash
 { see *Papilio cresphontes* 39 3R/3 p. 24. (*Lep.*)
- Parasitic insects destroying *Chrysomela (Doryphora) 10 lineata*. full list see *Ag. Rep.* 1874 p. 123.
- Papilionidae*. *Ag. Rep.* 1868 p. 314.
- Parsons*. on Italian bees, *Ag. Rep.* 1857 p. 523.
- * Patent office. *Ag. Reports*. end of 1861. (*Rep.* of Commissioner of Patents *Reports* of the
 { Commissioner of Agriculture, commences 1862. (very few insects mentioned until
 { 1854).
- Paris green* (Arsenite of Copper) substitutes its effects. *Ag. Rep.* 1871. p. 76. — efficacy - injurious
 { effects, mode of mixing &c for cotton, 1873. p. 168.
- Paris* 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*. 39. 3R/1/1 Ins. XXVI/58. (*Lep.*)
- Passalus cornutus* Col (*Rathvon*) *Ag. Rep.* 1861 p. 599. fig. 31, 32 I eat wood of old stumps especially
 { of black Oak — Oak wood 1868 p. 86 fig. 53 39 3R/27. 39 XXI/10. Col
- Pasymachus elongatus*. (Col.) destroys *Chrysomela (Doryphora) 10 lineata*. on the Colorado
 { potato beetle 39. *Pasymachus*. XI/16. (Col)
- Patent office. *Ag. Reports*. see above * but place here.
- Pea bug, see *Bruchus Mylabris fuscus*. 39. XIV/6. (Col)
- See *g. n. Calcepon*? of 39 3R *Ag. Rep.* 1855. p. 85. fig. 3 on Cotton is probably *Lorotaenia* *Lottae*
 { *gossypii* - *Lep.* see in Cotton plates 39. 1X/4, *Lep.* *Lorotaenia* (Horn) 39 *Lottae*.
 { *Lorotaenia gossypiana* Pack is in Cotton plates XI/3. (*Lep.*)

Peach araucoriscus. (Col) *Araucoriscus coffeae* (Col) found under the bark of diseased peach trees
 & in the rolled & shrunken fruit. Ag. Rep. 1873. p. 114. fig 3. - see *A. p. circulatoris*.
 { IS. XXXIX/21. (Col)

Peach tree borer. *Algonia (Trogilium) exitiosa*. L. injures bark, wood, or root, of Peaches, injures
 also Apples, Cherry nectarines, & plums. (Lep.) Ag. Rep. 1864. p. 550. Remedies. &c.
 { IS. L. P. 2. XLVII/2. (Lep.)

Peach bud worm. (Lep.) *Limonax* in the centre of twigs of Peaches, hiding the ends of the twigs.
 in early summer. *Anarsia prunella*. or *A. lineatella* Zellw. Ag. Rep. 1872 p. 112 fig 1.
 { IS. Sp. C. VIII/3. (Lep.)

Peach *elycatolus* (Lep.) *Mycolobla (Mycolophla) persicae*. L. 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, *Erythronia ulis. basilaris*
 { Ag. Rep. 1863. p. 575. IS. XI/5. 38. (Homop)

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

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

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

Pear slug. (Hym) *Delandria. carasi. consumas* 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 52. 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 vestimentis. " " clothes & bare skin. " " fig 58.

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

Pediropus. Bugs having raptorial. fore feet for seizing & holding their prey. Living on wet s.
 { ex. *Belostomatia americana*, Ag. Rep. 1875. p. 132. 134. IS. V/6. (Hem)

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

P. laticornis. *Flata limbata*. Ag. Rep. 1851 p. 57. (Hom)

Peldnotia, punctata (Col) Ag. Rep. 1854. p. 72. pl. 6. S. injures Grape fruit. &c - 1861. p. 602. - Remedies. 563.
 { IS. 18/18. (Col)

Pemphigus. pyri. (Hom) (Hem) Ag. Rep. 1864. p. 316. S. 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) vitifoliae (Hom) L. form hollow or baglike galls. open at
 the mouth, on the underside of grape leaves, containing gall lice, or said by
 Riley to be one state of the much dreaded *Phylloxera vastatrix*. of Europe.
 { Ag. Rep. 1870. p. 87. 88. fig 56. (see also under head of *Dactylophaera*) 1871. p. 87. fig 23.
 This said to be identical with *Phylloxera vastatrix*. or Grape root gall louse of
 France. 1871. p. 87. fig 23. - 1872. p. 116. G. W. Campbell, of Delaware, thinks the two insects
 are the same. & Experimentally at the Dept. to the contrary. - 1874. p. 127. Experiments
 in department to prove or disprove Rileys theory of the identity of the two insects,
 1876. fig. 45. grape leaf gall. *Pemphigus vitifoliae*. IS. see in Diptera pl. X/16. (Hom)

Pentatomia. (Hem) Ag. Rep. 1854. on Cotton (Hem)

Pentatomia, or "Gray Plant bug" of D. B. suck sap of Cotton. (Hem) Ag. Rep. 1853. p. 98. pl. VIII. fig. 6.
 { probably is *Euschistus punctipes* IS. XI/12. (Hem)

Pentatomia ? or Green Plant bug of D. B. suck sap of Cotton plants (Hem) Ag. Report 1868. p. 93. pl. VIII. fig. 5.
 { probably is *Mexora hilaris*. *Rhaphigaster pennsylvanicus* IS. XI/23. (Hem.)

Pentatomia (Hem) some feed on other insects (Hem)

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

IS. Lower

- Pontania punctifera* (Hbst) frequent Mulberry thistles & weeds, lives on Sap of plant
 { Ag. Rep. 1875 p 118 fig 7. see *Enochistus*. S.G. 11/12. Hbst
- Pontania* ? sometimes destroy caterpillars Ag. Rep. 1875 p 118. (Hbst)
- Pentonia* syn of *Carpocapsa japonica* Colem moth see *Carpocapsa* S.G. 265. X/8. LXVIII/48 (Sep)
- Pentonia vitivora* (Lep) see *Polesia botrana* grape berry moth Siberia XC VII/3. & CV/2 (Sep)
- Penicillata diffingens* Japanese earth worm, imported with some plants from Japan.
 { Ag. Rep. 1871. p 81. see *Megacotyle*.
- Phatellura nitidulalis* (Lep) cucumber moth. injures melons, cucumbers, squashes, &c.
 { 1870. p 84. fig 47. S.G. LVI/12. (Lep)
- Phalacrocladus* (Col) mere mention. Ag. Rep. 1868. p 83.
- Phalangium* (Spider) Daddy Long legs of U.S. Ag. Rep. 1872. p 128.
- Phalaena* see *Lachrygma macra*. S.G. 278. XVIII/5. & XIX/18 (Sep)
- Phanaeus canifera* (Col) color metallic green & gold, in minute & excrements. Ag. Rep. 1868.
 { p 88. fig 55. makes balls of dung. S.G. VIII/14. (Col)
- Phanocoptera curvicauda* (Orth) (Rathvon) fig 382. fig 21. S.G. 4/10. VII/29. 3. (V. 1/6) (angusticollis S. on)
- Phasma* see *Diaphanomeria*. Ag. Rep. 1871. p 135. ex *Diaphanomeria pomonata*. S.G. 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 95. fig 128. S.G. XXX/27 (Col)
- Phenax* (Col) see also *Ellechnis*. *Ellephampis* ♂ & ♀ Ag. Rep. 1868 p 95 - 1872 p 155. S.G.
- Phenax* (*Ellephampis*) pyralis, "lightning bug". Inj. phosphorescent at night. mere mention
 { 1873. p 155. Ag. Rep. *Phenax* S.G. XII/6. (Col)
- Phryganeon planosac* (Hym) destroys *Solype canicis* "Larch chester" or "Lamarack
 { leaflet moth" Ag. Rep. 1866 p 41. *Solype*. S.G. III/7. (Lep)
- Phryganica* (New) "Hater fly" caddis on case fly? I live in cases in water, & as flies
 { form good food for fish. - example L. S.G. XI/6 & S. 12/8. (New)
- Phryganidae* (New) Ag. Rep. 1868 p 309. (New)
- Phycita nebulo* (Lep) *Nephoteryx undulata* L. lives in small hooked horn like cases feeding on fol of Apples, coral, plum, & thorns, see *Nephoteryx undulata* S.G. L.P. 9.
 { XVII. LXX/2. Lep.
- Phyllium synthe* (Orth) leaf insect of the east Indies. Rathvon. Ag. Rep. 1862 p 377.
- Phyllobius argentatus* (Col) 6 in 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 pyri* (Col Eu) injures fol & fruit of fruit trees. Ag. Rep. 1865 p 90 (Col)
- Phyllophaga* see also *Lachnosterna*. May beetle Ag. Rep. 1863. p 467. (Col)
- Phyllophaga georgiana* Georgian leaf eater (Col)
- Phyllophaga quercina* (Col) May beetle. Rathvon Ag. Rep. 1861 p 60. fig 35-36. destroys foliage of forest & fruit trees. - 1868 p 88. 1872 p 524. see *Phyllophaga Falca*.
 { S.G. VII/57. II. & XLVI/40. (Col)
- Phylloptera oblongipola* (Orth) *Yatypid*. injures foliage of orange trees, Ag. Rep. 1858 p 265.
 { foliage of forest & fruit trees - Rathvon Ag. Rep. 1862 p 382 - 1874 p 141 fig 13.
- x *Phylloscelus atrata* (Hom) frequent weeds, & crambles (Hom) 1876. S.G. 1/38. (Hom)
- " " var *pallida* " " " S.G. 1/53. (")
- x *Phyllosticta striolata* see *Orchestis vittata* S.G. L.P. 27. & XXVIII (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. 1877. p 88 fig 22. - habits, remedies, mode of propagation, &c. Riley 1873. p 387 - Remedy sulphuret 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 sulphuret of Carbon. - experiments with roots at the Dept 1874. p 127. - value of Ag. Ent. by Riley. 1874/462. - 1876 fig 46. (Rhom)

- Phylloxera vitifolia vastatrix* (Hom) Grape root gall louse, 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* { *Systus* enosa, (Holt) destroys other insects. Butterflies, Bats, Wasps, plant lice, &c.
Ag. Rep. 1875, p. 126, & 35. Phymata 33, III/13. (Holt)
- Phytocacia*, *ephippium*, (Coi) (Coe) minus channels in roots of Carrots & resembles our *Oberca*
Ag. Rep 1865, p. 89. (Coi)
- Phytobius* { *apinis* (Coi) I eat out blister like spots on the leaves of the Sulphur tree pupae formed in little cocoons in the blister Ag Rep 1870 p. 68 fig 11. see Cantor humulus.
33, XLII/8. (Coi)
- Phytoconis* { *quadriculatus*, p. *lineatus*, *Carsus lineatus* ? injures foliage of Currants, Parsnips, mint, Hageia, H. cutya, Bittersweet, Raspberr, Dahlie, &c. Hec. see
lineatus 33, II/9. (Holt) ? (Ag. Rep 1865/94 1875/99 93.) ?
- Phytolacca*, *decandra*, poke root, weed is poison Costoachos. Ag Rep. 1873 p. 157.
- Phytomyza* (Loef) { *miniata*, producing blister like spots, & winding passages on the leaves. remedies, &c. Ag Rep. 1872 p. 135 example, *Phytomyza nigricornis*, Euroju
33, XI/12. (Loef)
- x *Pieris rapae*, Lep European cabbage butterfly Introduction *habes injures* &c injures Cabbage Cauliflower mustard Turnips *Magnonella radicoluina* willow &c &c
33, 100/15. 2. & CVI/30 Ins I/14 & N.2 Lep (see Ag Rep 1870, p. 74, fig 36.)
- x *Pieris rapae*, (Lep) *remedia*, H. *horreorum*, discussed, 1871, 82, fig 15 Larvae destroyed by
2 Spiders, *Theridion brassicae* & *hydropyllum*.
- Pieris oleracea* (Lep) Pot herb *Ponice* *horre*, I feed on Cabbage Pot herbs &c (Ag Rep. 1870 p. 79 fig 37. White butterfly or Northern Cabbage worm, feeds on Cabbage, mustard
Turnips 33, XXXVII/7, XXXI/2. 3p., XCIX/15. & CVI/23. (Lep)
- Pieris prodenia*, Lep Southern Cabbage worm injures Turnips also (Ag Rep 1870 p. 79 fig 37
33, I/6. Ins XXXII/12. (Lep)
- Pigeon *Tremex*, see *Tremex* *Sorex columba* Ag Rep 1866 p. 41 I. bur into wood of Pear & &
is destroyed by *Pompla atrata* & *lunator* (Hym *Tremex canina* 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 Ceticus*
americanus, 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 larvae of
Tremex Sorex 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/5. *Rhyssa lunator*, III/4. (Hym.)
- Pimpla* ? (Hym) destroy eggs in the egg cases of Coleopterous species, or the pupae
of adults of the western states, Ag Rep. 1874, p. 135. (Hym.)
- Pison* white *junis* *varicil* (Coi) see *psisodes strobil*, Ag Rep 1870 p. 71. — 1866 p. 41, & is destroyed
by *schneemon* fig *Pstrophe* 33, C/27. Ins LVI/11. (Coi) (1863 p. 573)
- Pine S. *var.* *Lophyrus*, *albatus*, (Hym) Habits *Stemella* &c. Ag Rep 1864 p. 546. 33, III/22. (Hym.)
- Pine Saw fly, *beater*, (Coi) *Hylurgus leucostans* eats under bark. see *Dendroctonus* 33, XVI/5 XXXVII/12. (Coi)
- " " (Coi) *Stemella junis*, lives under the bark of pine. 33, XIX/6. (Coi)
- Prophila* *casei* Cheese fly or maggot I live in Cheese & sometimes called *Staphy*, as they are
able to spring to a considerable distance Ag Rep 1856 p. 29. 33, V/34. (Loef)
- Pirates* (Holt) feed on other insects Ag Rep 1866 p. 44. Holt
- Pirates*, *biquittatus* (Holt) sometimes called the spotted corsair, & is said to destroy Bed bugs.
{ *Acanthis lactuaria*, (Holt) Ag Rep. 1875, p. 127. fig 39. 33, IV/22. (Holt)
- Pirates*, (*meanolestes*) *picipes*, (Holt) found under stones, moss, logs of wood &c. & most feeds on
subterranean insects, & is capable of inflicting a severe sting. Ag Rep. 1875, p. 130, fig 42.
meanolestes picipes, 33, IX/1. (Holt).
33, 11/27.

- 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 ich-
 numon fly. 1866. p. 41. - 1870 p. 71. fig 16. had laid food. IS. XVII. 11. (Col)
- Sitona* (Col) *Hypocissus piceovorus*, eats wood of pine, under the bark. remedies, &c.
 { Ag. Rep. 1863. p. 573. IS. XVII. 11. (Col)
- Plant louse on grape, (Com) Ag. Rep. 1874. p. 29. p. 66. see Aphid.
 Plant lugs, see *Heteroptera*. Remedies Ag. Rep. 1862 p. 57 (Het)
- Platyaceticus*. *floricola*. (P. k) *Psycha confederata*. Hatched, or drop worms on the orange.
 { Ag. Rep. 1858 p. 264. *Psycha confederata*. IS. L. p. XII. 18. IS. XXXV. 26. (Lep.)
- Platamodes*. (Phalla) *penysylvanicus*. (*Pensylvanicum* Lockroach) fig see IS. I. 1. 3 (Orth)
- Platycerus*. *quercus*, (Col). L. feed on Oak wood. (small horn bug) Ag. Rep. 1868 p. 86. fig 62.
 { 1870. p. 66. fig 5. IS. X. 19. (Col.)
- Platygastrus*. (*Stenomera*) *juvencus* *lyman*. in *Cecidomyia destructor*. Ag. Rep. 1870. p. 126.
 { *Platygastrus semioctatus*. (Hym.)
- Platygastrus*. Hym. Parasit. in *Dipteris* bred. on the wheat midge. (Lep) *Platygastrus*
 { *typica* example IS. XI. 4. (Hym)
- Platygastrus* (Hym) destroys the grain worm in wheat. (*Enyptoma* *Isosoma hordei*)
 { *Isosoma hordei* IS. V. 26. (Hym) Ag. Rep. 1866 p. 42
- Plat. p. yellow *periscolicellatus* (Orth) (Kalmus) Ag. Rep. 1862. p. 351. In 4. 20. eggs deposited
 in two rows, overlapping each other. (Orth)
- Platysmia* (*Attacus* *sericus*) cocoon. cocoons naked. Ag. Rep. 1867 p. 74. see also *Semio* & *Attacus*
 { Ag. Rep. 1866 p. 543. - 1865 p. 98. - 1866 p. 36. Silk. 1867 cocoons naked
 destroyed by *Schneumon* *Ophoni* *macruron*. 1866 p. 41 food Apple Cherry, Colm. plum &c.
Platysmia *serotina* IS. L. Co. VIII. 2. L. young. XCV. 15. IS. XLVI. 12.
- Platysmia*. *vegetanda*. (Eu Het). probably feeds on insects. Ag. Rep. 1870. p. 126. p. 57. IS. XI. 13. (Het)
- Platensis* (Het) (Pan 8 Het) flowers. example. *Gerris coniformis*. Ag. Rep. 1875 p. 132. fig 53.
 { IS. VI. 6 (Fet)
- Plum Curculio (Col) said to be destroyed by *Diplodus curvipes*. H. C. Ag. Rep. 1870. p. 131. fig 50.
 { *Evagrus*. *viridis* *Dipodus*. IS. IX. 19. for *Conotrachelus nematus* or Plum weevil see IS. XI. 5
- Plum Tugger. (Col) *Anthonomus prunicola*. (Col) Ag. Rep. 1870. p. 7. fig 15. fig 1. see *Anthonomus*
 { *scutellatus*. IS. XXXVI. 23 & XIV. 23. (Col)
- Purr. Knot. is disease of the plum tree caused by a fungus "*Sphaeria mortosa*" Ag. Rep.
 1863 p. 573. 1870 p. 178.
- Plum weevil, or Curculio. see *Conotrachelus nematus*? (*Rhynchonemus* Syn) Ag. Rep.
 1863 p. 570. & 9. see *Conotrachelus* IS. XI. 5 (Col)
- Plusia* ♀ (Lep) on Cotton. Ag. Rep. 1854 p. 61. (Lep)
Plusia ♀ (Lep) " " Ag. Rep. 1853 p. 91. Pl. VII. fig 2. (Lep)
- Plusia*. *ambipennella* see *Cerostoma brassicella*. (*Psychotropa* Linn) L. injures cabbage
 & is destroyed by an *Schneumon* fly & was spiders *Tronidea brassicae* & *hyphopod*
 Lum. Ag. Rep. 1870. p. 62. fig 16. *Cerostoma brassicella* IS. IX. 28 LXIII. 31. XCV. 16. (Lep)
- Podilus* (Col) (Eu) Ag. Rep. 1866. p. 91. destroys other insects. Ex. *Podilus chalcidus*. IS. II. 30. (Col)
- Podisus*. *cyneus*. (*Arma grandis*) (Het) injures foliage of Apple, Cat. &c & destroys *Conotrachelus*
Chrysomela 10 lineata. Ag. Rep. 1875 fig 6. p. 118. (Het) *Podisus cyneus* IS. II. 29. (Het)
- Podisus spinosus* (Het) see in article *Arasa*. Ag. Rep. 1875.
- Podisus spinosus* (Het) live on Saps of trees. Apple &c & destroys. *Coryphora* (*Chrysomela*
decolorata). & other insects. Ag. Rep. 1875. p. 116. fig 9. IS. II. 28 (Het)
- Podura*. (Orth) more mention. Ag. Rep. 1866 p. 102.
- Poduridae* (Orth) "Springtails" "Bristle tail". 1876. p. 130. 145. by some called "Garden fleas"
Podura villosa (Orth) end of abdomen furnished with a forked tail. fed on vegetable
 matter, fungi, &c. One species feeds on pulps of Potato leaves. & is supposed to
 pass on the saps. Curled. remedies. (Eu) Ag. Rep. 1874. p. 146. fig 19. example
Podura villosa. IS. VI. 7 (Orth) Stover

- Pachytrocha frumosa*. see *Oronotus*. Ag Rep. 1876, fig 10. frequent *Chelidonium*. Goodberry, plum, pr-wot.
grass &c. (Rhom) (Syn. Flata) *Oronotus* 33. 11/16. (Rhom)
- Pachytrocha* (*Oronotus*) *septentrionalis* Ag Rep. 1876 fig 8 frequent grass may apple (*Pedalyphylum*)
{ *Oronotus*. 11/15. 33. Hom. }
- Pachilus* Ag Rep. 1865 p. 91 Co.
- Poisoning insects with cobalt Ag Rep. 1865 p. 65.
- Poisoning flowers of Jamestown weed (*Datura*) & Tobacco with blue-ore. for the Tobacco
{ moth (*Macrosila carolina*) (Lep) Ag. Rep. 1867 p. 160 *Macrosila carolina*.
{ 33 Ser III/6. IX/2. (see also Ag Rep. 1873 p. 159-)
- Poison. for flies. see Fly poison.
- * *Poisites*. (Hym.) found in stomach of a red bellied Woodpecker. Ag. Rep. 1865 p. 38.
- Poisites*. *rubiginosus*. (Hym.) carries off young Larvae of *Doryphora* (*Chrysomelid*) *decori*.
{ *lineatus*. as food for its young. Ag Rep. 1874 p. 123. 33. 11/39. (Hym)
- Poke root. *Phytolacca*. *decandra* used for poisoning Cockroaches, Ag Rep. 1873 p. 187.
- Polygonum Stuebeli* (Col) mere mention. Ag. Rep. 1868 p. 100. fig 158. 33. VII/6 (Col)
- Polygonum micans* (Co.) copper colored (*meuil*) injure Huckle & beech. Ag Rep. 1865 p. 90 (Co)
- Polygonus planifrons* (Col) "Charangon du Grosselier" France. destroys Gooseberries.
{ Ag. Rep. 1865 p. 90. (Col)
- Polygonus*. *sericeus*. "Charangon argente" France. destroy Soling fruits & grafts.
{ Ag. Rep. 1865 p. 90. (Col)
- Polygonum*. *hydropiper* (Smut weed) used as a wash for horses. to keep away flies.
- Polygramma*. *Doryphora decimlineata* (Col) 10 lined sparrowman. or Colorado potato beetle.
{ Ag. Rep. 1867 p. 65. 11/5. see *Chrysomelid decimlineata*. 33 XX/32 (Col)
- Polyphylla*. (*Melolonthid*) *elaeonoxia variegata* (Col) Ag. Rep. 1868. p. 89. fig 72. L fed on
{ roots. I find on fol. of Fruit. & Forest trees. see *Maconema*. 33. VIII/18 (Col)
- Polyphemus*. moth. see *Asterix*. See *Polyphemus*. 33. L VII/5. S. V/14 (Lep)
- Polyphaga*. (*Scut*) *acnea* (Lin) mere mention. Ag. Rep. 1868. p. 03. fig 184 33 XXVII/1.
- Poncia*. *brassicæ* (Lep) (Pistachio) Cabbage butterfly. (pro: *Pieris rapae*) destroyed by
{ *Carabes rapae*. Ag. Rep. 1861. p. 392. fig 7. 3. *Pieris rapae*. 33 L 100/18. CVI/30. S. 14. W/2 (Lep)
- Poplar spinner. *Scythyrus inclusa*. (*Chrysomelid americana*) (Lep) Ag. Rep. 1864 p. 502. injures foliage
{ of Willow, poplar, aspen, &c. *nomades* 4. *Scythyrus inclusa* 33 L VI/13. S. V/11/3 (Lep)
- For or. mine *Scythyrus* found without any sign of being injured by insects Ag. Rep. 1871 p. 70.
- Poricon *constrictus* (Hym.) parasite destroying *Conotrachelus* number of its plant in use
{ Ag. Rep. 1871 p. 70. ex using *Poricon moderator* Co. 33 X/13. (Hym)
- Potato beetle. *Chrysomelid*. (Lep) see *Doryphora Chry. omela*. *decimlineata*. 33. XXIX/32 (Col)
- Potato fly. see *Episcapus*. *cantharidis*. Latta. 7: 9.
- Potato worm. or *ridiculus*. L. *Macrosia quinque-maculata* (*conus* Sw) I feeds on Tobacco
{ potato. *viridula* 7. I attacked by 700m parasite. *Pterogaster congregate* (33. VI/2)
{ which eats out of body of worm small egg shaped cocoon on the outside of the skin of
{ the caterpillar. Ag. Rep. 1864 p. 529. - 1870. p. 60. fig 39. - 1873. p. 15. *Macrosila*
{ 33. II/6. IX/2. (Lep)
- Potato stalk weevil. (Col) *Paralid. trinotatus*. (Col) see *Boris* 33 XII/32 (Col)
- Potter wasp. (Hym) *Eumenes paterna*. forms a vase like nest of earth. Stings it with caterpillar
{ to form the food of its larvae. It is destroyed by a parasite *Lep. Scaophora*
{ *Eumenes paterna* 33 II 27. 28. nest VIII/2. (Hym) (Ag Rep. 1866/42 4. 1870 p. 78 fig 35)
- Poultry vermin. Ag. Rep. 1869 p. 424. 7.
- Practical Entomology for Farmers sons or "How to collect & preserve insects" by C. B. Dudge
{ Ag. Rep. 1868. p. 305. with figures.
- Praying mantis. see *Mantis carolina*. 33 XI/1 to 16 (Col)
- Puckly *Lepidoptera* (*20*) *Lepidopterus aculeifer*. injures Apple trees under the bark. Ag. Rep
{ 1860. p. 34. 33 XI/11. (Col) (1868. p. 576) 33 L

Pride of China, or India, see *Melie areolaris*.

Prionoclypeus armatarius (Lep.) lilac measuring worm Agl. Rep. Aug & Sep feeds on Lilac

{ Fig. LXII (Lep.)

Prionoclypeus (Col.) (Rathvon) Agl. Rep. 1861 p. 610. (Col.)

Prionoclypeus (Rathvon) *discoloris*. (Col.) L. feeds on rotten wood of Oak. Agl. Rep. 1868 p. 94.

{ fig. 121. Fig. XX/32. (Col.)

Prionotus cristatus, *Pedunculus novimurici*. (Hw.) destroy other insects, & also sting mankind. Severely destroy aphides, or plant lice, when young, and caterpillars with almost all other insects they can overcome when older. Agl. Rep. 1852. p. 88. pl. 8. common name, "Wheel bug" from the form of its back. "Devil's horse" &c. 1864. p. 559. 1875. p. 139. Fig. 41. *Prionotus cristatus.* Fig. 11/14 (Hbet)

Prionus. Col. Agl. Rep. 1861 p. 613-1871 p. 160. (Col.)

Prionus brevicornis (Col.) 1870. p. 72. see *P. laticollis* Fig. Lar D 34. Fig. XXI/5. (Col.)

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

Prionus cylindricus (Col.) (Rathvon) Agl. Rep. 1861 p. 611. Fig. 6. 62 L. eat wood of pine, *Orthocoma*.

{ brunneus. Fig. XXI/3. (Col.)

Prionus umbricornis (Col.) L. injures the roots of grape, orange, & other trees. Agl. Rep.

{ 1870. p. 72. Fig. XXI/2. (Col.)

Prionus laticollis brevicornis. Agl. Rep. (Rathvon) 1861 p. 612. Fig. 63 64. L. in wood of decaying

{ pearlar. - 1870. p. 72. Fig. 22. L. injures hood of apple, pearlar, Oak, pear, Orange

{ Orange. roots of tree. *Prionus laticollis.* Fig. Lar D 34. Fig. XXI/5 (Col.)

Pristiphora grossulariae. (Hw.) Native Currant or Gooseberry worm, or saw fly. kills & mends it. Agl. Rep. 1870. p. 77. - 1873. p. 118. It is destroyed by *Podiceps spinosus*. (Hbet Fig. 11/28)

Pristiphora icantidom. (Hw.) Cranberry saw fly, of fish. Agl. Rep. 1869. p. 207. (Hw.)

Proconia undata (Horn) frequents grape vines, & blackberry bushes. Fig. 1/22 (Horn)

Proconia americana (Lep.) L. feeds on foliage of grape vines, & virginia creeper. Agl. Rep. 1867. p. 73.

{ Fig. 6. - 1870. p. 81. *Aclothis americana.* Fig. Lar. XVII/3. (Lep.)

Proconites (Col.) (Col.) destroy other insects. Agl. Rep. 1865. p. 91. (Col.)

Prodenia autumnalis. (Fall or autumn army worm) (Lep.) L. destroys wheat, oats, rye, Sorghos.

{ Summit. &c. Agl. Rep. 1871 p. 376. & 1872 p. 118. Fig. CVIII/15. (Lep.)

Prodenia comelinæ. (Lep.) 1854. p. 61. in Cotton bolls. Agl. Rep. 1855. p. 102. Fig. 5. injures cotton

{ bolls & mends in their ear. feeds also on Wild comfrey, Commelina, Tomato, sweet

{ cabbage, &c. Fig. LXIV/5. XIX/19. Lar. XVI/5. (Lep.)

Promethia sexmaculata. (Col.) a small brownish beetle found under tree bark &c. probably

{ mistaken for the bed bug. *Acanthia lactaria.* Agl. Rep. 1875. p. 127. *Promethia*

{ sexmaculata. Fig. IV/25 (Col.)

Pselaphidae. (Col.) found in Ants nests, & under moss, bark, or stones. Agl. Rep. 1868 p. 82. *Sp. cimen*

{ Fig. xxx/3. (Col.) (*Pselaphus encheiron*)

Pseudoclerus ochreomaneus. (Col.) hibernates under bark of red oak. Agl. Rep. 1868 p. 102, 105-57. Fig. 140.

{ see *Thanasimus* Fig. xv/22 (Col.)

Pseudoclerus. *Thanasimus nigripes*. Col. saw 6 p. on the L. of a beetle. *Hylesinus aculeatus*

{ a wood boring beetle. Agl. Rep. 1868 p. 97. Fig. 139 *Thanasimus.* Fig. xii/19

Psila rosæ (Lep.) (Lep.) cannot fly. injures carrots. Hw. & remedies. Agl. Rep. 1872 p. 133. Fig. 23. Fig. x/10 (Lep.)

Psocidae (New) Agl. Rep. 1868 p. 263 live on Orange trees. *P. venosus* is found in clusters on

{ the trunk & branches of orange trees in Florida. see *P. venosus.* Fig. III/2. (New)

Psocini. (Col.) mere mention Agl. Rep. 1868 p. 99.

Psyche confederata. see also *Platycleis Fiversoni* Pack. injures Orange foliage. Fig. Lar. XII/11. Lar. LXIX/12

Psylla pyri. Pear thorn. (Horn) (Hw.) Agl. Rep. 1860. p. 314. sometimes twigs, & small branches

{ of pear & apple, & sucks the sap. Agl. Rep. 1864. p. 560. Remedies &c. - 1876. Fig. 30.

{ Fig. 1/10 11/30. 10. (Horn)

Psylla rhois (Horn) frequents Sumach. Agl. Rep. 1876. Fig. 85. (Horn). Fig. V/67. (Horn)

- Stenomalus*. (*Hym*) destroys *Chlorops*. a dipterous insect injuring wheat. V.
 { See Ag Rep 1866 p 44.
- Stenomalus*. (*Hym*) destroys the joint worm, *Isosoma*. (*Eurytoma*) *hordii*. (*Hym* an insect which forms sublings on the stalks of wheat. Ag. Rep. 1866 p. 42 (*Hym*)
- Stenomalus tubicornis*. (*Hym*) deposits eggs in the cocoons of *Microgaster congregata*. a parasitic hymenopterous insect. that destroys to Tobacco & potato worm. *Macrosila carolinæ* & *M. quinque maculata*. Ag. Rep. 1873 p. 158. (*Hym*)
- Stenostichus* (*Col*) some species in Europe are said to injure grain Ag. Rep 1868 p 86
 { ex. *Stenostichus chalcites* see *Proctus* SS. x/3. (*Col.*)
- Stibinus pectinicornis*. (*German Book worm*) L. injure books. & wood of Oak. beech
 { maple & Kerrie. Ag. Rep. 1868 p 99. (*Col.*) example *Stibinus ruficornis*. SS. xxxiii/16.
- Stilpnus ruficornis* (*Col*) were mentioned Ag. Rep 1868 p. 99. SS. xxxiii/16 (*Col*)
- Stilpnodactyla*. (*Cyphon*) *elaterina*. (*Col.*) food probably Oak. Ag. Rep. 1868. p. 94. fig 120.
 { SS. xxxii/29. (*Col*)
- Stimidae* (*Col*) I. counterfeit death when disturbed inhabit old wood. trees, &c. L. feed on
 { grain, skins, collections of natural history, &c. Ag. Rep. 1868. p. 98. 117. fig 150.
 { SS. xxxiii/2 (*Col*)
- Stinus fur.* (*humeralis*) (*Col*) destroy woolen cloths, grains, collections of dried plants, &c
 { insects stuffed animals, birds, &c. furs, meat, &c. Ag. Rep. 1868. p. 93. 117.
 { Ag. 150 SS. xxxii/11. (*Col*)
- Stinus humeralis*. see *Stinus fur.* (*Col*)
- Stiles irritans*. *See* L. feed on decaying vegetable, & animal matter. Insect feeds
 { on blood of man, &c. animals, birds, dogs, cats, &c. Ag. Rep. 1872 p. 135.
 { rules irritans. SS. vii/107. (*Lep*)
- Strand snapping bug*, or beetle, see *Alaus myops* 1868 p. 92. SS. x/17. (*Col*)
- Styralis linealis* (*Lep*) see *Asopia costalis*. The Clover worm. SS. lxxxii/25. (*Lep*)
- Styralidae*. Ag. Rep. 1868. p. 319. (*Lep*)
- Pyrethrum carneum*. *Proseum*. *P. purpuraceum*. basis of the celebrated Persian insect
 { powder. used to destroy cockroaches, ants, & other insects. Ag. Rep. 1873. p. 1295.
- Pyrethrum 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 *Stylopyga orientalis* (*Orth*)
- Pyrethrum*. *Willemette*. &c. used for the destruction of insects, a long article Ag. Rep 1861 p. 223.
- Pyrethrum*. 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 dendroidea*. *Dendroides canadensis*, taken under bark of maple. Ag. 1873. 1868.
 { p. 101. fig 171. *Dendroides canadensis*. SS. xxxvi/4. (*Col*)
- Pyrochroa flabellata*. (*Col*) In frequent flowers. Ag. Rep. 1868 p. 101. (*Col*)
- Pyrochroidae* (*Col*) found under bark & in rotten wood Ag. Rep 1868 p. 101. (*Col*)
- Pyrophonus noctilucosus*. feed on Sugar cane, Ag. Rep. 1868. 93. in Spanish "Cucuy"
 { English "Tore fly" of West Indies, and South America. Insect abundant
 { in South America. (*Col*)
- Pyrophonus phytodorus*. (*Col*) Tore fly or beetle of Florida. Long description, of habits
 { flight, & experiments. Ag. Rep. 1873 p. 155. fig 3. SS. xi/107 (*Col*)
- Pyraetia esabella*. (*Orctia* sp) (*Lep*). I. feeds on Clover. *Muric Dandelion*. *Plantain*.
 { *Straw* &c. is destroyed by an uncommon fly. Ag. Rep 1866 p. 4 SS. viii/10 SS. lvi/7 (*Lep*)
- Pyrrhocoris*. *Dysdercus suturalis* (*Stet*) Red bug or Cotton stainer history injury to cotton
 { first experiments of its application as a dyer's material by Dr Jackson
 { Ag. Rep. 1858 p. 271. fig 189. *Dysdercus suturalis* SS. i/11 (*Stet*)
- Pytho americanus*. (*Col*) found in empty nests or cocoon of *Stenomorus Rhagium lineatus*
 { (SS. xii/10 xxii/107 *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*. SS. xxvi/26 (*Col*)
- Pytho depressus* (*Eu*) (*Col*) found under pine bark Ag. Rep. 1868 p. 104. SS. lxxv

- Quadrupeds of Illinois. see also Animals. Ag. Rept. p. 52. to 110.
 Quails, destroying Chinese bugs. Microtus. Blacus leucopneus SS. II. 16. 17. (Hort.)
 Radish fly. see anthomyia raphani. Ag. Rept. 1867. p. 73. (Diss.)
 Radish fly. see anthomyia raphani. & a radicum. Ag. Rept. 1872. p. 134. (H. & J.) Anthomyia radicum.
SS. XI. 2. (Diss.)
 Ranatra quadridentata? (Hort.) Ag. Rept. 1875. p. 133. fig. 38. water bug. destroys insects.
 { Small fish. & Ranatra quadridentata SS. XI. 3. (Hort.)
 Rantonia. Ag. Rept. 1862. p. 376.
 Raspberry pith borer. (Col.) Oberca trimaculata Linn. bore into pith, & destroy the canes.
 { Ag. Rept. 1863. p. 576. & 1870. p. 67. SS. VIII. 1. (Col.)
 Raspberry borer. (Col.) Agripus ruficollis. L. bore into the pith. Ag. Rept. 1870. p. 67. SS. XI. 4. XII. 8.
 Rathbone. S.S. Report 1. Entomology & its relations to vegetable productions. of the soil.
 { with destructive & beneficial insects. Ag. Rept. 1861. p. 586.
 " " Report 2. Ag. Rept. 1862. p. 372. SS. Rathbone Lancaster Pa.
 Rat. poisons, traps, &c. Ag. Rept. 1863. p. 272.
 Rear horse. common name of Mantis carolina. Ag. Rept. 1854. p. 85. pl. VIII. & 1872. p. 133.
 { SS. II. 1. to 16. (Orth.)
 "Red bug" of S.C. Geo. &c. "Bete noir" of La. "seed Suck" of Va. a small red acarus or mite
 which buries itself under the skin of man &c. & frequently producing small
 blisters, & an insupportable itching. This must not be confounded with the following
 Red bug of Florida or Cotton stainer Syrphocoris Dysdercus suturalis. Insects stains
 the fibre of the cotton. with its excrement. & the exuding sap. of the oily seeds
 rendering it of much less value to manufacturers. Ag. Rept. 1858. p. 272.
 { SS. I. 11. (Hort.) Dysdercus suturalis
 " " Entomical researches on the red bugs, as color producing insects, by D. Jackson
 of Boston. Ag. Rept. 1858. p. 272..
 Red legged grasshopper, or Locust, see Calopterus femur rubrum. parasites red mites
 { Astoma locustarum a parasitic fly Sachsa H. & J. Ag. Rept. 1867. p. 65. fig. 66.
 1870. p. 76. fig. 32.
 { see Calopterus femur rubrum. SS. V. 11. & VIII. 2. (Orth.)
 Red pepper recommended to destroy plant lice (Aphides) Ag. Rept. 1873. p. 289.
 Red shouldered Apter Apter synonyxon basilaris Ag. Rept. 1867. p. 71. requires wood of hickory.
 & elm. See Synonyxon basilaris. (Col.) SS. XII. 1. (Col.)
 Red spider. Acarus telarius? of Saunders. report. a mite doing mischief in green house
 plants. & vegetation in gardens &c. remedies. Ag. Rept. 1864. p. 564.
 Red wheel of Ohio & some western states. see Diplois. (Conulomyia) brillici.
 { SS. I. 10. (Diss.)
 Redwings. Ag. Rept. 1868. p. 316. (Hort.)
 Redwings. Ag. Rept. 1854. p. 58. — 1868. p. 311. (Hort.)
 Redwings red edged. Redwings, of D. J. F. Ag. Rept. 1855. p. 74. p. VIII. fig. 7 in cotton fields.
 { see Largus succineus. SS. I. 12. (Hort.)
 Redwings. Redwings (Hort.) Pronotus cristatus 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. Rept. 1864. p. 558. — 1866. p. 55. — 1867. p. 67. — 1875. p. 129. fig. 45. 1854. 58. fig. 8. 1855. p. 110. fig. 3
 p. 7. found on cotton & destroys caterpillars &c. Pronotus cristatus SS. III. 14. (Hort.)
 Redwings personated. (Hort.) said to destroy red bugs Acanthia lectularia Ag. Rept. 1875. p. 123. 1740
 { SS. VII. 9. (Hort.)
 Redwings. aphelatorius. see Sinea multispinosa. destroys other insects SS. VIII. 3. (Hort.) Sinea
Redwings. spissipes. (Hort.) see Aphidomorus. destroys other insects. & is said to kill honey
 bees. Ag. Rept. 1875. p. 130. fig. 43. Aphidomorus spissipes SS. III. 24. (Hort.) SS. I. 10.

- Pithephorus paradoxus* (Col) Es. Probably parasitic on Wasps. Ag Rep 1865 p 101. (Col)
- Pithephoridae* (Col) probably parasitic in habits. Ag Rep. 1868 p 101.
- Pithecius* (Boem). Root plant louse. on verbonas, in flower garden. Ag Rep 1876, p 44 SS III/20 (Horn)
- Pithepenthra pusilla* (Col) found in wheat by D. Leconte. 1863 p 99, fig 137. SS XXII III/16 (Col)
- Pithephagus depressus* (Col) Es. Ag Rep. 1865 p 91. destroy. *Botanichidae* (Col)
- Rhopalus lateralis* (Hesl). I. sucks sap of plants, & probably injure pear buds. Ag. Rep. 1875 p 121, fig 19.
- } SS. IX/18 (Hesl.)
- Rhynchonemus nemophar* (Col) Curculio or Plum weevil. Ag Rep 1854 p 81, pl 7. 1855 p 311.
 { see *Conotrachelus nemophar*. SS. XIV/5. & For C/30. (Col)
- Rhynchites alliana* (Col) (Eu) color blue. cuts off twigs & young branches of fruit trees.
 { Ag. Rep. 1865 p 90. (Col)
- Rhynchites sacchus* (Col) (Eu) (Beomare, French) pierces young fruit of apple. I. color copper red
 { Ag Rep. 1865 p 90. (Col)
- Rhynchites betulae* (Su) Col. (Coque longeon, French) Rolls up leaves, & destroys foliage of
 { grape vine. Ag Rep 1865 p 87. (Col)
- Rhynchites conicus* (Col) (Eu) color steel blue. injures buds of fruit trees. Ag Rep 1865 p 90 (Col)
- Rhynchites cuneus* (Col) (Eu) injures piths Ag Rep 1865 p 80 (Col)
- Rhynchophoridae* (Col) Ag Rep. 1863. p 274. (Col)
- Rhynchophorus Zimmermani* (Col) Ag Rep. 1861. p 504, fig 46 "Palmelte weevil" 1861, p 604, fig 44.
 { I eat in wood of Palmetto. see *Rhynchophorus crenatus*. SS. XIII/21. (Col) & pub
 { & the *Calandra palmatorum* of Rathvon. 1861 p 21 P.
- Rhyparochromus micropus*. *Blissus clavator*. *leucopterus*. Chinch bug. Ag Rep. 1864 p 558.
 { remedies. — destroys grass, grain, Maize, potatoes vegetables &c &c: Remedies, habits, &c
 { 1870 p 89, fig 59. — remedy salt. 1871 p 84, fig 77. — 1873 p 122, fig 26.
 { *Blissus* (*Rhyparochromus*) *leucopterus*. SS. II/16. 17. (Hesl)
- Rhyssodidae* (Col) more mention. Ag Rep. 1866, p 84. (Col)
- x *Rhyssa atrata*. Hymenator. (*Pimpla* syn) (Hymen) destroy larvae of *Bemex Columbia* or the
 { region Texmex. in wood of pear &c. see also *Pimpla*. *Rhyssa atrata* SS. III/8
 { *Rhyssa unator* 1/29. III/4 (Hym.)
- Ribbed Rhagium*. Col see *Stenocorus Rhagium lineatus* SS. XVI/9. XVII/47. (Col)
- Ricci weevil*. see *Sitophilus*. *Calandra oryzae*. Ag Rep 1861 p 603. (Rathvon) & 1863 p 573. (Calandra
 { SS. XII/1. (Col)
- Roaches: vulgar name for Cockroaches. *Blattella*. *Ectobia*. *peniplaneta*. &c &c
- Roberts Dr Eugene recommending decortication of trees & to destroy bark & wood boring
 insects. Ag Rep 1865 p 92.
- Robin American. food & growth. Prof. Incauult, 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*. SS. XIII/15. VIII/1. Orth.
- x *Rosin Red weevil*. Europe, should be imported. Ag Rep 1870 p 90
- Romalea* (Orth) (Rathvon) Ag Rep 1862 p 384. more mention.
- Romalea moniflorata* (Orth) Lubber 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 1870 p 115. SS
 { SS. III/4. (Orth)
- Rose beetle (not Rose bug.) *Rosa chaffer* see *Macrodactylus subspinosus*, injures Rose. Grape &c
 { see *Macrodactylus*. SS. IX/23. (Col)
- Rose sawy. (Hym) see *Selandria*. *rosae*. remedies. Ag Rep 1870 p 78. SS. VII/8. (Hym.)
- Rose beetles (Col) see *Staphylinidae* Ag Rep. 1870 p 66. destroy other insects. es. *Oreophilus villosus*.
 { SS. XXIX/27. (Col)
- Rough *Osmoderma* (Col) see *Osmoderma scabra*. Ag. Rep 1860 p 320. — 1865 p 90. SS. X/3. (Col)
- Rutelidae (Col) more mention. Ag. Rep 1868 p 88 Col. SS. I/2.

Scaphilitidae (Col) more mention. Ag. Rep. 1868, p. 83.

Scaphnotus (Col) Ag. Rep. Rathvon 1861, p. 592.

Scarabaeidae (Col) eggs enclosed in round balls of excrement, Ag. rep. 1868, p. 86. The sacred beetle of the Egyptians 1864, 600. -- 1863, p. 274. 1864, p. 264. Col. Ex Cantonment Caesii JS. vii/2 Col

Scarred Macrosthanus (Col) the varicolor. Macrosthanus varicolor. JS. xii/20. (Col)

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

Sciara cucuta. & S. quinquevittata of Europe. (Lep) Turnip midges. & feed in putrid & decaying { Turnips, Potatoes, & supposed to cause the disease called the scab. Ag. Rep. 1872, p. 116. } Sciara cucuta. JS. X/5. (Lep)

Sciara (Molitorus) mali. Apple midge. L. found on apples injured by the colling moth.

{ Amphocerosia pomonella. Ag. Rep. 1872, p. 116. (Lep) }

Sciara pyra (Lep) "Pear midge" destroys young & undeveloped fruits, causing them to wither, and { fall to the ground. Ag. Rep. 1872, p. 116. (Lep) }

Sciara quinquevittata. Turnip or potato midge. Ag. Rep. 1872, p. 116. see also S. cucuta. Lep

Sciara (agrimis) Thomas (Lep) forms an elongated mass like a rope or snail, of hundreds of { the larvae banded together. & were seen coming from fungi on which they probably } feed, usually known as the Snake worms from their peculiar habits JS. vii/20. (Lep)

Sciara Thomas (Lep) snake, or army worm, of Germany. habits as above JS. xi/5. (Lep)

Sciara (resembling Thomas) found feeding on fungus. Uromyces muscarius. Ag. Rep. 1872, p. 116.

Scolytus (Turgona) sulcatus (Horn) Ag. Rep. 1876, fig. 6. frequently branched & small. JS. vii/20. (Horn)

Scolytus curvis Col Hickory bark borer, & injures bark of Hickory & Redwood. Ag. Rep. { 1867, p. 74. & 1870, p. 68. see Scolytus quadripinosus JS. xiv/5. (Col) }

Scolytus pice (Col) Ag. Rep. 1861, p. 314, 320. (Horn) Eats wood under bark of Apple "Scar bright { beetle" 1863, p. 574. remedies &c.

Scolytus? the larvae are said to be destroyed by Chrysobothris pinnatus (Curtis) Stenomacrus coronatus Eu. & Silvanus tridentatus Gyll. shown in the Paris Exhibition. 1865, p. 91. (Col)

Scorpion water, see Nepa apiculata. &c. feeds on water insects. &c. Ag. Rep. 1873, p. 57. JS. vii/18.

Scydmenidae (Col) taken in Ants nests Ag. Rep. 1868, p. 82. 104. (Col) Ex. Scydmenus clunipes JS. xii/10

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

Selandria cerasi. Error Selandria Ag. 1860, p. 315. (Horn)

Selandria cerasi (Horn) "Cherry slug". Ag. Rep. (Horn) 1860, p. 315. L. consumes the parenchyma of { the leaves, leaving the tree apparently scalded or scorched, some say. -- 1864, p. 547. } Cherry or Pear slug, with remedies. -- 1870, p. 78. JS. vii/34. (Horn)

Selandria vitis (Horn) Grape vine saw fly. L. injures foliage of grape, remedies. Ag. Rep. 1864, p. 346. { JS. ix/36. (Horn) }

Selandria rosae (Horn) Rose slug. Ag. Rep. 1870, p. 78. remedies Linyus foliivora of Rose bushes. { Ag. Rep. 1870, p. 78. remedies &c. JS. vii/6. (Horn) }

Semasia humivivana Lep L. inhabit Arctioles injured Plants. Ag. Rep. 1867, p. 73. JS. xvii/2 (Lep)

Senecia viricolor (Col) I feed on foliage of Apple pear &c. frequent. Whortle berry bushes. { Ag. Rep. 1866, p. 87. (Col) JS. ix/21. }

Senecia (Omalotheca) senecia (Col) I feed on foliage of Sweet bean & Pease. Ag. Rep. 1868, p. 87 { see Comptosia JS. ix/24, 19. (Col) }

Senecia vesperina. Ag. Rep. 1868, p. 85, & 115. Its feeds on foliage of sweet briar, & rose (Col). { Syn Omalotheca & Omalotheca Senecia vesperina JS. ix/17. (Col) }

Senecaria (Bombyx) mori, Chinese silk worm. See Bombyx mori. JS. vii/20. 12, 16. { XLVII/1. (Lep) }

Senthus (Lathra) dilutatus (Horn) feed on insects with eggs & young with & are aquatic in habits { Syn Lathra stollii Senthus dilutatus. JS. vii/11. (Horn) }

Seventeen year Cicada. (or Harvest fly.) see Cicada, septendecim. Ag. Rep. 1862, p. 385. 1864, p. 559. { JS. vi/20. (Foot) }

+ Sommeconia Col. Ag. Rep. 1864, 606. (Rathvon) (Col) Beetles having saw like antennae. JS. lower

- Sheep bot., head bot., or Maggot. *Cetrus Cephalomyia*. ovis. Larva live in the frontal sinus
 Remedies, Hants, &c. Ag. Rep. 1866, p. 573. 1872, 1892, p. 17. *Cephalomyia*. JS. VII. 136. (S. 4.)
- Sheep scab. see Acarus & scab. Ag. Rep. 1869, p. 286.
- Sheep tick. or Louse leg. (Dip.) see *Melophagus ovinus*. Ag. Rep. 1872, p. 133 fig. 26 JS. VII. 136. VIII. 3. Dip.
Sigalphus curculionis (Hym.) destroying the fourth of the silken curculio. (*Conotracheus ruficornis*.)
 { In 1869 see 1871, p. 375. 4, 17. (See also *Ponera conotrachea* a *Curculio destructor* Col. p. 177.)
- Silk in Va. more mention Ag. Rep. 1857, p. 40. Silk & manufactures, import. Fr. 1853, p. 224.
 { Silk culture by L. Constant Texas. 1859, p. 228. Silk culture in the Pacific states.
 1866, p. 483. Silk culture at the Paris exhibition. 1865, p. 92. - Silk culture 1868.
 282. to 304. - 1870, p. 235 to 241. silk from *Alacus Seta psocipennis*, 1866, p. 37
 { from *Thyridoteryx*, ephemera formis. 1866, p. 37. Silk from *Bombyx madrona* Sam.
 1866, p. 37. Silk from *Bombyx (Faudherusia) baultonia*, or *Soregal*. *Bryonia mai*, Japan (Cals)
Bombyx Peninx, China. V.B. *mylitta* (Bengal), 1866, p. 38.
- Silk producing spider in S. Car by M. Wells Ag. Rep. 1866, p. 37. (*Peiphila plumifera*. Essex Ina Vol. 5
 " " " " in S. Car by M. Wells 1866, p. 37.
- Silk, from a mid silk worm, making a large bag, 2 feet in length resembling a huge
 matted cobweb, in Central America, 1866, p. 37. (Wells)
- Silk, in a nest or covering, consisting of a mass of cocoon, from Panama (in Museum) 1866, p. 37
- Silk, from "nests of a domestic tealum & "snowy white" color." Humboldt on *Arctia*, 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 & Spanco) 1866, p. 37.
- Silk, successful cultivation in California by M. Powell, 1859. Silk, commission Lyons 1868. 300.
- Silk, worms & *Bombyx mori*. Ag. Rep. 1865. 35. 42 11, 70, 82, 100, &c.
- Silky, *Omaloplia* *Omaloplia sericea* Col see *Serica sericea* JS. IX. 19. 1 Col.
- Silky, timber beetle, see *Saximixor sericeum*. Ag. Rep. 1868, p. 98. L. eat wood of oak, & other
 { forest trees. JS. XX. 50. (Col)
- Silpha (*Procephala*) *americana*. (Col) Ag. Rep. (Rathvon), 1861, p. 575. fig. 17, 18. Silpha. JS. IV. 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 live
 { snails. Ag. Rep. 1868, p. 81. (Col)
- " ? Col said to destroy insects Ag. Rep. 1866, p. 34. (Col)
- Silpha, *quadripunctata*. (Col) (Eu) Lar destroys caterpillars. Ag. Rep. 1865, p. 91. (Col)
- Silphidae (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. Crotches lid's not Silvanus, as formerly thought.
- Silvanus. Ag. Rep. 1869, p. 153 (Col)
- Silvanus *bidentatus* (Col) found under Bark of Chestnut. Ag. Rep. 1868, p. 80 fig. 40. JS. V. 6. (Col)
- Silvanus. *dentatus*, see *Nauseis*. Found under bark, in sugar. Fr. Ag. Rep. 1866, p. 84 JS. VI. 23. Col
- Silvanus. *quadricollis*. Square necked Silvanus, (W.B.) found in ears of Maize (Col) Ag. Rep. 1866, p. 66, p. 4.
 { Larva also in injured cotton, bolls. 1855, p. 97. - 1866, p. 34, fig. 41 in injured cotton seed
- Silvanus. *surinamensis*. (Col) in cobalt, Maize, Tobacco, Sugar, &c. Ag. Rep. 1866, p. 154, 332.
- 1865, p. 84 fig. 39. - injure wheat, oats, rye, Apple seeds &c. 1870, p. 66, fig. 4 JS. IX. 19. Col
- Silvanus. *videntatus*. (Eu) (Col) said to destroy *Scolytus* & *Bolitochus* on Europe &c. Col.
- Sinox. (*Tremex*) *columba* (Hym) *Pigeon* *Tremex*. destroyed by *Pemiza*. *Thysa atrata*
 { & *Rhyssa lanator*. *Tremex*. JS. I. 12, 13. (Hym). (Ag. Rep. 1866, p. 41)
- Silver ash, common name for *Tilia*. Ag. Rep. 1874, p. 166, fig. 20. JS. VI. 6. Ont.
- Simulidae (Dip.) Sand flies, midges, among mankind, & animals by their poisonous bites or
 { punctures Ag. Rep. 1872, p. 128. ex *Simulium molestum*. JS. VIII. 8 & 29. (Dip.)
- Simulium. *columbascensis*. (Dip.) sometimes kill cattle, horses &c. in Hungary, by their
 { numerous & poisonous bites. Ag. Rep. 1872, p. 128. JS. X. 36. XII. 5. (Dip.)
- Sinea, *multiflorosa*. *Peduvius raptatorius* Hott. destroys aphids. *Chrysonela*. 10 *lineata* &
 { other insects Ag. Rep. 1875, p. 130 fig. 45. JS. XVIII. 3. (Hott) Styon.



Sirox, see *Tremex*. Columbia see *Tremex*.

Small horn. *Joneguen*. Cultivator & insects injuring it. *Ag. Rep.* 1864. p. 264.

Sitonaepa Anobium panicca (Col.) feed on bread, old ships usually specimens not kept, ginger.
 { *Abundant* - red or Cayenne pepper, Caribonites, wheat, &c. *Ag. Rep.* 1866. p. 99. fig 132.
 { syn *Anobium obesum* *Sitonaepa panicca* *IS. XIV/3* (Col)

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

Staphilus see also *Calandra*. *Ag. Rep.* 1849 p. 335. - 1854 p. 71. - 1858 p. 23. (Col)

Staphilus (*Calandra*) *granarius* *Ag. Rep.* (Rathvon) 1861 p. 603. 4-ant. Mexico. mere mention.
 { 1863. p. 573. *injuns* grain. Wheat, maize. &c. see *Calandra remota* *IS. XIV/3* (Col)

Staphilus oryza. Rice weevil. *Ag. Rep.* 1849. 1854. 33p. - 1854 p. 71. 4-ant. injures Rice, Wheat, & other grains, more plentiful in the southern states. 1861. p. 603. - 1863. p. 573. remedies. &c.
 { see *Calandra oryza* *IS. XIV/1* (Col)

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

Skirt beetle see *Stromates lardarius* *Ag. Rep.* (Rathvon) 1861. p. 575. fig 22, 23, 24. *IS. XI* (Col)

Skirt bot flies, see *Hypoderma bovis*. *Ag. Rep.* 1852 p. 128. (Edip) *IS. VIII/21* 4^o

Slender meadow grasshopper, see *Orecheilum vulgare*. *Ag. Rep.* 1874 p. 161. fig 1 is wrong &.

{ is *Acanthus*. instead of *Orecheilum*. (Orth)

Slugs attracted by emanation of Iodine & starch & then killed *Ag. Rep.* 1861 p. 332.

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

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

Smilia auriculata, see *Archamia galata*. Horn. *Ag. Rep.* 1876. fig 2. frequent Eupatorium on prairies, & veronica hastata. *IS. XI/1*. (Horn)

Smilia inermis see *Stictoptera*. (Horn) *Ag. Rep.* 1876. fig 19. frequent woods, grass, & Brambles, & is found on Grape & Chickapees. *Stictoptera* *IS. II/34*. (Horn)

x *Smilia* (*Pambroas*) *vau* (Horn) *Ag. Rep.* 1876. fig 20. frequent Hickory, Walnut, & Oak. —
 { *Smilia vau* *IS. II/31*. (Horn)

Smilia (*Pambroas*) *ornata*, (Horn) *Ag. Rep.* 1876. fig 18. frequent, Oak & Chestnut. *Smilia* *IS. II/30* (Horn)

Smith Prof Dr Application of Entomological science &c. *Ag. Rep.* 1872 p. 448.

Smooth *Osmoderma*. see *Osmoderma brevicola*. (Col. *Ag. Rep.* (Walker) 1850. p. 320. - 1868. p. 90.

{ Has feeds on Sap of Apple cherry & other Trees. & smelt like Russian leather *IS. X/2*. (Col)

Smyrthnus (Orth.) said to feed on pulp of plants. one species in Nova Scotia destroys young cabbages & turnips (Antis) *Ag. Rep.* 1874. p. 185. (by some called garden fleas)

{ *IS. VII/4*. (Orth)

Snails & Slugs. destroyed by *Stilix flavescens* (Col. Eu) *Ag. Rep.* 1865. p. 91.

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

Snake worm, see *Secera* (*affinis*) Thomas. *Ag. Rep.* 1872. p. 115. *IS. I/19*. (Edip)

Snapping beetle. (bug bugs) (Col.) see *Elateridae*. *Alous oculatus*, &c. *IS. X/5*. (Col)

" " *pumiloid*, see *Alous myops*. *IS. X/17*. (Col)

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

Soothsayer, or praying Mantis. see *Mantis carolina*. so called from the position it assumes, although praying would much more applicable from its predatory habits
 { *Ag. Rep.* 1854. p. 35. p. VIII. 1859. see *Mantis carolina*. *IS. II/11*. (Orth)

Solanum carolinensis. natural food of the *Doryphora Chrysomela* 10 insects. *Ag. Rep.* 1867. p. 63.

Soldier bugs, see *Stenotus*. (Holt)

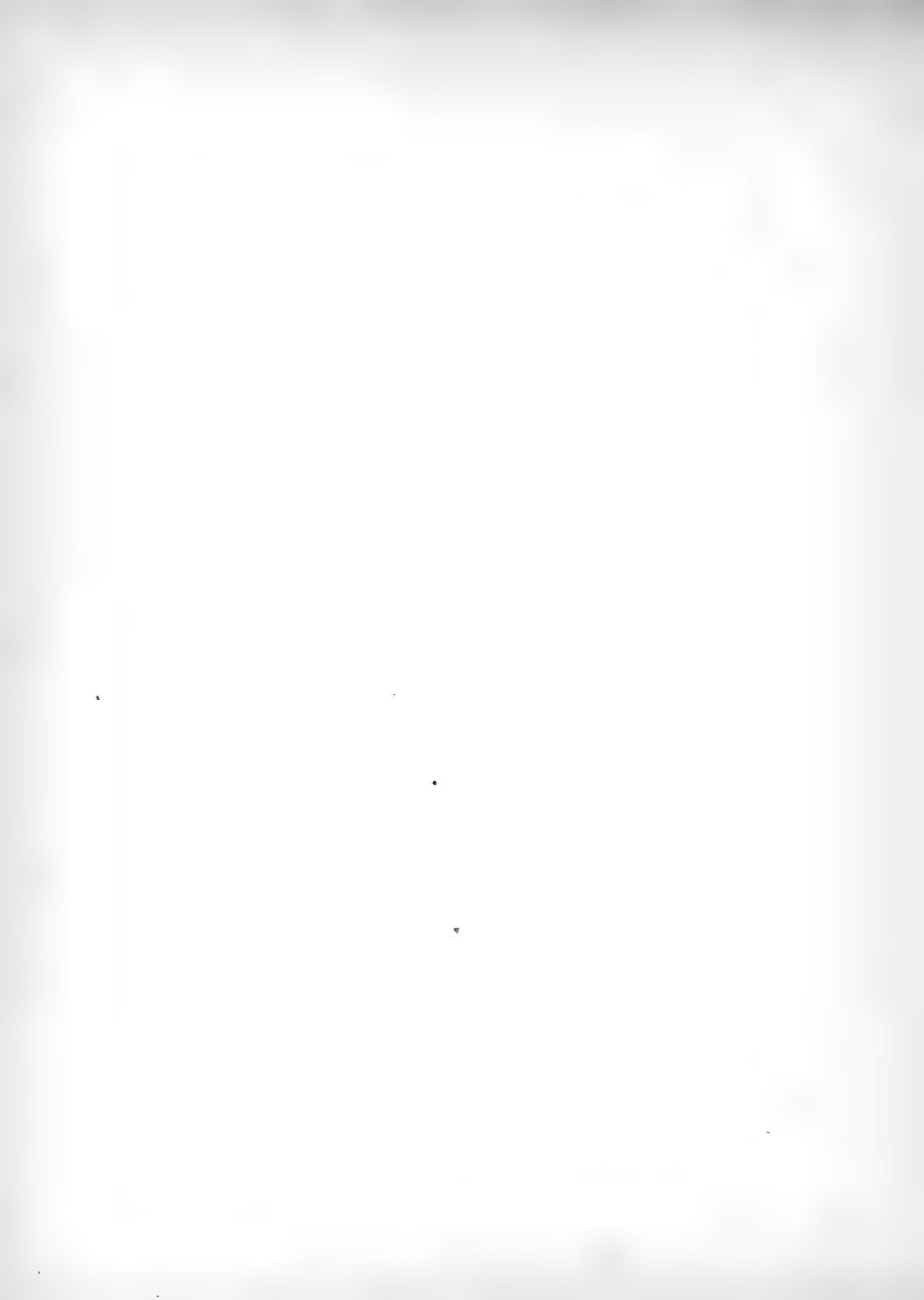
Span worm. small cotton (L. B.) *Ag. Rep.* 1855. p. 91. p. VIII. fig 3. caterpillars, injure foliage.

{ is probably *Eupitheca maculata* *IS. I. XIX/10*. & 21. *LXI/23*. *LXXIII/1*. (Edip)

Span worm. large (L. B.) *Ag. Rep.* 1855. p. 92. p. VIII. fig 4. caterpillars injure foliage of

{ Cotton. & probably is *Boarmia*. *IS. I. XIX/15*. (Edip)

Spurrows. English, good for destroying insects & noods. *Ag. Rep.* 1870. p. 90. — injure fruit & crops, in Australia. 1872. p. 433. *IS. I/1*



- Spectra. insects. see Phasmidae. (Orth.) Ag. Rep. 1874, p. 90.
- Spectrum* *lividatum*. (Orth.) I found in Florida, the males much smaller than the females, feed on lugs & flies. Ag. Rep. 1862, p. 377. see *Anisomorpha luteiventris* IS. 11/18 (Orth.)
- Spectrum* *femoratum*. (Orth.) Spectre insect Walking stick. Ag. Rep. (Rathvon) 1862, p. 377, fig. 11. Its feet on lugs & leaves of Sassafras & other plants 1874, p. 135. fig 6. see *Diapheromera femorata* IS. 11/7. (Orth.)
- Sphaeria* *morbosa*. Plum tree knot. a fungoid growth on branches or trunk of Plum, Cherry; Hawth. trees. generally known as the "Black Knot" remedy. Ag. Rep. 1863, p. 378. The *curculio* & other insects, are frequently found in these swellings, but by no means cause them.
- Sphaerulidae* (Col.) feed upon veg. & animal excrementitious matters. Ag. Rep. 1868, p. 81, 108. { example *Sphaerulium 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. or corn (Maize) boror. found in stacks of maize. Ag. Rep. 1854, p. 67, p. 4. — 1870, p. 68. (Col.)
- Sphenorhynchus canyosus* (Col.) injures Maize by piercing stem. 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 (in Asclepias) IS. XIV/28. (Col.)
- Sphenorhynchus* *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.
- Sphex* (Hym.) provisions its nest with cockroaches. (Rathvon) Ag. Rep. 1862, p. 376. example. { *Sphex* *leucipes*. IS. III/24 (Hym.)
- Sphingidea*. Ag. Rep. 1868, p. 316. (Lep.)
- Sphinx* *carolinia*. *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*. *sordida*. I found on mountain mint. Spear mint. & Apple. mid { *bergamot* & Ag. Rep. 1870, p. 86, fig 40. *eremita*. IS. LXXXV/1, IS. XLII/3. IS. Sep
- Sphinx* *sordida* see *S. eremita* above.
- * *Sphinx* *excacatus* *Smerinthus* (Lep.) I feed on Apple oak cherry plum (hol. in Virg.) { IS. LII/19, IS. XXXIX/4.
- * *Spittle insect*. see *Aphrophora* (Horn) IS. I/11. (Horn) & Ag. Rep. 1864, p. 539)
- Spider* Trap door Spider. *Clenira nidularis*. Ag. Rep. 1873, p. 161, fig. 6.
- Spiders* *Theridion* & *Hypophyllum*. destroy young caterpillars of *Pieris rapae*, & *Plutella* { *limbipennella*. Ag. Rep. 1871, p. 82.
- Spider*. Silk producing. of S. Car. Welder. Ag. Rep. 1866, p. 37. see under head of silk.
- Spilota*. *Anomala* *vicinata*. (Col.) Its injures foliage of Grape. Ag. Rep. 1865, p. 88, fig 74. { *Anomala*. IS. XXXIV/28. (Col.)
- Spilota*. *Anomala* *pinicola*. injures pine Ag. Rep. 1868, p. 88.
- Spindle worm* see *Gortyna nitida*. I found in stalk or fruit of *Lathraea portala*. Wheat. { *formals*. *maise*. IS. XCIII/24, IS. CV/13. CV/14. (Lep.)
- Spondylis* (Col.) Ag. Rep. 1861/613 more mention
- Sporononema* (Empusa) *muscae*. a fungoid growth killing flies. Ag. Rep. 1872, p. 132. (Empusa)
- Spotted canker*. *Worm*. destroys other animals, & amongst the nest. kills bed bugs. Ag. Rep. 1875, p. 127, fig 39. IS. IV/22. (Lep.)
- Spotted*. *Hellimata* (Col.) *Pelidnota 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. *Wass* *oculatus*. big eyed snapping beetle. IS. XL5. (Col.) IS. LXXXV



- Squash bug, *Anasa*, *Gonocerus*, *Cercus*, *tristes*. (Hom) *Ag. Rep.* 1866, p. 557. *Promedius*. 1870. 897.
 { See *Anasa tristis*, §§. 11/14 (Hbet.)
- Squash lady bird, or beetle, (Col.) injures foliage of Squash, *Ag. Rep.* 1863, p. 579. remedies, & 1864 p. 43.
 { 1875, 118, destroyed by *Stenobius diana*. *Hbet.* *Epilachna borealis* §§. XXXIX/25 (Col.)
- Stag beetle, see *Lucanus dama* (Col.) §§. X/16 (Col.)
- Staphylinidae, (Col.) *Ag. Rep.* (Rathvon) 1861, p. 596, fig 20. 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, 1864 p. 39. — eat decaying animal & vegetable
 substances, fungi, flowers, &c. 1868 p. 82. — 1870, p. 66. (Col.) example *Cryptus ater* §§. 29/20
- Staphylini. *Ag. Rep.* 1862, p. 372 — 1866, p. 116. ex *Crochilus villosus*. §§. XXXI/27, example.
- Staphylinus, maculosus, (Col.) *Ag. Rep.* (Rathvon, *Ag. Rep.* 1861, p. 596 fig 19. feeds on
 { decaying animal & vegetable matters, fungi, manure, &c. §§. XXXI/22 (Col.)
- Stelione
 { on *Antismacra canis*. *Ag. Rep.* 1868 p. 161. (Col.) §§. XXVII/16 (Col.)
- Steel blue grape flea beetle. *Fraxinella (Horticola) chalybea*. injures foliage of *Vitis* & *Grape*. *Blum. Elm.*
 { black Alder, &c. *Ag. Rep.* 1863, p. 576. remedies, see *Fraxinella chalybea*, §§. XXV/9 (Col.)
- Stelidota geminata, (Col.) feeds on decaying vegetable & animal substances, & breeds in *Grape*
 { previously injured by *Calodes inaequalis*. *Ag. Rep.* 1863 p. 83. §§. XXXVI/28 (Col.)
- Stenocorus putator, *Elaphidion villosum*. Oak pruner. I. cuts off twigs of Oak, apple,
 { peach, hickory, walnut from the inside. *Ag. Rep.* 1871, p. 72, fig 2. *Capricorn villosum*,
§§. X/13 (Col.)
- Stenohelma, (C. Orth.) (Fathvon) *Ag. Rep.* 1862, p. 579, fig 14. *En. formica*. (Orth)
- Stenurus, (Col.) Rathvon. *Ag. Rep.* 1861, p. 607. see *Dicraea*. (Col.)
- Stictoptera Omelia incanis. (Hom) frequents woods, grass, Brambles. is found on Oak &
 { chinquapin. *Ag. Rep.* 1876, 110. *Stictoptera incanis*, §§. 11/34 (Hom)
- Stingless bee of South America. *Apis Virginii*. *Ag. Rep.* 1866 p. 32. honey comb want
- Stenobius diana, (Hbet.) destroys *Epilachna borealis*, or the squash Lady beetle. *Ag. Rep.* 1875.
 { p. 118, fig 10. — beneficial. (Syn 3 anchorago Fab.) §§. 11/29, 11/25, & 11/20 (Hbet.)
- Stenotus, trimaculatus, (Hbet.) destroy *Chryphura chrysonota* 10 lineate. *Ag. Rep.* 1874 p. 123.
 { common name "Boracett Soldier, bug" destroys *Papilio asterias* & web worm
 { *Hypochiridia texor*. (Sep.) Colorado potato beetle, & other insects. *Ag. Rep.* 1875,
 { p. 119, fig 11. §§. 11/20 (Hbet.)
- Stiru, sparsus, (Hbet.) I. carries off Harvest flies (Conococtus called locusts) to its hole
 { in the earth, or mud, & buries them, to form food for its young. *Ag. Rep.* 1866 p. 63
 { 1867 p. 67. §§. 11/19 (Hbet.)
- Stomox calcitrans (Linn) "Stable stinging fly" I. stings severely, & is especially 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. §§. 14/10 (Linn)
- Strachia Murgantia hudsoniella, (Hes) Roriquian Cabbage bug, very destructive to the cabbage
 { especially in the southern States, injures also Sumac 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 "dipterosus phyllophus" (see §§. 11/21) *Murgantia*
 { *hudsoniella* §§. 11/22. (Hbet.) (see also *Strachia*)
- Strangalia luteicornis, (Rathvon) *Ag. Rep.* 1861, p. 620, fig 90. I. lives in stumps, & in flowers
 { §§. XXII/13 (Col)
- Stratiomyidae, *Ag. Rep.* 1863 p. 317.
- Stratiopes, anticus, (Col) burrows in sandy fields, in N.J. *Ag. Rep.* 1868, p. 89. §§. XXX/22, XIII/20 (Col)
- Strawberry saw fly, (Obym) I injures foliage *Empytis maculatus* *Ag. Rep.* ?
- Strawberry blossom weevil, (Col.) *Anthonomus signatus* *Ag. Rep.* 1871, p. 73, fig 3.
- Striped bug, *Diabrotica vittata* *Parsica* Syn §§. XX/13 (Col)
- Striped Cricket (Orth.) *Acheta vittata* see *Memobius*. §§. VII/18 (Orth)



Stylopidium. *Stylops*: (Col) L. parasitic in the body of *Bos taurus*. J.G. xxx/15. (Col)

Stylopyga orientalis (Ckth) Oriental cockroach. almost omnivorous. feeding on animal & vegetable substances. traps poison & other remedies Pyrethrum & root of *Nicta weeds* & *Phytolacca decandena*. Ag. Rep. 1874 p. 138 fig 4 (Syn. *Phylla*) *Stylopyga*
J.G. 11/24-6. v. 11/12. (Ckth)

Sylvanus see *Silvanus*.

Synchroa punctata. (Col) L. found in *Rodler Oak* stumps. Ag. Rep. 1865. p. 101 fig. 173. J.G. xxvii/7. (Col)

Synoxylon (*Aphate*) *basilare*. (Col) L. in wood of hickory, & Elm. Ag. Rep. 1868. p. 99, fig 155.

{ *Synoxylon*. J.G. xiii/1. (Col)

Synoryzium sexdentatum. (Col) (Eu) stems of unwealby grape vines. Ag. Rep. 1865 p. 9.

Syrwan see *Apis fasciata*. (Hym) Ag. Rep. 1866 p. 32. (Hym)

Syrphus (*Dip*) L. drosophyloidea plant lice Aphides, (Hom) Ag. Rep. 1866 p. 44. Example. *Syrphus*

{ *notatus*. J.G. 11/31. (Dip)

Syrphid (*Dip*) probably found *gneloe 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 geminatus*. J.G. 11/24. (Dip)

Syrphid Phymata *erosa*. destroys other insects. Ag. Rep. 1875. p. 126 fig 35. *Phymata, erosa*.

{ J.G. 11/13. (Hem)

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

Systema blanda. (Col) injure foliage of *Maize*. Ag. Rep. 1873. p. 157. fig. 1. J.G. xxviii/5. (Col)

Tabanidae. Ag. Rep. 1865. p. 276. — 1868. p. 317. — 1872. p. 129.

Tabanus atratus. large Black horse fly. (*Dip*) bites on stinios horses cattle. &c. Especially

{ in woody districts. Ag. Rep. 1872. p. 129. fig. 15. *Tabanus atratus*. J.G. L. 12/35 1x/10 J. 11/15 (Dip)

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

Tachina (or *Sarcophaga*?) (*Dip*) destroy. Red legged Grasshopper, *Caelypterus* Emur. rubra.

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

Tachina *Lomyphora* (*Dip*) destroys *Lomyphora Chrysomela decumlineata*. Ag. Rep. 1871. 74

{ 1874 p. 123. Example. *Tachina*. *Dasyconus* J.G. x/23. (Dip)

Tachina virida. (*Dip*) destroy caterpillars of *Linyocampa* (*Eclys*) *imperialis*. Ag. Rep. 1866 p. 44.

{ J.G. 11/16 (Dip)

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

{ Ag. Rep. 1865. p. 276 — 1872. 131. — &c. (Dip)

Sea plant. with plate copied by J.G. article by J.G. 12 Ag. Rep. 1857. p. 166.

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

Telomona (*Entilia*) *concaua* (Hom) J.G. 11/ Hom

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

{ Ex *Telias laeviusculus*. J.G. 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.

{ J.G. xii/18. (Col)

Telephorus fuscus. & *lividus*. (Europe) Col destroy the soft bodied *Conca* or *Sea* flies. Ag. Rep.

{ 1865 p. 91 (Col)

Telephorus lividus. see above under *T. fuscus*. Col

Telephoridae. (Col) men 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*. J.G. xxvii/15. Lar. 13/3 (Col) (damaged flour)

Tenebrio. *obscurus*. (Loc.) habits as above but prefers sound & dry meal flour bran Ship biscuit &c. Ag. Rep. 1863 p. 100. *Tenebrionellus obscurus* J.G.

1000 ft

- Ten lined sparrow. see *Doryphora Chrysomela*. deum lineata. 39 XXIX/32 Col,
 Tortredonidae. Ag Rep 1863 p 376 — 1873. p 254 & 7.
 Tort calceolaria. see *Cicindaria americana* (Lep) decipiens. Syn. the American Lackey moth.
 { 39 eggs C1/19 LXXII/9. LXXII/7. C1/9. Lep }
 Termites. (New) White ants. see Termites. *Termites*. found in decaying wood. corn. stalks. & c.
 { 39 III/8 to 11. (New) }
 Termites fatalis. 40 African White ant. live in clay nests. excavate tunnels in the earth &
 { some bore into wood. Ag. Rep. 1866. p 435. (New) }
 Terrible grasshopper. see *Aedipoda atrox*. Ag. Rep. 1874 p 137 fig 10. 39 VIII/3. (Orth)
Therapsa tenipes. (Col) L. in wood of Walnut, Herbory. Ag. Rep. 1874 p 137 fig 26. see *Dusshaga*
 { 40 XXXIII/10. (Col) }
 Tetracha *Megadactyla* virginica. (Col) destroy *Doryphora* (*Chrysomela*) 10 lineata. — Colorado
 { potato beetle, & other insects, feed on *Cartho* worms. & Ag. Rep. 1872 p 65. fig 1.
 { 1874. p 123. Tetracha. 39 I/21. 24. Col (Cicindela. var) }
Tettix *Tettix lateralis* Orth (Prachon) Ag. Rep. 1862 p 387. fig 29. when young resembles
 { *monbracii* (Hom) (Rathoon) Tettix. 39 VII/7. (Orth) }
Tettigonia. (Hom) vicia. vicia hopper. Ag. Rep. 1854 p 77. pl 6. see *Erythronaura*. 1871. p 85. fig 19.
 { 1876. fig 33. history, habits, &c. see also *Erythronaura basilaris*. 39 II/5. 37. 38. (Hom) }
Tettigonia (*Erythronaura*) *basilaris*. (Hom) Ag. Rep. 1876. fig 33. injures. fol. *Graps*. see above.
Tettigonia mollis (Hom) frequents *Cyperis*. a grass. see *Autacurus*. Ag. Rep. 1876. fig 32.
 { 39 II/30 (Hom) }
Tettigonia quadrivittata Hom. frequents Blackberry bushes. Ag. Rep. 1876. fig 34 see *Dicrocephala*.
 { *coccinea* 39 II/54. II/29. (Hom) }
 Tettigonidae. (Hom) 1868. Ag. Rep. p 315. (Hom)
Tetras bruchellata. (Lect) large scutellum. Ag. Rep. 1875. p 116. fig 2. 39 II/27. Hol.
Tetras. see *Aphodius*. (Col)
Thanasimus. *formicarius* (Col) Europe) L. destroy L. of wood eating insects, 1865 p 91. 114.
 { 1865. p 97. (see *Cerus* & *pseudoclerus* Syn) (Col) }
Thanasimus. (*pseudoclerus*) *nigripes*. (Col) L. feed on grubs of *Phylasimus aculeatus*. Col (see
 { *Stenocrinus* 39 XXXIII/10. Col) in wood. Ag. Rep. 1868. p 97. fig 139.
 { *Thanasimus nigripes*. 39 XII/19. (Col) (syn. *Pseudoclerus incedens*) }
Thelid *homaculata*. Hom. One frequents the Locust. Ag. Rep. 1876. fig 17. 39 I/20. 24. II/23. Hom.
Theridion brassicae. *Hypophyllum*. Two spiders destroying young worms. of *Pieris rapae*. Lep.
 { *Phlebotia lumbipennis*. Lep. Ag. Rep. 1871. p 82. 83. }
 Thick legged *Blattella*. see *Chorisothrips*. *tenuata*. (Col) 39 XI/7-10. XVI/12. (Col)
 Three lined leaf beetle. on potatoes. see *Cnicaris Lema truncata*. Ag. Rep. 1863. p 576. fold
 { potato. three lined leaf beetle. I destroys the foliage. Ag. Rep. 1871. p 37. fig 6.
 { *Lema bilineata*. 39 XXVII/10. (Col) }
 Thripidae (Orth) Ag. Rep. 1874. 130. 146 — (Orth)
Thrips (Orth) remedies Ag 1864 p 445. 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 & grasses but by others said to be insectivorous
 { to destroy the eggs of *vine weaver*. &c. see *Erythronaura*. Ag. Rep. 1871. p 86. fig 21.
Thrips (*Limothrips*) *cerealis*. (Bas) (Hom) Wheat. injured (Orth) but said by others to feed
 { on the eggs of *Diplosis tritici*. the wheat midge. an insect injuring grasses.
 { of wheat. B. in gill making larvae. Ag. Rep. 1874. p 145. fig 18. see *Thrips ornatum*.
 { 39 VIII/9. 10. ? (Orth) (1844 p 572) }
Thrips. name incorrectly applied to *Erythronaura* (*vicia*) *basilaris*. the grass vine leaf
 { hopper. Ag. Rep. 1874. }
Throscidae (Col) classed with *Eucnemidae* I. or *Flavicornis* Ag. Rep. 1868 p 92 one European
 { species inhabits Oak wood. (Col). }
39 lower

Throscus. (Col.) Ag. Rep. 1868 p. 42. -

Thyridopteryx epimeraeformis *Oeceticus coniferum*. Ag. Rep. 1855 p. 79. pl. VI. fig. 8. injures cotton, bay, labor vitae, Sarsch, Hemlock spruce, Linten, Augusta, Maple, Cedars. "Beech worm", "Case Worm", or "Caseworm" remedies, 1864, p. 552. - 1866 p. 41. 97. Destroyed by a parasite *Hym. Cryptus inquilus* (JG. 11/5.) *Thyridopteryx*. JG. XII/1. to 5 Sep.

Thysanaura. (Orth.) see *Poduridae*. JG. ex J. ulloso. VI/7. (Orth.)

Thysanotera. (Orth.) see *Thrips*. JG. ex. VI/9. (Orth.)

Ticks on Birds (Orth.) *Malacotharus*. *Biting bird lice*. Ag. Rep. 1874 p. 146. ex. *Dicoponous*. oryx. JG. XII/5

Ticks on Sheep. Ag. Rep. 1864, p. 563. remedies. 97. (Orth.)

Tickling Beetle. see *Monochamus titillator*. L. in mood of pine. (Rathvon) Ag. Rep. 1861

{ p. 613, fig. 65, 66, 67. JG. XVII/1. (Col.)

Tiger beetles. see *Cicindela*. *Megacephala*. *Tetraoba*. (Col.)

† *Trioraria* *Horvii sanguinensis*. (Col.) more mention. Ag. Rep. 1868 p. 103 fig. 178. probably

{ parasite on Bees, or their food. *Trioraria*. JG. XXVII/17. (Col.)

Tills. (Col.) more mention. Ag. Rep. 1868. p. 97. 112. 7 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 *Cymatodera*. 1868. 497. JG. XII/26. XLV/44. (Col.)

Timber weevils. see *Symexylon*. Ag. Rep. 1868. p. 96. (Col.)

Tinea granella. Sep. Grain moth. Wolf. L. injures maize. found in old cotton, bolls. prob

{ for seed. Ag. Rep. 1854. p. 65 plate. 4. † see *Colletes*, erroneously named by

{ JG. B. 1855. p. 98. pl. IX. fig. 3. - † 1864. p. 566. JG. IX/1. 3 Q/12. (Sep.) (1849. 332)

Tinea flaviventris. Cloth moth eats also furs, feathers. † see remedies. Ag. Rep. 1864. p. 556.

{ JG. LXVI/14. (Sep.)

Tingis arcuatus (affinis) (Hbst.) sucks sap of quinces. Distings mantinea. Ag. Rep. 1875.

{ fig. 36. p. 126. (Hbst.) JG. IV/2. (Hbst.)

Tingis juglandis. (Hbst.) sucks sap of Nuttanut. Birch. Willow. † Ag. Rep. 1875. p. 126.

Tipularidae & *Tipularia*. Ag. Rep. 1869. p. 317. † 1872. p. 178. (Sep.)

Tipula maculosa (Sep.) Crane fly. (Europe) more mention. Ag. Rep. 1872. p. 128. (Sep.)

Tipula sterocora. (Sep.) Crane fly. destroys root of grain. Grass. flowers, long-tailed. †. habit.

{ remedies †. Ag. Rep. 1872. p. 128. fig. 12. JG. I/10. J. X/17. (Sep.) (European)

Tipula tritici. (Sep.) 1864. p. 166. (Sep.)

Toads as destroyers of insects. eat even *Plectiscus* flies. (*Epicauta vittata*) Squash bug. (*Anasa*

{ tritici †) Ag. Rep. 1870. p. 90.

Tobacco worm. or caterpillar. fly or *Sphinx* (Sep.) *Macrosila carolina* (Sep.) remedies.

{ poisoning with Cobalt. (blue stones) Ag. Rep. 1864. p. 549. - 1869. p. 296. - 1873. p. 158.

{ destroyed by Bonnets, wasps, *Schocumonus*, & *Microgaster congregata*. †. 1873. p. 159.

{ JG. I/11/6. J. X/12. (Sep.)

Tobacco leaves used as a wash to preserve horses from Flea. Ag. Rep. 1872. p. 132..

Tolype lanius. (Sep.) Sarsch cheater. parasite *Phryganea* *Planaria* (syn *Castrocha*) JG. XII/1

Tomato worm. caterpillar, or fly (Sep.) *Macrosila quinque-maculata*. *Calus* with stinging

{ or poisoning persons. sa.

{ Ag. Rep. 1870. p. 80 fig. 34. - 1873. p. 158. 1874. p. 126. JG. III/4. 5. J. X/16/6. (Sep.)

Tomus mai. Apple bark beetle. (Col.) L. injures bark of apple trees. Ag. Rep. (2nd ed.) 1860. p. 52.

{ JG. XV/16. (Col.)

Tooth bugged *Buprestis*. see *Chrysobothris dentipes* Ag. Rep. 1868. p. 92. L. in Oak wood

{ JG. XI/18. (Col.)

Tortoise beetle. see *Cassida*. †. (Col.)

Tortricidae (Sep.) Ag. Rep. 1868. p. 315.

Tortrix (Sep.) † rolls up leaves of cotton. Ag. Rep. 1854. p. 61. †

- Toxotrix*. cotton. (Lep) of 2913. Ag. Rep. 1855. pl. VII. fig. 1. feeds on Cotton foliage. &c.
 { is *Loxolaima Toxotrix rosaceana*? var. *rosaceana*?
Toxotrix rosaceana (Lep) (or *Loxolaima* from *Toxos oblique* Tawau band) *rosaceana*.
 { rolls up leaf & devours foliage of Rose, Apple, cotton, fruit, & other trees.
 see 39. 12. XII/13. L.P. XII/14. Ins. XV/20 - LXVII. 8. 2. 12. (Lep.)
- Toxotrix*. apple. see above destroyed by *Melyas cinctus* 39. III/12. (Lep), *melyas*.
- Toxotrix* a sort of *Carex* on which *Conixa* (Hct) deposits its eggs in Mexico Ag. Rep. 1866 p. 38
- Toxothora* (Lep) a parasitic fly found in the bark shaped mud nest of *Eumegast*
 { *praterna* (Hym) 39. II/27. 28. — *Toxothora*. 39. V/35. (Lep) (see also 1870 p. 78, fig. 35)
- Trachis* (Col.) Ag. Rep. 1868, p. 92. (Col.)
- Trachyleris*. Colj. Ag. Rep. 1866, p. 91.
- Trachys minutus* (Eu). Ins feeds on bark. Ag. Rep. 1868, p. 92. (Col.)
- Sharp door spider, see *Clonixa nectulans*. Ag. Rep. 1872, p. 160. fig.
- Tree cricket, climbing. see *Clantrhus*. Ag. Rep. 1874, p. 122. (Orth.)
- Tremex columba*. or *perizon tremex*. L. feeds in wood of Pear &c &c. destroyed by *Physsa*
 { (*pumila*) *atrata* & *lunator*. *Tremex* (*Sinax* Syn) *columba* Co. Trip. 1866. p. 41.
 { *Tremex columba*. 39. I/12. 13. (Hym) see also *Sorex*. & *Physsa*)
- Trichosted.* (*Phyllophaga*) *pulvicollis*. tristes (Col) Ag. Rep. 1868 p. 88. fig. 71. L. feeds on
 { roots of grass. & foliage of fruit. & forest trees. *Phyllophaga tristes*. 39. VII/14. (Col.)
- Trichius* (*Trigonoplastes*) *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*. 39. IX/22. (Col)
- Trichoera hyemalis* (Lep) (Eu) Turnip grout. falsely supposed to be the cause of the disease
 { called anthrax in Turnips Ag. Rep. 1872 p. 128. fig. 14. 39. Ins. X/31. & VI/19. (Lep.)
- Trichonemis* (Col) *Rathvon* Ag. Rep. 1861 p. 613. mere mention. (Col.)
- Trichogramma oryzae* (Hym) destroys *Orygia leucostigma* (Lep) 1866 p. 82. *White spot moth*
 { Ag. Rep. 1866 p. 82. (Hym) *Orygia*. 39. X/15. to 10. Ins. XXII/9. LXI/546. (Lep.)
- Trocanra* (Coccin) *sanguinicornis* Ag. Rep. 1868 p. 103. *Trocanra sanguinicornis* 32.
 { ~~39. VII/17.~~ (Col) probably parasitic on Bees.)
- Trichopterygidae*. (Col) mere mention. Ag. Rep. 1868 p. 83. (Col.)
- Trictonotoma chidwenis* (Stam) large beetle (*Rathvon*) Ag. Rep. 1866 p. 611. Length 3 inches
 { color metallic green & habits carnivorous. (Col)
- Tridactylus*. (*Xyca*) *terminalis*. said to be food of *Galgulus ocellatus* (Lep. V/2 39.)
 { Ag. Rep. 1875. fig. 55. p. 132. — *Tridactylus terminalis*. 39. III/6. (Orth.)
- Trigona*. (see *Apis*) Hym. Stenyon's bee of South America. Ag. Rep. 1866 p. 52. & 1869, p. 63. (Hym)
- Trigonarectes delta* see *Trichius* Ag. Rep. 1855. p. 84. & 1868 p. 90. (Col.)
- Trioxys*: (Hym) destroys plant lice "aphidids." Ag. Rep. 1866 p. 41. (Hym.)
- Triphleps unicoloris*. insidiosus. Fair Chinese bug. feeds upon other insects. probably the
 { *Sanche* bug deep included also. *Triphleps nitidus*. or the leaf-miner gall louse.
 { Ag. Rep. 1875. p. 123. fig. 27. *Triphleps insidiosus*. 39. II/13. (Hct)
- Trochilium exitiosum*. see *Agroica*. Peach tree. lower. Lep. 39. L.P. 3. XLIII/2. (Lep.)
- Trochilium globiformis*. see *Agroica*. Grape vine. lower. 39. XVII/5. (Lep.)
- Trochilium tipuliformis*. see *Agroica*. Currant bush. lower. 39. XL/3. (Lep.)
- Troglodan*. & *Trogon*. (Col.) Ins. causes, or death. Hive in decomposing animal matter. Ag. Rep.
 { 1866 p. 66 & 107. (see also *Tox*)
- Trogosita carnifida*? *Tenebrionides mauritanica*. (Cadele. Eu) (Col) Ag. Rep. 1869. p. 337.
 { said to destroy the larvae of the wheat weevil? feeds on grain bread. *Tricost*
 { stored grain 1868 & 83. 1865. 91. lives under bark of trees. 1870 p. 66.
 { *Tenebrionides mauritanica* 39. XXXII/1. (Col)
- Trogosita*
 { *Tenebrionides dubia*. Feeds on Maize, Wheat, Peach nuts. & found under
 { bark. Ag. Rep. 1865. p. 91. — 1868 p. 83. — 1870 p. 66. — 1870. p. 66. fig. 3.
 { 39. *Tenebrionides dubia*. VI/25. (Col).
- Trogositidae* (Col) some live under bark & others injure grain Ag. Rep. 1868 p. 83. 105 V. (Col) 39. lower

- Ver a cent. Heart worm. Canadian name for *Pieris rapae*. (European white cabbage
 Guller-fly caterpillar, from its injuring the heart or interior of Cabbages &c. 39.
 V. C/18 C.VI 30 Dec 14. 99 p. (Sep.)
- Vespa. (Hym) Ag. Rep. 1872. p. 132. Vespidæ. Ag. Rep. 1866. p. 43. (Hym.)
 Vine hoppers. see *Deltophona erythronera*. &c.
- Virginian *Diprasti*. see *Diprasti Chalcophora virginica*. virginiana. L. injures wood
 of pine. Ag. Rep. 1861. p. 607. fig 53. 1868. p. 91. fig 59. *C. virginiana*. 39. 11/11 (Oct.)
 Vinegar remedy, recommended for the destruction of insects by the Imperial Soc.^{ty}
 Horticulture of the Rhone. - in the proportion of one part of vinegar to 9 parts
 of water. Ag. Rep. 1865. p. 92.
- Volucella inanis. (Dip.) inanis. Ag. Rep. 1849. p. 339. (Sep.) Ex *Volucella zonaria*. 39. 11/31 (Oct.)
 Walking stick insects, see *Spectrum*. *Diapheromera*. &c. phasmidæ. 39. 1874. p. 133. (Oct.)
 { feed on leaves. Flies. Injs resemble twigs.
 Ex. *Diapheromera remorata* 39. 11/7. (Oct.)
- 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. feed on fruit of pear &c. White Ag. Rep. 1866 p. 516. Hym.
- Wasps. (Hym) Vespidæ. to destroy. Remedies. 1864 p. 547. &c. (Hym.) - injure fruits
 { but also destroy flies, 1868. p. 43 - prob. breed in body of *Phyllophora* (Coc) *Stylops*.
 Ex. *Nalae 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. Injurious 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. 11/6. Dec 14. 8. (Neur)
- Water measure. Hel. see *Hydrophilidæ*. (Col) (Germ. &c.) Ex *Ceris conformis* 39. 1/10.
- Water scorpion (Hem) see *Nepa*. &c. 1875. Ex. *Nepa apiculata* 39. 1/10. (Hem)
- Water skimmer. (Hem) see *Zettia*.
- Wax insect of China. *Fata* (*Cecada*) *limbata*. Ag. Rep. 1861. p. 57. (Hem)
- Wax moth or Bee moth. (Lep.) see *Galleria cerea* 39. 11/14. 4. 11/17. (Lep.)
- Weaver. or Fall web worm. (Lep.) *Hyphantria* *textor*. 39. 2. 11/15. 3. 16. 1. 11/16. 18. (Lep.)
- Western grasshopper see *Calopterus sputatus* (Orth) 39. 11/16. 11/11. (Orth)
- Weevil. grain. see *Calandra vomotipunctata*. (*Sitophilus granarius*) 39. 11/12. (Col)
- Weevil. Hunter. (Col) eats holes in leaves of maize. Ag. Rep. 1863. p. 573. affinis
 { *Sphenothorus zene*. 1870. p. 68 fig 10.
- Weevil. red *Curculionidæ*. (Col) & incorrectly. *Diplosis Cicidomya tritici*.
- Weevil. red see *Diplosis tritici*. 1872. 126 so called incorrectly in Ohio &c.
- Weevil. Wheat see *Calandra vomotipunctata*. *Sitophilus granarius* Ag. Rep. 1865. 91 &c. 39. 11/2. 2.
- Weevil. Rice. see *Calandra oryzae*. *Sitophilus* 1849 p. 334 1854. p. 71. p. 5. 1861. p. 603.
 { *Calandra* 39. 11/11. (Col)
- Wheat midges. see *Diplosis tritici* Ag. Rep. 1864. p. 362. probably destroyed by *Mormidea*
 { *Chalus typhaeus* (*jugras*) sp. 39. 11/7. (Hem) *Diplosis tritici*. 39. 11/11. 11. (Hem)
- Wheel-bug nine pronged. (Hem) feeds on other insects. *Pronotus cristatus* *Peduncus novus*.
 { *ovatus*. 1864. p. 546. & 1875 p. 129. fig 41. *Pronotus cristatus*. 39. 11/14. (Hem)
- White ants. see *Termites*. (Neur) Ag. Rep. 1864. p. 545. Ex *Termites*. 39. 11/18. 10. (Neur)
- White climbing cricket (Orth) see *Oecanthus nives* 39. 11/14. 2. (Orth)
- Whorlogig. see *Gyrinus*. *lucicola* (Col) Ex. 39. 11/14.
- White grub. L. of *Lechnosterna*. *Phyllophaga*. &c. White grub parasite *Rali*. 64. Rep. 1874. 112
- White necked pine beetle. see *Dichelonycha ulmicollis*. (Col) 1868. p. 57. 39. 11/3. (Col)
- White pine weevil. see *Pissodes strobi*. 39. 11/11. (Col) 39 clover.

- Wilder, silk producing spider Ag. Rep. 1866, p. 37.
- Willow, Black. saw fly, *Pematus ventralis* Ag. Rep. 1873, p. 255 - hellborn recommended. (Hym)
- Worm, of *Empetris* is *Elater obscurus*. ♀ Ag. Rep. 1861, p. 608. - is the larva of an *Elater* (with *rodentia*. Ag. Rep. 1863, p. 566. - destroyed by baiting with sliced potatoes every day & destroying all found under earth - as they feed on vegetable roots &c. (Eg)
 1868 p. 93. - destroyed by sowing 6 bushels of lime "Machi" Ag. Rep. 1867 p. 441
 Example 33. - XI. 46 Corymbula. Col
- Wood boring or wood eating insects, destroyed by *Ephrales imitator*. (Hym 39 1/20 0 VII) 13 ♂
 33. 13. 3. (Ex 39. VII) 31. (Hym) Ag. Rep. 1866 p. 41. The larvae are also said to be
 destroyed by *Situs*, *Thanasimus*, *Apilus*, *Hydrophilus*, &c. (Col) see Ag. Rep. 1865.
 p. 98 (Col)
- Woolly apple tree louse. see *Briosoma lanigera*. - III/21. (Hym) 39
 *Wool see *Tricla granella*, injures wheat & grains. 39. IX/1. C/12. (Eg.)
- Woolly *Onoclea*. (Col) *Onoclea*, *Catalpa*, *lanigera*, pear foliage. Ag. Rep. 1860, p. 315. Catalpa
 { lanigera 39. VII/17. (Col) (see 1868. p. 89. also)
- Woolly Bears. (Lep) caterpillars of *Arctia* &c. as presenting a rough hairy appearance. Lep
 Worms earth. destroyed by *Staphylinidae*. (Col) Ag. 1865, p. 91. - forms food for *Staphy*
 { *Lampis*, *pyralis*, & *Agrotis* by. Ag. Rep. 1868. p. 95. - eaten by *L. Stenochlaena*
gnicata 1870, p. 65. - see also *Stenochlaena*. 1871, p. 81.
- Worm earth. Japanese see *Megacolex* or *Ponchaetox*. Ag. Rep. 1871, p. 82.
- Worm Cel. of *L. Fish*. Ag. Rep. 1871, p. 81.
- Worms in horses. remedy. Ag. Rep. 1860, p. 85.
- Worms. (Worm holes) tumours or abscesses under the skin of cattle caused by the larvae
 { of *Ichthyophaga* *horis* or the skin bot fly. Ag. Rep. 1872, p. 130. 39. VII/35 & VI/37. (Lep.)
- Diphtheria* (Orth) (Ratton) Ag. Rep. 1862, p. 4. milk medicine.
- Tija terminalis*. (Orth) said to be destroyed by *Galgulus oculatus*. (Hym) 39. 28. see *Tridactylus*.
 { 39. III/6. (Orth)
- Dyleportha*, *svincta* (Col) (Eg) injures branches of grape. Ag. Rep. 1865, p. 94 (Col)
- Xylophagus*. Ag. Rep. 1865, p. 92. m m. (Col)
- Xylopinus*, *saperdoides*. (Col) in black oak stumps, & under bark. 1868, p. 100, fig 160.
 { 39. XVII/34. (Col.)
- Xylocyrtus*, *saturus*, (Col) 3 m. taken at root of sweet gum, & Oak. Ag. Rep. 1868, p. 89, fig 79
 { injurious to Oak. 1873, p. 152, fig 2. 39. XVIII/15. XLII/45. C. C.
- Yellow caterpillar? of *L. 303*. (Lep) Ag. Rep. 1855, p. 83. (Lep)
- Yellow jacket (Hym) *vespa*, *diabolica*. 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 insects. 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.
- Zenoc*. (Sandalus) *prica* Ag. Rep. 1865 p. 94, 105. found under bark. Zenoc prica 39. XX/13 (Col)
- Zonitis*, *atipennis* (*Demognatha*) 1865, p. 103, 104. (Col). 39. XVII/21. XLII/48. (Col.)
 { 39. 29

Insects to a greater or lesser degree

Beneficial.

by destroying noxious insects

Aleochara (Col) *anthomyzae*. destroys
 {*Anthomyia brassicae* (Lep.)
Ammophila gryphus. (Hym) destroys caterpillars
 {*ans*. (Lep.)
Anatis (Coccinella) *hirsutata* (Co) destroys
 {*Antenn. Aphides*, (or plant lice) (Hom)
Anthrenus (Hes) destroys small insects. —
Antrenax (Lep) destroys *chrysalis* of *Sepidif.*
Ants. (Hym) destroy caterpillars of grass
 {*worms*, &c when injured. (Lep)
Aphidius (Hym) destroys *Aphides*, (Hom)
Aphimera (Hes) destroys other insects & also
 {*Kills honey bees* (Hym)
Asilus missouriensis L. &c (Lep) destroys
 {*Honey bees*, & other insects. (Hym)
Asilus soriceus (Lep) destroys other insects.
Baccha (Dip) destroys *Aphides*. &c (Hom)
Bembex (Hym) destroys flies (Lep)
Brachinus (Col) said to destroy insects.
Brachytarsus varius. (Col) destroys, coccis,
 {*from pine* - Europe (Hom) ?
Bracon (Hym) said to destroy wood boring
 {*insects*. (Col)
Brontes (Col) said to destroy *Scolytus*, and
 {*Postogochus* in Europe. (Co)
Calosoma calidum & *sordidum* (Col) destroy
 {*other insects*.
Campyloneura (Carpus) *vinifera* (Hes) destroys
 {*Evithroneura*, or wine hopper (Hom)
Carpophylus *separatatus* (Col) Europe, said to
 {*destroy Postogochus* in wood. (Col)
 * *Carabus ligatus* &c (Col) destroys caterpillars
 {*of Pontia brassica* &c (Lep)
Conaphron (Hym) destroys *Cecidomyia* destroyer
 {*of Russian Fly* (Dip)
Chalcis ? (Hym) destroys *Chrysobothris femor-*
 {*-ata* &c (Col)
Chilocorus lineator, (Col) destroys coccis
 {*on orange*. &c (Hom)
Chrysopa (Carp) destroys eggs of *Anthomyia*,
 {*Cepanum*, *Aphides* & other insects.
Cicindellidae (Col) destroy other insects.
Cleonymus *clasicompa* (Hym) destroys
 {*Lep of Cleto-campa americana* (Lep)
Cinixidae (Col) destroy wood boring larvae
 {*bees* &c (Col & Hym)
 {*Lower Sep. 29th 1877.*

Clerus apivorus & *abreareus* (Col) destroy
 bees in Europe. (Hym)
Coccinellidae. Lady birds, all with exception
 {*of Eribolina borealis*, destroy
 {*Plant lice Aphides*. &c (Hom)
Cockroaches, (Orth) were said to destroy
 {*bed bugs*. (Hes)
Coelinius nigor (Hym). Chlorops.
 {*(Lep)*
Conorhinus variegatus (Hes) destroys
 {*bed bugs*. *Acronthia*. (Hes)
Crickets, said sometimes to destroy other
 {*insects*.
Cryptus inquisitor (Hym) destroys *Thripidif*
 {*stony clemmerae*, *orthis* or *hang*
 {*worm* (Lep)
Culex. Mosquito (Dip) destroyed by
 {*Swallows* &c
Dasygogon (Dip) destroys other insects
Diapma agromyzae. (Hym) destroys
 {*agromyza tritici* (Lep)
Diplodus *immedius* (Hes) destroys *planor*
 {*Curculio*, & other insects (Col &c)
Ditoma coronata (E. rope) (Lep) said to
 {*destroy Postogochus*. *Scolytus* &c (Co)
Diptera destroyed by *Eumenes flatorna* (Hym)
Dulus flavescens (Col) (Europe) destroys *snail's*
 {*slugs* &c
Dytiscus (Col) water beetle, destroys other
 {*insects*.
Ephialtes (Hym) destroys wood boring insects.
Erax, Dip. destroys other insects.
Eumenes flatorna, destroys canker worm
 {*Anisopteryx*. (Lep)
Euschistus punctifera &c (Hes) destroys other
 {*insects*.
Evagonus rubribus (Hes) destroys bronze plant
 {*lice Aphides* &c (Hom)
Eucromus *quaxi* (Co) destroys other insects.
 {*Orthis* &c (Hom)
Forsiculus (earwig) (Orth) said to destroy
 {*Orthis tritici* or wheat midge (Lep)
Gerris (in water) (Lep) destroys other insects.
Gyrinus (Apple bug) (Col) destroys other
 {*insects*.
Hammatocerus fuscus (Hes) destroys other
 {*insects*. *Nabis* &c —

- Homocidus* (New) destroys other insects.
Leptodermis (Coc) Col. destroys Aphides, &c. (How)
Homocidus & wasps (Hym) destroy Tobacco worms.
 & other insects. (Lep & c.)
Hydrophilus, water insect (Coc) said to destroy
 other insects.
Hypophloeus (Col) said to destroy insect in
 wood.
Inostemma (Hym) destroys Hessian fly
Acidomyia destructor (Dip)
Schnecumon flies (Hym) destroy *Urosata*.
Lepraecus, *Ceraloma*, *Pyrorotia*.
 (Hym) (Lep)
Larrada argentata, Hym. destroys cricket
 & crickets.
Lebis grandis, & Col destroys *Chrysomela*.
 (Lonyphora) (Col.)
Leptoglossus philoporus, (Hect) destroys Murgon
 flies, his Unionishas. (Cabbage bug) (Hec)
Leb. laladae, Oregon flies (New) destroy insects.
Lycaridae, (Hec) destroy other insects.
Lucanus dimus (Col) destroys soft bodied insects.
Macroglanis (Hym) destroys *Acidomyia destructor*
 (Coc. or Hessian fly) (Dip)
 x *Diapheromera* or *Mantis* (Orth) destroys other
 insects.
Melanolestes (Hec) destroys other insects.
Meloe, is bred in holes of bees, wasps, &c.
Mesoporus granivola (Hym) destroys Rice
 weevil, *Calandra oryzae* (Col)
Microgaster congregatus (Hym) destroys *L. Mac*
 & *rosula*, *carvinae*, &c. (Lep)
Midas (Lep) feeds on other insects.
Mylus cinctus (Hec) destroys *Chrysomela*
 (Lonyphora, 10 lineata) (Col)
Mommidia typhaea (Hec) destroys *Aphosis*.
 (Wheat midge) (Dip)
Nepa & *Notoxeta*, water insects (Hec)
 & destroy other insects.
 x *Myrmelcon* (Ant Com) (New), destroys other
 insects.
Ophion macrumum (Hym) destroys *Paty* -
Samia cecropia (Lep)
Pachymerus calceator (Hym) destroys
Diplosis tritici Wheat midge (Dip)
Parysachus elongatus (Col) destroys *Chrysomela*.
 (Lonyphora 10 lineata) (Col)
Pentatoma (Hec) destroys caterpillars (Lep & c.)
Phryganeon planosae (Hym) destroys -
 (Wolfe larvae) (Lep)
Phymata exosa (Hec) destroys other insects.
Pirates biguttatus (Hec) destroys bed bugs (Hom)
- Platygaster* (Hym) destroys *Isosoma hordei*.
 { *Jains* (worn) (Hym)
 { destroys *Acidomyia destructor*
 { or Hessian fly (Dip)
Podisus (Cynicus, &c. (Hec) destroys *Chrysa*
 { *melae*, *Doryphora* 10 lineata (Coc)
Povon (Hym) destroys *Conotrachelus nemu*.
 { *phar*, or Plum weevil. (Col)
Pucillus (Col) destroys other insects.
Pulsates rubiginosus (Hym) destroys *L.* of
 { *Chrysomela*, 10 lineata. (Coc) & c.
Pronotus { *orientatus* (Hec) *Pedemus novemarius*
 { destroys other insects.
Psectocantus Bestardi & c. destroys Hiss bees
 { *phala* *alphacus*. " " " (Dip)
Pteromalus (Hym) destroys *Chlorops*, *Dip* &
 { *Isosoma hordei*, &c. (Hym)
 " *tabacum* (Hym) destroys *Microgaster*.
 { *congregata* (Hym)
Pirates biguttatus (Hec) destroys bed bugs (Hom)
Ptycho americanus (Col) destroys *P. Phagum*
 { *lineatum* (Col)
Reduvius personatus (Hec) destroys bed bugs (Hom)
Rhagonia (Coc) (Col) destroys Lar of *Sius*
 { *flavus* (Hym)
Rhizophagus (Coc) (Col) destroys *Pentogonus* (Col)
Rhyssa (Hym) *atrata*, & *lunator* (Hym)
 { destroys *James columba* (Hym)
Rilphu quadrimaculata (Col) (Coc) destroys
 { caterpillars. (Lep)
Sphex ? (Hym) said to destroy cockroaches
 { (Lep)
 Spiders destroy *Pirius rapae*, &c. (Lep)
Staphylinidae (Col) destroys other insects.
Sticticus cianus (Hec) destroys *Epilachna*,
 { *realis*, or Squash lady bug (Col)
 " ... *limbriales* (Hec) destroys (Lep) & c.
Stenus grandis, &c. (Hym) destroy Cicada or
 { Hessian fly. (Hom)
Taphus (Dip) destroys Aphides, or plant lice.
 (Hom)
Tachina (Dip) destroys grass hoppers, (Orth)
 { *calypallae*, (Lep) *colorado* *palute*
 { *betts*, &c. (Coc) & c.
 " *quida* (Dip) destroys *Eaels*.
 { *impennalis* (Lep)
Tela (Hym) said to destroy eggs of
 { *Notoxeta*. (Hec)
Telphonus (Col) L. said to destroy soft bodied
 { insects.
Tetracha (*Megacophala*) *virginica* & *carolina*.
 { L. destroys other insects.



79 X.

Thanasimus (*Pseudoclerus*) (Col) destroy
 { grubs in bark.
 " *nigripes* destroy L of *Hylesinus*.
 { *aculeatus* (Col)
Theridion & *Hypophyllum* (Spiders) destroy
 young caterpillars of *Pieris*. (Lat)
Thrips (Bitt) said to destroy *Aphis* tobacco fly,
Ericosoma (Horn) destroys bees. (Hym)
Tuis (Col) destroy wood boring larvae.
Toxophora (Dip) destroys *Eumenes fraterna* (Hym)

Trioxys (Hym) destroys aphides. & plant lice.
Triphleps *Anthracus insidiosus* destroy
 { small insects.
 Wasps. (*Pespidae*) (Hym) destroy flies.
 { other insects.
 " { breed. Meloe (Col) & *Phlebotomus*.
 { (Col) in body
 Water beetles *Dytiscus*, *Hydrophilus*
 " { etc. destroy other insects, fish
 { & fish eggs.

Other agencies useful in the destruction
of Insects.

from Agl. reports.

Amanita muscaria, a fungus poisoning flies.
Amaranthum muscatum yellow a plant " "
 Arsenite of copper Paris Green, used to
 { poison insects.
Artemisia { plant used to fumigate or suffocate
 { bees in China
 Birds, various *Phoeniceus* (Ag. Rep. 1867, 2018)
Botrytis bassiana, fungus destroying
 { Silk worms.
 Club foot, in cabbage a disease.
 Cobalt - used to poison insects
Helleborus, *White* *Veratrum album* used to
 { destroy insects.
 Iodine, & starch used to attract snails, &c.
 Gulls destroy *Amelanus simplex* n. Wlah.
Meloe arator (China tree) leaves &
 { berries used to destroy insects.
 { Bats in houses &c.

Paris green Arsenite of Copper used -
 its poison Boll worm, cotton cat
 { pupular. Tobacco fly &c &c.
Polygonum - plant used as a wash.
 { for horses to drive off flies, see
 { also Walnut leaves.
 Poke berry, (*Phytolacca*) used to destroy
 { *Cotyledons* &c.
Pyrethrum plant used to destroy or
 { drive away insects
 Salt used to destroy wire worms.
 { the larvae of *Elateridae*
Sphaeria morbosa, a fungoid growth
 { forming black knob 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, Sore skin, and Rust.

Amongst the Birds, Gulls, Quail, Sparrows, &c &c are mentioned as beneficial, Lead is sometimes, tossed into by insects - viz. *Chiron cinctus*, *Hyloterpes*. - (*Callidium*) *basulus* (Col) - *Amobium*, *Apate*, & *Bastinicus* (Col) have also been recorded as being eaters of leads. & also probably a *Sorex* (Hym).

J. Flower 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, Herbage, & 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 gardeners & truck farmer. — Whenever the words "frequented by" 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. "inj" 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 synonyme. 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 the 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. "Bes" wasps &c. "Lep" Lepidoptera. Plant bugs &c. "Hom" Homoptera. "va." plant lice. Leaf hoppers, &c. "Lepid" or "Lep" Lepidoptera, Butterflies, moths &c. "Dipt" Diptera 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. Ballam fr.	" " fol. frequented by <i>Pterostoma (Cecropia)</i> <i>obscura</i> . (Hom)
" canadensis. Hemlock Spruce.	" " frequented by <i>Cecidea Tassus</i> (Hom)
Acer. Maple.	" " " by <i>Psocoma uncinata</i> (Hom)
" <i>dasycarpum</i> Silver maple.	" " " by <i>Triplaris chalybea</i> (Col).
Alum. Fruit of Oak.	Amanita, a fungus eaten by <i>Scispa Trunc</i>
" injured by <i>Balaninus nardus</i> &c.	(Up) <i>Lep</i> 29. <u>Nov</u> Aug 8 1877
<i>Calanthus glandulosus</i> . Tree Heaven.	
" eaten by <i>Sarcis Alticus Cylind</i>	

x *Amelanchier canadensis* in Shadbush.
Amaranthum muscae tricornis plant. used
 to poison Ples. (Lep)
Ampelopsis quinquefolia Virginian creeper.
 " frequented by *Tetamonia ampelopsidis* (Hom)
 Animal substances destroyed by *Carabochas*
 { *Ectabia germanica*. *Perinateta americana*
 { *Stenomodes parvylanica*. *Stelobygia orientalis*
 (Orth)
 Animal remains. dead mice, &c eaten by *Cristalis* (Ort)
 " " eaten by *Dormes les nubius*. &c (C.E)
 " " " *Gryllotalpina*. (C.H)
 " " " *Gryllus acheta domesticus* (Or)
 " " " *Necrobia*. (Col)
 " " " *Staphylinus maculosus*. &c (Col)
 Animals, blood sucked by *Pulex irritans*. Flea (Lep)
 " " " *Culex* &c (Mosquito) (Lep)
 " " *Acanthia (Amax) lectularius* (bed bug) (Hem)
 " when dead see Carrion.
 Animals (& birds) infested with biting bird lice
 { *Mallophaga*.
 Ants. nests. &c
 " " frequented by *Claviger porcolatus* (Col)
 " " " by minute *Hesperi*. (Eu) (Col)
 " " " by *L. of Lonicis* *Neognatha*
 { *caripennis*. (Eu) (Col)
 " " " by *Pelaphidae*. (Col)
 " " " by *Scydmaridae*. (Col)
Asium graveolens see Celery.
 Apple. see *Pyrus malus*
 " wood injured by *Allaus ocellatus* (Col)
 " " " " *myops* (Col)
 " twigs injured by *Amplycerus* (*Bostriachus*)
 { *Alphata* *bicaudatus*. (Col)
 " fol. injured by *Amisopteryx vernata* &c (Lep)
 " " eaten by *Antheraea* *Attacus yema mui*.
 { Lep. (Foreign)
 " flower buds inj^d by *Anthrenomus pedicula*
 { *nis* (Col) Europe.
 " " inj^d 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. *Wright* (Hom)
 " bark & fol. injured by *Aphis*. *malv*. (Hom)
 " " " injured by *L.P.S* *Aspidolelus*
 { *conchiformis*. Apple bark louse (Hom)
 " " " injured by *Alphidolelus harrissi* (Hom)
 " Pith in twigs injured by *Bostriachus*
 { *amphicerus*. *bicaudatus*. (Col)

Apple fruit injured by *Caracarsa pomonella* (Lep)
 " " twigs inj^d by *Cerasia babaluis*. *dicerus*. &c (Hom)
 " " " inj^d by *Chromis cinctus yanguarucum*
 { or Hickory borer. (Col)
 " wood inj^d by *Chrysobothris femorata* (Col)
 " " " inj^d by *Chrysocampa*. *degreonis*. *america*
 { *vicana* (Lep)
 " fruit. injured by *Anotrachelus*. *Rhynchae*
 { *nus-nemphar*. or Plum weevil. (Col)
 " " fol. injured by *D. Latona* *monstra* (Lep).
 " " wood injured by *Dicerca*. *divaricata* (Col).
 { *Stenurus* (Syn)
 " " twigs cut off by *Elakthidion villosum*. (Col).
 " " { *Stenomorus* *perator*. or Oak pruner.
 { Bark & roots. injured by *Eriosoma*. *lanigera*.
 { Woolly Apple tree louse. or Am. *Wright*. (Hom)
 " " fol. injured by *Epicraerus*. *imbriatus* (Col)
 " " " by *Graphorhinus* *radiosus* (Col).
 { Syn *Ellicurus*. *altus*. (Col)
 " " fol. injured by *Perkhantia*. (*Arctia*) *textor* (Lep)
 " " buds & twigs &c injured by *Phycorus*
 { *novaboracensis*. *carolinoides* (Col)
 " " Bark & wood injured by *S. Septostylus* *aculifer*.
 { *aculiferus* (Col).
 " " fol. injured by *Lorotaenia* (*Tortrix*)
 { *rosaceana*. (Lep) Apple *Tortrix*.
 " " fol. inj^d by *Lygus* *limosus*. (Hom)
 { *Carabus*. *oblineatus*.
 " " Wood injured by *S. Lucanus* *dama*. (Col).
 { Fol. fruit & flower injured by *Macrodox-*
 { *tylus*. *subspinosus*. or Rose bug. (Col)
 " " Young fruit injured by *Macrobasus*.
 { *Antreas*. *fulvica* *unicolor*. (Col)
 " " fol. injured by *Macronoxia*. *Polyphyla*
 { *variolosa*. (Col)
 " " branches punctured by *Acanthus* *niveus* (Ort)
 " " twigs girdled by *Cnicidites*. *cingulatus* (Col).
 " " wood injured by *S. asmoderma* *eremocleides*
 { " " *Osmoderma* *scabra* (Col).
 " " fol. injured by *Platysamia* (*Attacus*) *caerofralis* (Lep)
 " " root-bark. injured by *Pomphigus* *piperi*. (Hom)
 " " fol. injured by *S. Phyllophaga* *svercina*
 { *lachnostoma*. *tesca*. &c &c &c (Col).
 " " fol. injured by *Podisus*. *cynicus*. *Arma*
 { *grandis*. (Hbet)
 " " fol. injured by *Podisus* *spinosus*. (Hbet)
 " " Wood injured by *Prianus* *laticollis*.
 { *brevicornis*
 " " twigs Bark &c injured by *Psylla* *pyri* (Hom)
 " " Young fruit (Europe) injured by *Rhyssalus*
 { *baeches*. (Col)

- Apple, wood injured by *S. Saperda*, *candida* -
 { *leucostale* (Syn), (Col)
 " fruit frequently by *Sciara*, *mal.* (Col)
 " (or apple midges) (Syn)
 " bark & wood injured by *Scytalus pyri* (Col)
 " fol. injured by *Tomicia* *viricolor* (Col)
 " seeds injured by *Sivanius* *surinamensis* (Col)
 " fol. injured by *Emerinthus* *exacatus* (Lep)
 " " " *Sphinx* *eremitis* (Lep)
 " " " *Tela* *attacus* *polyphemus* (Lep)
 " Bark & wood inj. by *Tomicus* *mal.* (Col)
 " foliage injured by *Conostania* (*Tortrix*)
rosaceana (Lep)
 " fruit injured by *Tripteta* *pomonella* (Lep)
 Apricot *Armeniaca*, *vulgaris*, L.
 " bark, twigs, &c. injured by *Aspidiotus* *conchi*
formis (Hom)
 " Bark, wood & bark, injured by *Agoria*
Trochilum *ciliata* (Lep)
 " Fruit, injured by *Asteria* *hirta* (Europe) (Col)
 Arbor vitae White cedar, *Thuja* *occidentalis*,
 " inj. by *Thuridiphloxya* *shimonei* -
 = *formis*. *Pecticus* *rosiferum*. Basket worm (Lep)
Armeniaca *vulgaris*, Apricot, L.
 Arbutus ?
 " foliage destroyed by *Bombyx* *mactrona* (Lep)
 Ash, *Fraxinus*,
 " foliage eaten by *Cartharis* *vasicatoria*, Col
 Killed by a *Phidippus* (Col)
 Ash mountain *Pyrus*, *Sorbus*,
 " wood injured by *Saperdella* *candida* (Col)
 X *Asclepias*, milk or silk weed,
 " fol. injured by *Euchaetes*, *egh.* (Lep)
 " frequented by *Sphenothrips* *13 punctatus*,
 (Col)
 X Ash (Spruce) (Lep), scar prickly (Lep), & *Xanthoxylon*,
 Ash, *Fraxinus*,
 " Wood injured by *S. Dynastes* *tiglius* (Col),
 " " " *Trochilum* *Algeria* -
 { *denudatum* (Lep)
 " asph of flowering ash when punctured by a
 Cicada said to produce a kind of manna
 " wood prob injured by *Xyloryctes* *satyrus* (Col)
 Asparagus, *officinalis*,
 " fol. injured by *Griscomis*, *asparagi* (Col)
 Aspen, *Picea*,
 " Bark fol. &c. injured by *Aspidiotus* ..
 { *cryptogamus* (Hom)
 " bark inj. by a coccus, ? by Rep 1860 p. 312.
 " fol. injured by *Polyporus* *inclusus* (Lep)
 { *Corticium* *annosum*, Sen

- Aster, starwort,
 " stalk bored into by *S. Gontyna* *nitealis* (Lep)
 " fol. injured by *Epiceetes* *penzanceana* (Lep)
 Aquatic plants, frequented by *Syrphicus*.
Hydrophilus &c. &c. (Col)
 Bacon, injured by *Domestis* *cardarius* &c (Lep)
 Balsam fir, *Abies* *balsamea*,
 " fol. injured by *Saturnia* (Lep)
 " { see *Thyridiphloxya* *shimonei*, Col
Bartisia, *tinctoria*, see-mill indigo
 Barley see *Hordeum*,
 " green leaf &c. injured by *Aphid.*
 { *avenae* (Hom)
 " grain inj. by *Chlorops*, *fol.*, *Europe* (Lep),
 " " " *Chlorops* *taeniosus*, " "
 " causes swelling of the joint (Lep)
 " seed or grain injured by *Caidomyia*
Diplosis *tritici* (Lep),
 " injured by a disease called Gout wh
 { is a swelling of the stem, Europe
 " silant & seed injured by a swelling
 { in the joints caused by *Eurytoma*
Isosoma *hordei* (Hypon),
 " young injured by *Ascomis* .. (Lep)
 " seed to be injured in Europe by
 { *Tarbus* *gibbus*, Col)
 Bark of trees (under) frequented by *Colydiidae* (Lep)
 " " " frequented by *Cepes*, *concolor* (Col)
 " " " *Gymatodera* *undulata* (Col)
 " " " *Eucemis* *Deltometopus*,
 { *romanicornis* (Col),
 " " " *Ellechnia* *Photinus*,
 { *corrasca* (Col),
 Bark (under) frequented by *Histeridae* (Lep)
 " " " *Bostrychophaga* *vicornis* (Col)
 " " " *Iph.* (Col)
 " " " *Melanoidyidae*, (Col)
 " " " *Melanoides* *communis* (Col)
 " { *eratomyctes*
 " " frequented by *Mycetophiles*, (Col)
 " " " *Nidulini* (Col)
 " " " *Nasutius* *Sivanius* *dentatus* (Col)
 " " " *Staphylinidae* (some) (Col)
 " " " *Stenobothrus* *Beudanticus* *regipes* (Col)
 " " " *Tenebrionidae* (Col)
 " " " *Tenebrionides* *Trogosita*,
 { *manuaticus*, Col?
 " " " *Tenebrionides* *Trogosita* *dubia* (Col)
 " " " *Dytiscus* *Saperdella*, (Col)
 " " " *Tenebra* *picula* (Col)

St Glou., Aug 24/77

X *Allium* *cepa*, onion.
 X *Allium*, *petroselinum*, parsley

X *Umbrosia*, Baywood.

- Bass wood, Linden, *Tilia*.
 * fl. &c. injured by *Lachnus caryae*. (Hom.)
 Bats. infested with *Acanthia Comex lactularia*.
 { Bed bugs. (Hob.)
 Bauhinia, fl. eaten by *Attaea Bauhinia*.
 { *Leptorhina* (Lep.)
 Bean, Java. *Phaseolus*.
 " injured fl. &c. *Brachius fabae*. (Hom.)
 " fl. &c. fruit. injured by *Brachius obolatus* Kott
 " " " *Mylabris*. *Brachius spumarius*
 { " " " *varicornis* (Col.)
 * Bed bugs. d. destroyed by *Conorhinus variegatus*.
 { *sanguisuga*. (Hob.)
 Bee (honey) destroyed by *D. Apimarus spissipes* (Hob.)
 " " " by a plant. *Lucidius*.
 " " " by *Asilus*. (Hob.)
 " (Mason) " *Clarus obscurus* (Eu) (Col.)
 " (Honey) " " *apicatus* " " "
 " comb. wax. honey destroyed by *Galleria cerana*.
 { Wax or be moth. (Hom.)
 " nourish L. of *Meloe angusticollis* in body (Col.)
 " destroyed by *Phomachus bastardi*. (Hym.)
 * " " *Proctacanthus*. (Hym.)
 " nourish L. of *Stylaps* in body. (Col.)
 Bess nests frequented by *Thumamis*.
 " " *formicarius*. (Col.)
 " " by *Formicid*. (Col.)
 Beech. *Fagus*.
 " " injured by *Agriolini*. (Eu) (Col.)
 " Sap eaten by *D. Allohuma* (Colinis) (Col.)
 { *nitida*
 * " Wood injured by *Agriolus viridis*, (Eu) (Col.)
 " " *Bisera* (Stenarus) →
 { *divaricata*. Col.
 " frequented by *Eriodroma imbricator*. (Hom.)
 " " *Blisocerus coquebertii*. (Hom.)
 " injured by *Polydrosus micans*. Col. (Eu.)
 " nuts injured by *Trogosita* (*Tenebrionidae*)
 { *albis*. Col.
 Beet. *Beta*.
 " shoots. & leaves injured by *Silpha atrata*.
 (Eu) (Col.) & *laevigata*. (Eu) (Col.)
 Bergamot. *Monarda*.
 " (wild) injured by *Sphinx eremita*. (Hep.)
 Betula *Bircha*.
 Birch twigs & fl. frequented by *Acanthosoma*.
 { *ignisca*. (Hob.)
 " twigs & fl. injured by *Eriodroma tessellata*
 { *flora*
 " under bark frequented by.
 { *Pyrochroa coccinea* (Eu) (Col.) -
- Birch fl. injured by *Singus juglandis* (Hob.)
 Birds (some) infested with bed bugs. -
 { *Acanthia Comex lactularia*. (Hob.)
 " infested with Biting birds lice see
 { *Mallophaga* (Birch)
 " blood sucked by Fleas, *Pulex irritans* (Dip.)
 " skins injured by *Stinus* for Col.
 { see Nat. Hist. specimens. &c.
 Biscuit ship injured by *Sitona* (*Amelium*)
 { *panisca* (Col.) & see Bread &c.
 " injured by *Tenebrio* *tenebrionellus*
 { *molitor* &c. (Col.)
 Bittersweet. *Solanum dulcinaria*.
 * fl. injured by *Lygus*. *Phytosora*.
 { *lineatus*. (Hob.)
 Black alder. *Alnus serrulata*.
 " injured by *Caridea subfasciata*. (Hom.)
 { *syn Josus*
 " injured by *Praxitola chalybea*. (Col.)
 " " *Proconia undata* ? (Hom.)
 Blackberry. *Rubus villosus*.
 " flower & fruit frequented by *Byturus*.
 { *Eu* (Col.)
 " bushes. frequented by *Castropera*.
 { *proteus*. (Hom.)
 " bushes frequented by *Dicrocephala*.
 { *coccinea* *Tillyonia quadrivittata*. (Hom.)
 " stalks punctured by ♀ *Acanthia*.
 { *nicus*. (Orth.)
 " stalks bored by *Chora* *triquantalata*. (Col.)
 " Bushes frequented by *Oliarius* (Hom.)
 " " by *Proconia undata* (Hom.)
 Blackberry. *Vaccinium*
 " frequented by *Cleptera proteus*. (Hom.)
 Blood of Animals, mankind. &c. sucked
 { by *Culex*, *Musquitos*. *Pulex* fleas
 { *Acanthia* bed bug. &c. &c.
 Boleti. see also fungi.
 " frequented by *Haplcephala bicornis* (Col.)
 " by *Tenebrionidae*. (Col.)
 Blister flies. see *Cantharis*. *Epicauta* &c. (Col.)
 Bombs in Mammoth cave. N.Y. frequented by
 { *Adelops hirtus*. Col.
 " eaten by *Staphylinidae* *Dermestidae*. (Col.)
 " see also *Carnio*
 Boots. injured by *Dermestidae*. Col.
 " " *Dermestes lanarius*. Col.
 { *vulpinus* &c. &c.
 " injured by *Ptilinus pectinicornis*.
 { (Col.)
 " injured by *Platamodes*. *Ectolha*
 { & all the *Blattidae*. or *Cockroaches* (Orth.)
 * *B. leuco*. 26 Aug. 71.

Brambles. Rubus.
 " frequented by *Ampelisca* (Flato) *viridata*.
 " " " & many other insects too numerous to enumerate here (see part 4)
 Bran. injured by *L. Vinclorenellus*. *Sensorio*.
 " " " *molitor*. (Col) See flour-meal bread &c.
 Brassica oleracea see Cabbage Cauliflower &c.
 Brassica rapa Turnip.
 Bread injured by *Ecolia* *Blatta germanica*
 " " " & other cockroaches. "Orth"
 " " injured by *Sitotroga* *Anobium* /
 " " " *Spanicida*. (Col)
 " " injured by *Tenebrionides* *Tenebrio molitor* (Col)
 " " " " " *obscurus* " "
 " " " *L. Troglodita*. *Tenebrionidae*.
 " " " *mauritanica*. (Col)
 Buckwheat. *Fagopyrum*.
 " " " injured by *Prodenia* autumnalis Lep.
 Buttercup. *Ranunculus*.
 " " " injured by *L. Epicausta cinerea* (Col)
 " " " *Cantharis marginata*. (Col)
 " " " fol. injured by *Meloe angusticollis*. (Col)
 Butternut. *Juglans cinerea*.
 " " " frequented by *Enchea rufipes* *lidentata* (Hom)
 " " " bark & wood, injured by *Scolytus* -
 " " " *caryae* *quadris* *variosus*. (Col)
 " " " fol. injured by *Stigis* *juglandis*. (Hes)
 Cabbage. *Brassica oleracea*.
 " " " roots &c. injured by *L. Anthomyia*.
 " " " *brassicarum*. (Lep)
 " " " club-foot, a disease formerly thought to be
 " " " caused by *L. Anthomyia brassicarum* Lep.
 " " " leaves & head, injured by *Aphis brassicae* Hom
 " " " " " by *Siphonalia auricularia* Em. (Orth)
 " " " leaves & injured by *Glyphorhynchus*.
 " " " *radicosus* & *Spurarius fallax*. Hes.
 " " " flowers frequented by *Ligus lineolaris*.
 " " " *Carpus obsoletus*. (Lep)
 " " " leaves &c. injured by *Murgantia*
 " " " *Strachia histriónica* (Hes)
 " " " fol. inj^d by *Nysius raphanus*. (Hes)
 " " " " " by *L. Plenis oleracea*. (Lep)
 " " " " " *fontinalis*.
 " " " " " *variae*.
 " " " " " *Phyllotreta striolata*. Hes.
 " " " *Orchestis vittata*. (Hes)
 " " " fol. inj^d by *Plutella* (*Phyllostera*) of Cu
 " " " *Amilipenella* *Crostoma brassicella* Lep.
 " " " fol. injured by *Prodenia* *comelivora* (Lep)
 " " " " " by *Smynterus*. (Orth)
 Cactus tuna used as a hedge plant in Spain
 Cactus cochineiferus, food of the cochineal insect

Cactus food of coccus cacti. (Hom)
 " " " of cochineal insect - (cactus) (michley pear)
Cannabis sativa, hemp.
Cantharides, or Blister flies, eaten by
 " " " *Sitona* *Anobium* *spanicida*. (L)
Capsicum. Cayenne or red pepper
Carcasses, see carrion.
 Carrion devoured by Carrion beetles.
 " " " *Silpha neobiporus* H.
 " " " eaten by *Nemobius* (*flacheta*) *vittatus*. (Orth)
 " " " " by *Corynetes* *Neocolia violaceus* Col.
 " " " " *Bromestidae*. (Col)
 " " " " *Crepophilus villosus*. (Col)
 " " " " *Histeridae*. (Col)
 " " " " *Calliphora vomitoria* (Lep) x
 " " " " *Lucilia* *Caesar*. (Lep) x
 " " " " *Surcophaga carnaria* (Lep) x
 " " " " *Neorophodius marginalis*
 " " " " *Silpha*. Col.
 " " " *Neorophodius* *Silpha americana*. (Col)
 " " " *Nemobius* (*acheta*) *vittatus*. (Orth)
 " " " *Neorophodius* *pellata*
 " " " " see *Peltis americana*. (Col)
 " " " *Nitidulidae*. (Col)
 " " " *Peltis americana*. *neorophodius*
 " " " *pellata*. (Col)
 " " " *Peltis*. *Neorodes* *surinamensis* (Col)
 " " " *Silpha* *Neorophodius americana*
 " " " *Silpha* (*Neorophodius*) *velutina* (Col)
 " " " destroyed by *Staphylinidae*. (Col)
 " " " *Stalidius gemeratus*. (Col)
 " " " *Trogidae* &c. (Col)
 Carrots *Daucus* *carota*.
 " " " fol. injured by *L. Papilio astereae* (Lep)
 " " " injured by *Phytocia* *ephippium* (Col)
 " " " " *Pilla rosae*! (Lep) (Lep)
 Castor oil plant. *Ricinus*. commons.
 " " " eaten by *Attacus* *virindia* L.
 " " " " *Samia* *Attacus* *cynthia* Lep.
 Castanea pumila. Cinquafiori.
 Castanea vesca. Chestnut.
 Caterpillars destroyed by *Ammophila*.
 " " " *Gryphas* (Hym)
 " " " destroyed by *Staphylinidae*. (Col)
 " " " " *Calosoma calidum*
 " " " *St. scrutator* &c. (Col)
 Cattle, in Europe, sometimes killed by
 " " " *Simulium* *columbaschensis* (Lep)
 " " " stung by *Stomoxys calcitrans* (Lep)
 Cats infested & tormented by fleas.
 " " " *Pulex irritans* &c. (Lep)
 " " " J. Flower. Aug. 27. 77.

Cauliflower. *Brassica oleracea*. var.
 " fol. inj^d by *Pieris rapae* ♀ (Lep.)
 Cayenne pepper. Red pepper ♀ *Capiscum*.
 { eaten by *Sitotroga (Anobium) panicar* (Col.)
 Cedar red. *Juniperus virginiana*.
 " { fol. inj^d by *Thyridopteryx ephemeriformis*. *Reticularia confusum*. (Col.)
 Cedars affected by *Santalus*. (Col)
 Celery. *Astrum graveolens*.
 { fol. inj^d by *Papilio asterias*. (Lep.)
 { seed inj^d by *Depressaria orientella heracliana* Syn (Lep.)
 Cereals. see Wheat, Rye, &c.
 Cheese eaten by *Corymbes (Hecrodia) rufipes*. (Col)
 " " *Musca cornuta*. (Dip)
 " " *Prophila casei* (Cheese fly) (Lep.)
 Cherry. *Prunus cerasus*.
 " fruit inj^d by *Acanthophaea femorata* (Hes)
 " sp. *Metarodius Anisostelis Phorochrus ruscivorus*?
 " { Root bark, wood, inj^d by *Agrocybe - Proctulium Exitiosa* (Lep.)
 " { Wings bored into by *Amphicomus Bostonichus bicardatus*. (Col)
 " fol. inj^d by *Anisosternyx venata* (Lep.)
 " fruit cult^d inj^d by *Anthrenus*.
 { *Ampharion* (Col) Europe
 " { fruit (wild) inj^d by *Anthrenus inermis* (Col)
 " { *Junco* ♀ fol. inj^d by *Aspidiotus conchis*. (Eu)
 " { forms on the scale insect. (Horn)
 " { fol. destroyed by *Chrysompha decipiens americana* (Col)
 " { fruit inj^d by *L. Conotrachelus (Phya) cusi nemophan*. (Col)
 " fruit inj^d by *Corimelaena atra* ♀ (Hes)
 " fol. inj^d by *Aritana ministra*. (Lep.)
 " " *Diabrotica vittata* (Haltia) (Col)
 " wood inj^d by *Dicera divorticata (Stenurus)* (Col)
 " " *Syrnastes Nitjus*. (Col)
 " { fol. inj^d by *Graphorhinus vadousus*. (Col)
 { *Epicacrus fallax*. Col
 " fol. inj^d by *Epicacrus imbricatus*. (Col)
 " " *Lophanthoria (Urcia) tentor*. (Lep.)
 " wood inj^d by *Lucanus dama* (Lor) (Col)
 " { fol. flower & fruit inj^d by *J. Macroctylus*
 { *subspinatus* Col
 " { *Junco* ♀ punctured by ♀ *Acanthus niveus* (Orb)
 " { wood inj^d by *Amoderma evemicola* ♀
 { *O. scabra*. (Col)
 " fol. inj^d by *Phyllophaga Lachnosterna fusca* ♀ & other may beetles. (Col)
 " { fol. inj^d by *L. Platysmanca Attacus*.
 { *caerolia* (Lep.)

Cherry fol inj^d by *Polyphylla Macronoxia*.
 { *variososa* (Col).
 " fol. inj^d by *Selenodia cerasi* (Hym)
 " eaten by *L. Selca. Attacus Polypho*
 { *mus* (Lep.)
 " fol. inj^d by *Trichetes Phyllophaga*
 { *tusis* (Col)
 Chestnut *Castanea vesca*.
 " fruit inj^d by *Balaninus nasicus* ♀ (Col)
 " { *Junco* cut off by *Elaphidion melosum*
 " { *Stenocorus fuscator* (Col)
 " { wood inj^d by *Orthostethus Elater*
 " { *infascatus*. (Col)
 " { *Bark* (under) frequented by *Silvanus*
 " { *bidentatus*. (Col)
 " { frequented by *Smilia inornata* (Horn)
 " { *Membracis* Syn
 China aster flowers inj^d by *Epicauta pennsylv*
 { *vanica* ♀ other *Cantharides*. (Col)
 Chunguapin. *Castanea pumila*.
 " fruit inj^d by *Balaninus nasicus*. B.
 " { *rectus* ♀ other nut weevils. (Col)
 " { fol. frequented by *Sclerophora Smilia*
 { *inermis* (Horn)
 Cicada. destroyed by *Anabrus simplex*. (Orth)
Arcium lanceolatum. Trieste.
Citrus aurantium. Orange.
 " *Lemonium*. Lemon
Climatis. *Argemone* lower.
 " fol. inj^d by *Epicauta cinerea*. (Col)
 " { *E. marginata* ♀ (Col)
 Colra galls on roots formed by *Baridius*
 " { *chloris* (Eu) (Col.)
 Cornus Dogwood.
 Clothing inj^d by *Ectobia Blatta germanica*.
 " { & other *Cockroaches*.
 " { inj^d by *Tinea flavifrontella*.
 { *Lep* & other clothes moths.
 Clover *Trifolium*
 " fol. inj^d by *Asopia costalis* (Lep.)
 " { *Pharax sinalis* Syn
 " fol. inj^d by *Colias phaladice* ♀ (Lep.)
 " { fol. inj^d by *Graphorhinus vadousus*.
 " { *Epicacrus fallax*. Col
 " fol. inj^d by *Pyrnarctia Arctia*
 { *isabete*. & other *Arctians*. (Lep.)
 Cotton. *Gossypium herbaceum* ♀
 " { fol. frequented by ants. for the sake
 { of the honey dew. made by plant lice;
 { roots & plant injured by *cut worms*
 " { the caterpillars of *Agrotidae*.? (Lep)
 " { & wire worms Lar of *Elateridae* ♀
 { Flower Aug 28/77

- Commelyna*, *Lary flower*.
 " injured by *Prodenia commelynae* (Lep.)
 Collections of insects &c. injured by *Amelanus*.
 {various &c. (Col.)
 " " injured by *Diormistes maculatus*.
 & almost all the *Termedulidae*. (Col)
 Col of net herb: see also fern, feathers, &c.
 " " " acid plants, &c. injured by *Pteris*.
 {var. &c. (Col.)
 Cork. injured by *Diormistes maculatus*.
 {No. in *Unius* &c. (Col)
 Corn see maize, see also maize.
 " grain injured by *Unacampsis* *Gelechia*
 {*caecilia* (Lep.)
 " (Sweet), or maize injured by *Ips quadricornis*.
 {*sejunctus*. see *Ptyophagus quadrystitatus*.
 (Col.)
 " fol. inj. by *Saturnia io* *Cyprichia varicata*.
 " " " *Lophomyia macroa* (Lep.)
 Cornus, see Dogwood, & *Corylus*, see Filbert, Hard nuts
 Cotton *Gossypium herbaceum*.
 " plant, fol. frequented by ants. (Hym.)
 {*Formica* &c. for the sake of the honey dew
 " roots, & plants injured by Cut worms. Gen
 {of *Agrotidae*.
 " fol. injured by Cotton army worm. c.
 {*Caterpillar* or fly. *Aletia argyllacea*.
 {*Anomis xylozæ* (Lep.)
 " fol. injured, by *L. Urdia*? (Lep.)
 " " " *Pharantimastax* (aff. Lep.)
 " plants injured by *Astacus*. cray. fish.
 " fol. injured by Spanworm. prob. *Bombyx* (Lep.)
 " " " *Caloceros variatus*. (Tob.)
 " Bees frequented by *Carpophylus hemipterus* (Col)
 " " when decayed frequented by *Centurus*
 {*pericillatus*. (Col)
 " flowers frequented by *Chauliognethus*
 {*mercurialis* & *pennsylvanicus*, *edens* present
 {on the pollen. (Col)
 " {Bees when injured frequented by *Colastes*
 {*smeticus*. (Col) feed probably on minute fungi.
 " fol & flowers injured by *Dialiolella* *deco-*
 {*decompunctata*. (Col)
 " flow stained by *Dysdercus*. cutworms.
 {*Pyrethronis*. (or the cotton stainer. (Hem)
 " Flowers &c. injured by *Spicaula striposita* (Lep)
 " fol. injured by Span worm. prob. *Cyrtus*.
 {*cia miorulata* (Lep.)
 " {Bolls when injured frequented by *Euryomyia*
 {*Cotonia* *inda*. (Col) prob for flowering sep.
 " Bolls when injured frequented by *Euryomyia*
 " *Euphorbia melancholica* (Col) prob for sep.

- Cotton fields, frequented by *Euryctia claudia*:
 " {*Argynnis columbina* (Lep.) feeds on
 {white Passion flower.
 " {fol. injured by Grasshoppers *Calopterus*
 {B. (Orth.)
 " {Boll injured by *Heliothis umbrinus*
 {*armigera* (Lep.)
 " {fol &c. injured by *Eupherchæa varia* -
 {*Saturnia io* (Lep.)
 " {fol injured by *Lepidoptera* Ag. Pap. 1853
 {p. 103. pl. 4. fig. 6. (Lep.)
 " fol. injured by *Lophomyia macroa* (Lep.)
 " frequented by *Larva succinella*. (Hem)
 " injured by *Lepidoptera* Ag. Pap. 1853 p. 103. pl. 12
 {fig. 6. (Lep.)
 " flowers frequented by *Notus mordax*.
 {B. (Col.)
 " Stalks injured by punctures of *Orchelimum*
 {*Orth.*
 " fol. injured by a *fontanella*. probably
 {*Euschelus punctifera*. (Hem)
 " {Bolls. injured by L. of *Prodenia comm-*
 {*lynae* (Lep.)
 " flowers & decaying bolls frequented by
 {*Silvanus quadricollis*. &c. Col
 " fol. injured by *Thysidopteryx sphen-*
 {*oraciformis*. *Costus confertum*. (Lep.)
 " (Bolls when injured frequented by *Uroca-*
 {*granella* or *Wolf*. (af.) (Lep.)
 " fol. injured by *Lep. Tortrix*. prob
 {*Lonstæria rosaceana*. (var) (Lep.)
 " fol. injured by *Tortrix*. ? (Lep.)
 " flower frequented by *Trichia della* (Col)
 {probably for nectar. (Lep.)
 Cotton articles, in Reports. for reference
 " Remarks on the cultivation, 1869, p. 30.
 " The Cotton trade. 1852 p. 65.
 " Remarks on the Cotton of India }
 { 1863, 1895. }
 " in the climate of the U.S. 1863. 363.
 " History & culture in *Miss.* 1868. 117.
 " Investigation on Cotton fibres, 1854 p. 151.
 " Insects frequenting the Cotton plants 1853 p. 64.
 " History & results of the culture of Cotton
 {in British India, 1855, p. 226.
 " Accidents & diseases of Cotton plants 1855. 230.
 " {Chemical researches on the seed of the
 {Cotton plant 1855. 236
 " {Cotton districts of the globe considered
 {with reference to their climates. 1855. 247
 J. Flower Aug. 30. 77. 5. 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 of cultivation of Cotton. 1853. p. 371
- " x Cotton in Missouri. 1861. p. 221.
- " { Chronological & statistical history
of Cotton. 1872. p. 406. 41. 42.

Cotton, principal articles in Ag. Reports
referring to insects.

1854. p. 59. Cotton insects (not ment. *Alabama*
{ *Alabama*. *Alabama argyrella*.
1855. p. 71. { Cotton army worm. *Alabama argyrella*.
article.
1856. p. 27. Cotton Stainer. *Lycercus setirostris*
1867. p. 68. Army worm, & grass worm. 79.
1871. p. 83. Remedies. liquid poisons. &c.
1872. p. 116. Localities injured.
1873. p. 163. Short article showing differences
{ between the real Cotton Army
worm, & the grass worm.
1874. p. 128. The Fly as now coming from
{ the south. 4.

- Crab. (apple) fruit & twigs injured by *U. diatras*.
{ *conchiformis*. (Horn)
- Cranberry. *Vaccinium oxycanthus* 8.
- " fol. injured by sp. of *Atractia*. (Lep.)
- " " " *Atractia vaccaeana*. (Lep.)
- " { buds & blossoms injured by *Ostrinia*.
saturalis. (Col.)
- " fruit. injured by L. 1870. Ag. Rep. 486. p. 51.
- " leaf-rollers injured by *Cecidomyia*. (Wlgr.)
- " fol. frequented by *Clastoptera proteus*.
{ *C. capid* (syn.)
- " fol. injured by *Prestiphora cecidivora*.
- " attacked in the W. *Hemiteles*. *White* *White* *White*
- " Wood injured by *Junonia canaliculata* (Horn)
{ *canaliculata*

- Crotalaria. Tuttle box.
- " Seed, in pods destroyed by *Utricularia*
{ *oleacea* *bellii*. (Step)
- Crowfoot. see Buttercup. *Ranunculus*.
- Cruciferae. fol. injured by *Megastictus*.
{ *Strophia histomonella* (Horn)
- " fol. injured by *Megastictus raphanus* (Horn)
- Cucumber. fol. injured by *Diabrotica vittata*
{ (Col.)
- " fol. injured by *Epitrix cucumeris*.
{ *crepidodera pubescens*. (Col.)
- Crepidodera pubescens*. See *Epitrix cucumeris* x
- Cucumber fol. injured by *S. Phaulthorus antiochalis*.
{ (Lep.)
- Cucumis melo. melon.
- " melo pepo. squash.
- " sativa. Cucumber.
- " pepo. Pumpkin.
- Cucurbitae injured by *Anasa* (*Gonocerus*)
{ *tristis* or Squash bug (Horn)
- " fol. injured by *Epilachna borealis* (Co.)
- Current. *Ribes viscidum*.
- " { bones in stems & shoots. *Algonia*. *Inochus*
leum *tephaliformis*. (Lep.)
- " { bark, fol. injured by *Aspilota*.
conchiformis. (Horn)
- " { fol. injured by *Ellopius vebanica*. (Lep.)
Abraham (Lep.)
- " { fol. injured by *Lygus lineatus*. *saxosus*.
quadrimaculatus. (Horn)
- " { fol. injured by *Nematus ventricosus*.
{ Horn (imported insect)
- " { branches. punctured by *Q. Acanthus*.
rupeus. 8. (Col.)
- " { fol. injured by *Prestiphora grossulariae*.
{ Horn. (native insect)
- Cyperus. *Galangale* - a sedge.
- " plant frequented by *Amblyderus*
{ *molitor*. (*Vittigomus*) (Horn)
- Cydonia. *vulgaris* sa. Quince.
- Decomposing vegetable. & unimur. matter.
- " see. *manusc.* *Canadian Lung*. &c.
- Dahlia. stalks bored into by *L. Gonium*
{ *nitela*. (Lep.)
- " fol. injured by *Lygus lineatus*. (Horn)
- " *saxosus* *quadrimaculatus*. (Horn)
- Dentata. fol. injured by *Lygus lineatus*. (Horn)
- D. antiochalis*. *Taraxacum*. *Alnus* *lucida*.
- " { fol. injured by *Diprortica*. (*Atractia*)
usabella. (Lep.)
- Dextria. fol. injured by *Lygus lineatus*. x
{ *Capsus quadrimaculatus* (Horn)

Dogs. blood sucked by *Pulex irritans*. (Wfg)

Yucca.

Logwood Cornus.

" { l. eaten by *Saturnia io*. *Hypochirsis*
vomer (Col)

Diospyros virginiana see Foxsummon

Earth worms. eaten by *Phorus pyraei*.

{ *Elioplamus* (lightening bug) (Col)

Egg plant. *Solanum, ascutum*.

" { fol. injured by *Alomyia* *prosa* *Chrysomelae*
l. junctus. (Col) & *decimlineata*.
(Col)

" { l. injured by *Epicaula caneca* 8; 69

Elm. *Sambucus canadensis*.

" stems bored into by *Desmocorus*.

" { *gallialis*. *cyrenus*. Col
Flowers frequented by *Macrodactylus*.
subspinosus. (Col)

Elm. { foliage injured by *Unisulphura* ..

{ *vernata*. (Col)

Elm. { l. injured by *Ceratomia amplexor*.
quadrinervis or Elm Sphinx. (Lep)

" { l. injured by *Catappa lanigera*
areola. Col.

" { l. destroyed by *Ennomos subsignaria*.
(Lep) head took measuring worm.

" { l. destroyed by *Paleruca calmarensis*.
Taraxacella xanthomelaena. (Lep)

" { l. injured by *Troxilodesa chalybea*
halatica. (Col)

" { l. injured by *Chalothecia crenulata*.
(Phyllophaga). Col

" { l. injured by *Polypantia coctis*
(Tent). (Lep)

" { l. injured by *Polyphylla variolosa*.
Macronoxia. (Col)

" { translucent sap. fed upon by *Lanone*
of *Mycetoliza*. (Lep)

" { l. injured by *Tachnosterna*
Phyllophaga fusca. *hirtula*. *micans*.
9; (Col)

" { Twigs girdled by *Onicides*
cingulatus. or Twig girdler. (Col)

" { l. injured by *Phyllophaga fusca* ..
col. ..

" { " " *Malsamias Attacus*
aceropa (Lep)

" { Twigs 8; in pits. *Synoxylon apote*
basilare. (Col)

" { l. injured by *Delia Attacus*.
polyphemus. (Lep)

Eryngium *campestre*. (Eu)

{ frequented by *Chrysothorus bimaculatus*.
(Eu) (Col)

Eupatorium frequented by *Archamia galata*
Smilia auriculata (Hon)

Excrement of herbaceous animals see also
{ manure. dung. &c

" { frequented. if form food of *Ateuchus*
Egyptiorum. or sacred beetle of the
Egyptians. (Col)

" { fed upon by *Alphodius*. (Col)

" { frequented by *Centlow laevis*. (Col)

" " by *Copris carolinia* (Col);

" " " *Ecobrypes spissoides*. Col

" " " *Chalobrytes*. (Col);

" " " *Phanaeus carnifex* (Lep)

" " " *Scarabaeidae* Col.

" " " *Sphaerulidae* (Col);

Fagopyrum. Buckwheat.

Fagus. Beech

Walters. injured by *Ermodetidae*. see also
{ *lens*. collections. Nat. hist. &c.

" { on twig bored, infested with living
bored lice see *Malsamias*. (Orth)

" { destroyed by *Tinea flaviventella* &
Lep

Filbert. see *Corylus*. Hazelnut. &c.

Field (crops) injured by *Coleophorus pomor*
rubrum. *C. spinellus* & many or less
{ by almost all grasshoppers. (Orth)

Fig *Ficus carica*.

Fig Indian. in Asia fed upon by *Coccus lacca*
or *lac insect*. (Hon)

Fig. Fruit injured by *Allophona nitida*
{ *costalis*. Col.

" { fruit & sap. fed upon by *Eurygomyza*
Cetonia unda. (Col)

" { fruit & fol. injured by *Pemphila*
microptera or *lubber grasshopper* (Orth)

" { fertilized in Eu by *Cynips piceus*. or
the fig wasp. (Hfm)

Fir. *Abies*.

" { fine larvae or grubs in wood of fir
are said to be destroyed by *Phanoxenus*
formicarius. (Col)

Flowers roots injured by *L. T. pupa* *Abacac* (Eu) by

" As flowers in general are frequented by
all kinds of insects merely for the sake
of the pollen & nectar upon which they feed.
& do no injury to the plant itself, but on
the contrary are frequently benefited
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. G. Jones Sep. 1-77

x *Faba*, horse bean.

Flesh, frequented. Fed upon by: *Musca*
Lacidea Casor. *Caliphora vomitoria.*
Sarcophaga carnaria. & (*Dips.*)
 Fleck. flies see *Lacidea*. Caty. there. *Sarcophagidae*.
Flics namith parasitic insects. *Melob. angulicost.*
 ♀ in body. (Col)
 Flour, injured by *Pinnus fur.* (Col)
 " " " *Enobionidae.*
 " when moist injured by *Tenebris Tenebrion*
 = *molitor.* & when dry by *L. obscurus*
 (Col)

Flour, see also bran, meal, wheat, &c
 Forest trees, fol. injured by *Phyllophaga*.
Laciniatorna fusca. &c & all the way
 on June bags. &c (Col).
 " " fol. injured, by *Cryptophylles con-*
cavus. & all the *Kalyptid.* (Orth)
 " " fol. injured, by *Oxygia leucostigma* (Des.)
 " " " *Polyphyla.* *Macromoxia.*
variolosa. (Col)

Forest trees, this being such an indefinite
 term, only such are ment'd in this
 list as are especially named in
 the text, as *Ash.* *Oak.* &c

Fruits, (ripe) injured, by *Allothena* (*Colicid*)
nitida (Col)
 " injured, by *Eurygaster* (*Col*) *Tortricae.*
auricularia. (Orth)
 " boxed into by *Tortrix nitida.* &
lepis.
 " injured on ground, by *Telidae.*
Myreapha.
 " injured by some *Orthaleidae.* (*Dips*)

Fruit trees, Fruit, injured in Europe, by —
Phyllobius, argentatus. L. pyr. & Col
 " " fruit injured, by *Polyborus.*
sericeus. (France) (Col)

Fruit trees, {fol. injured by *Catapha lanigera.*
Arceuth.
 " {flowers, frequented, by *Hoplia*
delicia
 " {fol. & injured, by *Oxygia leucostigma*}
 " " " *Phyllophaga fusca.* & ♀.
 " & most of the way & June beetles (Col)
 " injured by *Phymatodes, albionise.*
 " & *P. conicus.* (Eu. Col)
 " {fol. injured by *Leptocoma.* (*Tortrix*)
rosarana. (Lep.)

Fruit trees, This being such an indefinite
 term, only such as are particularly
 mentioned in the list are quoted.

x *Formica*, ant.

x *Fragaria*, Strawberry.
Fungi, fed upon by *Uredus americanus* (Hbst)
 " " " *Bolothrus cornutus* (Col.)
 " in cotton balls, fed upon by *Carpophilus*
hemipterus. (Col) & *Colastes semitectus.*
 (Col)
 " Puff balls frequented by *Conocara.*
oculata. (Col)
 " frequented, by *Colydiidae.*
 " " " *Cryptorhagidae.*
 " " " *Ferdonidae.*
 " " " *Endecatomus rugosus* (Col)
 " under bark: *Gastriidae.* (Col)
 " eaten by *Mycetobia.*
 " eaten by *Pella secretis.* *sermion*
ensis. (Col)
 " eaten by *Pedara villosa.* (Orth)
 " " *L. Suavia.* (Lep. *Thomae*) (Dip)
 " frequented, by *Staphylinidae.* (Col)
Tenebrionidae. (Col)
Fungi, injured by *Pinnus fur.* & see also
 {coll. nat. & History, *Fathers.* & Col
 " injured by *Tinea flumifrontella.* & *lep*

Galingale. sedge, see *Cyperes.*
Gaylussacia Whortle or Hackleberry.
 Garden crops, injured by grass hoppers.
Caloptenus, femur rubrum. L. *Smelus* &
 other grass hoppers in general. (Orth)
Singer, Kingeber officinale.
 " {briar roots eaten by *Ptilopus Anolum*
harvici. (Col)

Golden Rod, *Solidago*.
 " flowers, frequented by *Alydes curvius.*
 (Hbst)
 " flowers, frequented by *Epicaute*
 " *curvica.* *Epenyloana.* & other
 " *Chloris* flies. (*Cantharidae*) (Col)
 " flowers, frequented, by (*Emphidius*) *Eurygaster*
via unda (Col)
 " {flowers frequented by *Macrobasis*
canica *Fabricii.* & other *Cantharidae*
 (Col)

Gooseberry *Ribes, grossularia.*
 " fruit, injured by *Cocclomyia, grossu-*
larica. (Lep)
 " fol. injured, by *Elaphis Abraxas*
grossulariae. (Lep)
 " fol. injured by *Enaphonivus, vadous.*
Epicaerus, altax. (Col)



- Gooseberry. fol. injured by *Pematus*.
- { *venosus*, " imported currant worm" (Hom.)
- frequented by *Pachylotera ornata*.
- { *annosa*. (Hom.)
- injured by *Polydorus flammoneus* (Eu)
- { Europe
- fol. injured by *Pristiphora quercivora*
- { native Saw fly (Hom.)
- x *Glycyrrhiza glabra* see *Lycium*
- x *Gossypium herbaceum* Cotton
- Grafts injured by *Polydorus sericeus* (Eu) (Col)
- Trunk in general. Wheat (Wheat) (Wheat) (Wheat)
- " roots & injured by *Agrotis sepium* (Eu)
- { (Lep.) & many other cut worms (Lep.)
- " said to be injured by *Amure* &
- { (Eu) (Col.)
- " injured by *Blacus macropus*
- { *leucopictus*. (Holt) (Chinch bug)
- " injured by *Calandra* (*Sitophilus*
- { *granarius*) nemote punctata. (Col)
- " injured by *Calandra oxyzae*.
- { (*Sitophilus*) (Col)
- " injured in Europe, by some *Cerab.*
- { *Edae*. (Holt)
- (Wheat) (Wheat) & injured by
- { *Chionops* (Lep.)
- " injured by *Cicuzes testaceus* (Col)
- " " " *Nidivosa cadomyia*
- { native "Wheat midge" (Lep.)
- when young injured by *Foraxys*
- { *Foraxys* (Lep.)
- " injured by *Blachia cerealis*.
- { *Blachia* (Lep.)
- " & shoots injured by *Homoptera* (Col)
- " fol & grafts injured by *Conura*
- { *extranea*. "unpuncta". Western
- { army worm (Lep.)
- frequented by *Mormonia ovalis*.
- { (Eu) (Col)
- " injured by *Cecis* (Lep.)
- " " in Eu by some *Pleostichini* (Col)
- " said to be injured by *Stenus* (Col)
- " plant injured by *Prodenia autumn*
- { *nalis*, *luteolus* army worm (Lep.)
- " injured by *Selenis leucanemata*.
- { (Col)
- " injured by *Stenopora parvica* (Col)
- { *Amelur*. (Col)
- " injured by *Conobrytes mauritan*
- { *ica* *Trogosita caraboides* (Col)
- " injured by *Cinea granella*.
- { grain moth, or weevil. (Lep)

- Grain Roots injured by *Diptera olivacea*.
- { Eu crane fly. (Lep.)
- " injured by *Trogosita caraboides*.
- { *conobrytes mauritanica*. (Col)
- injured by *Trogosita dubia* ?
- { see *Trichometes* *tabula*. (Col)
- injured by *Uromia*. (Col)
- { Roots shoots & said to be injured
- { by *Labrus gibbus* (Col) (Eu)
- Grape: *Vitis*.
- " fol injured by *Acolithus americana*
- { *nais*. *Pracis* (Lep.)
- fol inj'd by *Acolithus falsarius*. (Lep)
- { *Pracis*
- root stem wood, & injured, by
- { *Allycea Trochilum helictiformis*
- { (Lep)
- " fol. injured by *Allycia octo mac*
- { *ulata*. (Lep.) *Pracis* (Lep.)
- found in larva by *Amphiceros*
- { *Pracis* *Pracis* *Pracis* (Col)
- fol inj'd by *Amure* & in various
- { (Lep.) (Col)
- fol & shoots injured by *Cyrtus rufus* (Hom)
- " " " *Aphrophora & notata* (Hom)
- { *Amelur* (Lep.) *Pracis* (Lep.)
- " Jugs injured by *Cinea babala*.
- { *Buffalo Tree hopper*. (Hom)
- " Jugs injured by *Cinea discolor* (Hom)
- " when injured frequented by
- { *Cecis* *Pracis* *Pracis* (Col) & *Pracis*
- { fol injured by *Colaspis strigosa* (Col)
- { (Eu) (Lep.)
- fruit injured by *Conimelasma*.
- { *Conimelasma* (Lep.) (Holt)
- " fol injured by *Desmia maculata* (Lep)
- { (Lep.)
- " fol injured by *Cyrtus rufus*.
- { *Pracis* - *Pracis* *Pracis*. (Hom.)
- " fol injured by *Fidra murina* (Lep.)
- " " " by *Conura* *Pracis* &
- " " " by the leaf gall leaf.
- { *Pracis* *Pracis* *Pracis* (Lep.)
- " fol injured by *Diptera chryso* (Col)
- " " " *Lygus lineolaris*.
- { *Carsus obscurus*. (Holt)
- " flower part found injured by *Macro*
- { *Pracis* *Pracis* (Col)
- " frequented by *Pracis* *Pracis* (Col)
- { *Pracis* *Pracis* *Pracis* (Col)
- " injured by other insects.

Grape fol & ² injured by *Neraxa hilans*
 { *Rhaphigaster pennsylvanicus* (Hb.)
 " " injured by *Myndus ruficornis* (Hb.)
 " { branches, pubescent by *Acronictus*
 { *versicolor* (Calk)
 " { frequented by *Oticercus cygnobolus* (Hom)
 " { fruit bunches, *Aph.* injured by *Blattella*
 { *punctata* (Col)
 " { fol injured by *Grapic* leg. gall leaf.
 { *Tomkinsii* (*Dactylophaga*) *virginica* Hom
 " { seed & fruit injured by *Pentonia vir-*
 { *virana* *Loebelia botanica* (Lep.)
 " { roots injured by *Joly* *Coxia*
 { *vasutaria* (Hom) (*vitata* prob same Hom)
 " { wood & roots, injured by *Dinurus*
 { *imbriicornis* (Col) & *P. laticollis* (Col)
 " frequented by *Proconia undata* (Hom)
 " fol injured, & rolled up by *Rhyachi-*
 { *leis vitata* (Col)
 " { fol, injured by Grape Saw Fly
 { *Selandria, vitis* (Korn)
 " injured fruit, frequented by *Skeletona*
 { *geminata* (Col)
 " frequented by *Stictoplera Smilia*
 { *inermis* (Hom)
 " { when unhealthily frequented by *Sinox-*
 { *ylon, seridentatum* (Col) (Eur-As)
 " frequented by *Delamona ampelopsidis*
 { (Hom)-
 " { injured by *Emythoneura* *Setigoria*
 { *verrucosella* called *Shuis* (Hom)
 " { branches, injured by *Xyloperthes*
 { *sinuata* (Col) (Eu)
 x Ground Cherry, *Physalis viscosa*
 " { fol, injured by *Chrysomela* *10 lineata*
 { *Alomyphora* (Col)
 Graminae Grasses
 " { roots, injured by *Agriotes vlesus* &
 { *Ammochus* *US setiger* & *truncatus* (L) (Col)
 " { frequented by *Amphiscepa* (Flata)
 { *lineolata* (Hom)
 " eaten by *Amabrus* (L.P.S) *simplex* (Orth)
 " (prob seed injured by *Unicumptis*
 { *Bitalis albicincta* *Cerebellata* *Unguicoma*
 { *muta* (Lep)
 " Swamp) frequented by *Onychia* (Col)
 " injured by *Culepterus femur rubrom.*
 { *Spineta* (L) & all grasshoppers. (Calk)
 " seed injured by *Diphosis* *Acadomyia*
 { *tristice* (Wheat subs. (Lep)
 " { destroyed by *Gryllotalpa borealis*..
 { & all mol. crickets. (Orth)

Grass, seeds & roots, injured by *Homophididae* (Col)
 " roots, fed upon by *Holotrichia ornulata* (L)
 " " " by *Diplophaga fusca* (L)
 " { all the may beetles. (Col) *Lachnostera*
 " { fol injured by *Laphrygma*.
 { *macra*, or *fragrans* (Lep)
 " { inf. by *Leucania unipuncta* *virana*.
 { (Lep)
 " injured by *Macroctaphus subsericeus*.
 " " *Blissus* *Microtus leucosternus*.
 { (Lep)
 " eaten by *Leptocarpus varicornis* (Calk)
 " { *Orchelimum usque* (Calk)
 " frequented by *Poculoptera* (*Ormeris*
 { *microsa* (Flata, Eyn) (Hom)
 " injured by *Prodenia autumnalis* (Lep)
 " roots injured by *L. Sjula olivacea* (Lep)
 " injured by *Xyphidum fasciatum*.
 { *Orchelimum gracile* (Calk)
 Gum sawch. *Liquid amber* *Styraciflua*.
 " { for eaten by *Eacles* *Hyocampa*
 { *impenalis* (Lep)
 " { roots, & wood prob injured by
 { *Diploxyctes Satyrus* (Col)
 Hair of many animals & eaten by
 { Mallophaga or biting louse
 Hay, said to be injured by *Uthrophora*
 { *quadrangularis* (Hom)
 Huckle, *Corylus*. — Hawthorn *Crataegus*
 " { fruit injured by *L. Balanus rectus* &
 { *nasices* (L) *nat univis* (Col)
 " { wood injured by *Ptilinus pecten*
 { *vicinus* (Col)
 " { fol, injured by *Dichomyza* *Sus*
 { *vitata* (Col) (L)
 " fol, injured by *Trachys minutus* (Col)
 " " inf. by *Polyporus micans* (Eu) (Col)
 Homlock, *Abies canadensis*.
 " { leading shoot & injured by *Pissodes*
 { *strobil* (Col)
 " fol injured by *Chrysobothris*.
 " { *hemorrhaginis* *lecticus coniferum*
 { (Lep)
 Hemp, seed see seed.
 Hemp, *Cannabis sativa*.
 " injured by *Laemophloeus modestus*
 { (Col)
 Hens, injured by Hen lice. —
 Herbaceous plants injured by *Agriotes*.
 { *manchus* (Col) *U. satius* (injure
 { roots) (Col)
 " roots injured by *Agriotes setiger*.
 { & *truncatus* (L) (Col) (Shoen 187) *col 4*

Hickory. *Carya alba* &c.
 " { Trunks bored into by *Amplicerus*.
 " { *braudatus*, *Bostrychus*. (Col.)
 " { Wood bored into by *Chion cinctus*.
 " { *C. gargaranicum*, *Hickory boxer*, (Col.)
 " { *Teth. in^a* by *Bostrychus asporicollis*.
 " { *Arae* (Col.)
 " { *Tol. in^a* by *Catalpa lanigera*.
 " { *Arae* (Col.)
 " { *Tol. in^a* by *Lachnus caryae* (Hom.)
 " { Wood in^a by *Scirca divocata*
 " { *Scirurus* (Col.)
 " { Wood in^a by *Dysphaga tenuipes*.
 " { (Col.)
 " { Twigs cut off by *Elaphidion*
 " { *villosum*. *Senecorus putator*, or
 " { *Cakt pruner.* (Col.)
 " { *Tol. in^a* by *Nexama hilaris*.
 " { *Phaphigaster pennsylvanicus* (Hort.)
 " { frequented by *Oliocerus Woyotti*.
 " { (Hom.)
 " { Twigs in^a by *Orcideres cingulatus*.
 " { (Col.)
 " { Bark & wood injured by *Scolytus*
 " { *quadripinosus*. *caryae* (Col.)
 " { *Tol* frequented by *Smilca rana* (Hom.)
 " { wood injured by *Syraxylon*
 " { *Arae*. *Sanilare* (Col.)
 * Hawthorn. *Crataegus oxycantha*.
 Hoops of Animals when in storage
 { injured by *Dermeates lardarius*,
 { &c. (Col.)
 Honey Comb. &c. injured by *Galleria*
 { *cereana* (Lep.)
 Honey dew fed upon by *Aphis* (Hom.)
 { *Lucanus* (Col.) *Dipetra* &c.
 Hoops. (*Homulus*) injured by *Aphides* (Hom.)
 Hoop trees. (*Ptelea*) *Tol.* frequented by
 { *Enchenopa bidantata*. (Hom.)
 Hordeum (*Barley*).
 Horns. - { in storage) injured by
 { *Dermeates lardarius*. &c. (Col.)
 Horses { annoyed & blood sucked by
 " { ear fly of the west *Chrysops*
 " { *vittatus*. *Stomoxys calcitrans*
 " { *Tabanus atratus* &c. &c. (Dip.)
 " { tormented by *Hippobosca*.
 " { *equina* (Dip.)
 " { injured by stomach bots.
 " { *Gasterophilus equina* (Dip.)
 " { (Europe) injured by *Simulium*
 " { *Columbianense*. (Dip.)

Horse-nettle. *Solanum carolinense*.
 " { Juice eaten by *Chrysomela*.
 " { *Doryphora*, 10 lineata, & *Chrysom*
 " { *ela*. *Doryphora juncta*. (Col.)
 Huckleberry. see whortleberry.
 Ilex. . . fed upon by *Coccus ilicis* (Hom.)
 Indigo wild (*Baptisia tinctoria*) fed
 { upon by *Macrosclaelus subspinos*.
 { *Sus*. (Col.)
 Insects in museums. destroyed by Anthre
 { *mus*. - *Dermeates* &c. &c.
 Jamestown weed. (*Datura*) eaten by.
 { *Chrysomela Doryphora* 10 lineata.
 { &c. (Col.)
 Jernegian, or Sugar hemf. (abroad) injured
 { by *Maax*? *Cochel*? & *Rus* *Col.* &c.
 Juice. (*Coregia*) *Tol.* eaten by *Bombyx*.
 { *mylitta*. (Lep.)
 Juniperus. *virginianus*. Fed cedar.
 Knot weed. see *Polygonum*.
 Larch (*Larix*) *Tol* injured by *Thyridopteryx*
 { *septemriformis*. *Corticis con*.
 { *ferum* (Lep.)
 " { *Tol. in^a* by *Tortise larvæ*. or
 " { *Larch theater*. (Lep.)
 Larix americana. *Tamarack*. *Am.* or
 { black Larch.
 Lead. bored into & injured by *Chion cinctus*.
 { (Col.)
 " bored into & injured by *L. Hyalotropes*
 { *varulus*. (Col.)
 Leather. injured by *Ectobia* (*Blatta*). *Ger*
 { *manica*. & other cockroaches.
 { *Crickets* &c. (Orth.)
 Lemon. *Citrus limonum*.
 " { *Tol.* limbs &c. injured by *Aspidictus*
 " { *atricola*. - *A. Gloverii*. &c. (Hom.)
 " { injured by *Sacarium* (*Coccus*)
 " { *hesperidium*. (Hom.)
 Lettuce. (*Lactuca*) leaves injured by *Nyctis*
 { *traphanus*. (Hort.)
 Lilac (*Syringa vulgaris*) *Tol.* &c. injured by
 { *Aspidictus conchiforthis*, *var.*
 { *laude*. (Hom.)
 " { *Tol* eaten by *Callosamia promethæa*
 " { (Lep.)
 " { *Tol* eaten by *Cantharis vesicatoria*
 " { *European blister fly* (Col.)
 Ligustrum vulgare. *fruits*, or *prun*. . . x
 Leucanthemum vulgare. (*Ox eye daisy*). . . x
 Linden. or *Basswood*. (*Tilia*)
 Swood injured by *Saperda vestita*.
 { (Col.)

Linden. {*Col. inj.* by *Ceratonia asmyrta*.
quadricornis (Lep.)
 " {*Col. injured* by *Ennomos sub-*
signaria (Lep.)
 " {*Col. injured* by *Hydropteryx*
ephemerae Formis. *Aetideus*.
coniferum (Lep.)
Liquid amber *Styraciflua*. Sweet gum.
Piqueria (Glycerhina).
 {frequented by *Acarus telorum*
Liriodendron tulipifera. Tulip tree &
Locust. *Robinia pseudacacia*. 7^o & 8^o.
 " {*Col. inj.* by *Agrius egenus*. (Col)
 " " " *Cecidomyia robiniae* (Lep.)
 " " " " *pseudacacia*.
 " {frequented by *Enchenopa li-*
notata. (Hom.)
 " {Wood injured by *Cyrtus robin-*
vae. *Cyrtus pictus* 7^o (Col)
 " {Sap. fed upon by *Euryomia*.
inda. (Col)
 " {frequented by *Thelia bimaculata*
 (Hom.)
 " {*Col. injured* by *Macroctylus*
subspinosus. (Col.)
Lupine *Lupinus* form food of *Uthedia*
bella. (Dejean) (Lep.)
Lycopersicum esculentum. (Tomato)
Mario. Indian corn. *Tea may*.
 x " {*Col. inj.* by *Blissus*. *Micropus*.
Encopertus. *Chunche bug*. (Het)
 " {seed inj^d by *Amacandus*
cerealella. (Lep.)
 x *Maclura aurantiaca*. *Osage orange*.
 {or *Bois d'arc*.
Maire. {injured (grain) *Calambra*.
Silochilus *nematopunctata*.
granarius. & *C. oryzae*. (Col)
 " {injured (grain) frequented by
Colastes semibetis. (Col)
 " {Sap. eaten by *Euryomyia unda*.
 (Col)
 " {Grain injured by *Fucchiis*.
cerealella (Lep.)
 " {Stalk bored into by *Portynna*.
nitela (Lep.) (*Spinilla* worm)
 " {in ear, injured by *Halothia*
armigera. (Lep.)
 " {*Col. inj.* by *Macroctylus*
subspinosus. (Col)
 " {Roots & stalk injured by *L.*
Proxus emblicornis 7^o (Col)

Maire. {*Ear &c* injured by *rodentia*
commelinae. (Lep.)
 " {*Col. inj.* by *Pimarchia*
isabella. (Lep.)
 " {*Col. inj.* by *Saturnia io*
Hyperichia varia. (Lep.)
 " {Stalk & pierced by *Sphenophorus*
camosus & others. (Col)
 " {Stalk injured by " *Bell bug*" resembling
Sphenophorus camosus. (Col)
 " {blade or leaf pierced by *Sphen-*
ophorus *reze*.
 " {grain injured by *Tenebriones*
debea & most of the *Tenebriones*
 (Col.)
 " {Stalk when decaying (interior)
 frequented & eaten by *Sermes*
flavipes. (New)
 " {grain injured by *Simia granella*.
 (Lep.) (Wolf)
Mankind. blood, sucked by *Acanthis*
lectularia or *bed bug*. (Het)
 " {Stch. on mankind produced by
Ucarnus scabei
 " {blood sucked by *Conorhinus*
sanguisuga variegatus. (Het)
 " {eggs of *Conira femorata* &
 used as food by mankind. in
 Mexico & Het.
 " {Blood, sucked by *Culex ciliatus*.
 7^o (Dip) & other mosquitoes.
 " {Dust, loose, infests mankind.
Pediculus pulis. (Hom.)
 " {Head loose, infests mankind.
Pediculus humanus capitis. (Het)
 " {Clashes loose, infests mankind
Pediculus vestimenti. (Het)
 " {blood sucked by *Pulex irritans*
 or the *flea*. (Dip)
 " {Flesh burrow into, by *Sarcophylla*
penetrans.. or *Chyge*. (Dip.)
 " {blood sucked by *Simulium*
modicum. *bridge* or *sand fly*. (Dip)
 " {blood sucked by *Stomoxys*
calcitrans. (Dip) 7^o
 " {Blood sucked by *Tabanus atratus*.
 & other horse flies. (Dip)
 " {stung, or pierced by *Stingis*
arclatus. 7^o (Het)
 " . see also *Excrementis* 7^o.
Mensur.
 " {eaten by *L. Phanaeus convexus*.
 (Col.)
 J. G. Haver
 J. 9 Novor 15 Oct. 1877.

Manure, food of *Centmores splendidus*.
 { *Copris carolinensis* & *Aphrodisius* &c.
 & all the so called dung beetles, Col.

Maple, (acer) sap eaten by *Althornia*.
 nitida. (Calicut) (Col)

Maple, (silver) fol. injured by *L. Anisota*.
 { *(Lycocampa)* *nalbunda*. (Lep.)

Maple, wood, injured by *Cerys bathra* (Col)
 { *gubernatrix* bark, frequented by
Dendroica canadensis. (Col)

" buds & twigs, injured by *Thy.*
 { *cerus curculionoides*. (Col)

" branches & twigs frequented by
 { Maple scale, *Lecanum aceris* (Hom.)

" injured by *Macronoxia vari-*
 { *cosa*. (Col) *Polypheilla*

" fol. injured by *Phyllophaga*.
 { *lucida* & other map beetles. (Col)

" fol. injured by *Thyridopteryx*
 { *ephemeraeformis*. (Lep.) (Lep.)

" wood, injured by *Ptilinus*.
 { *pectinicornis*. (Col)

May apple, *Podophyllum peltatum*.

May pop. *Passiflora*.
 fol. inj by *L. Agraulis vanillae* &
 { *Eurystrota claudia* (Lep.)

" " " " " " "

Meal, injured by *Plinus*, var (Col)
 " " *Thelotrema molitor*.
 { *I. obscurus*, & most of the *Tenebris*
 (Col)

Meat, injured by *Calliphore vomitoria*.
 { *Lucilia caesar*, *Sarcophaga*, &
 { most of the blow flies. (Lep.)

" when dried injured by *Cory-*
 { *netes molassus* *Dermestes*
 { *Cardarius* & c. (Col)

Melon (*Cucurbita mel*) fol. &c injured.
 { by *Diabrotica vittata*. (Col)

" injured by *Phaenocarpa nitidula*.
 { Col.

" fol. & fruit injured by *Promelia*.
 { *microptera*. (Col)

Month. mint. - *M. viridis* spec mont.

Magnonella (*Proscia*) fol &c injured by
 { *Pteris rapae*. (Lep)

Milk, or Silke Weed. *Asclepias*.
 " fol eaten by *Euchuetes egi*. (Lep.)
 { flower frequented by *Chrysocelus*.
 { (*Eumolpus*) *auratus*. (Col)

Mint - *mentha*
 " fol. injured by *Ligys linealis* (Hetz)

Monarda, Bergamot.
 Mountain Ash *Pyrus Sorbus americana*.
Morus mulicaulis & Mulberry.
 Muller. (*verbascum*) frequented by *Eus-*
 { *chistus punctipes*. (Hetz) (*Pentatoma*)

Mulberry, fol. eaten by *Bombyx Scriaria*.
 { *morii*, or the silke worm. (Lep.)
 { Wood injured by *Dorchascema*
 { *Willii*. (Col)

Mules, injured by stomach bot. *Paster-*
 { *gulus equi*, & other insects, injuring
 { horses. (Dip)

Muscums, nat hist. injured by *Dermestes*
 { *anthrenus*, &c &c. (Col)

Mustard (*Sinapis*) injured by *Nepus*
 { *vaphanus*. (Hetz)

" fol injured by *Murgantia*.
 { (*Strobilua*) *hispidiorhina*. (Hetz)

" fol injured by *Pteris olivacea* (Lep.)
 " " " " " *rapae*. "
 " " " " " *protidice* "

Nasturtium, *Tropaeolum*.
 " fol & injured by *Pteris rapae*. (Lep.)

Nat. hist sp. injured by *Dermestes*, *Anthrenus*
 { *Plinus*, *Sitotroga*, &c &c. (Col)

Nectarine, *Sensia vulgaris* (var lauis)
 { fruit injured by *Coactrachelus*
 { *manipulus*, & insects injuring the
 { peach. (Col)

" roots & bark injured by *Agge-*
 { *ris exilis*, & other insects
 { injuring the peach. (Lep)

Negundo, fol. inj^d by *Thyridopteryx eph-*
 { *emeraeformis*. (Lep)

Nicotiana, tabacum, Tobacco.
 Nuts, see Hazle, Filbert &c.
 " fruit injured by *Balaninus*
 { *nasicus*, &c &c. (Col)

Oak, *Quercus*.
 " fol. inj^d by *L. Anisota senatoria* (Lep.)
 " " " *L. Anisota* (Europe) Col.
 " Wood, injured by *Alaus myops*, &
 { *A. scutellatus* (shagbark bug) (Col)

" fol. inj by *Anthracas* (*Bombyx*).
 { *perthys*. (Lep.) (Forays)

" fol eaten by *Anthracas Yoma mai*
 { (Foreign) (Lep)

" fol eaten by *Callosamia prometha*.
 { (Lep) &c

" frequented by *Comptosia*
 { *viridipennis*. (Hetz)

Oak.

- Oak. {wood when rotten. frequented. by *Amorpha calcarata*. (Col)
- " {Wood injured by *Chrysobothris Emorovi*. (Col)
- " {Evergreen of Europe frequented by *Coccus ilicis*. (Hom)
- Oak. {frequented by *Catalla cerambei*. (Col)
- " {fol. inj. by *Citralia lanigerata* (Col)
- " Balls {Europe, formed by *Cynus Lullosis gariae lintonis*. (Urbiso galls) (Hom)
- " " {formed by *Cynid* sp. (Hom)
- Oak. {fol. inj. by *Ecdes imperialis* (Lep) & *Bryocampa* (Lep)
- " {Twigs cut off by *Ephedion villosum*. (Col)
- " {stumps frequented by *Sorex*. (Col)
- " {bank, frequented by *Collops means*. (Col)
- " {frequented by *Hoplophora quad-* *resvitata*. (Holt)
- " {Wood, injured by *H. locostus*. *americanus*. (Col)
- " {wood, inj. by *Hylotrates bayles* (Col)
- " {buds & twigs inj. by *Phycerus carculionoides*. (Col)
- " {inj. by *Lachnes coryae*. (Hom)
- " {leaves (dead) frequented by *Lagrea hirta* (Col)
- " {Wood injured by *L. Susanus*. *dama*. (Col)
- " {wood, injured by *L. Lynceylon*. *Sericeum*. (Col)
- " {fol. injured by *Maurodactylus substriatus*. (Col)
- " {injured by *Maconoxia variolosa*. (Col) *Schizophila*.
- " {rotten stumps. frequented by *Melambrya umbrina*. (Col)
- " {wood. frequented by *Melanotus communis*. (Col)
- " {wood, injured by *Omoderma scabra*. (Col)
- " {frequented by *Otocerus aequi-* *bertii*. (Hom)
- " {fol. injured by *Phyllophaga fusca*. *quercina* & sp. (Col)
- " {wood injured by *Platycerus quercus*. (Col)
- " {fol. inj. by *Podisus cynicus* (Holt)
- " {in rotten wood. *Pionus cyphon discoides*. (Col)

- Oak wood injured by *Pionus laticollis*. (Col)
- " {bank. *pseudoclerus ichneumonius*. (Col)
- " {wood inj. by *Plinius pectori-* *cornis*. (Col)
- " {prob. food of *Ptilodactyla clator-* *ma*. (Col)
- " {under bark of wood. *Pyrochroa coccinea*. (Eu) (Col)
- " {frequented by *Smilia inornata* (Hom)
- " " " " *var.* "
- " " " " *Stictoptera inermis*. (Hom)
- " {in Stumps. *Synchroa punctata* (Col)
- " {fol. eaten by *Tela Pappiphenus* (Lep)
- " {Red Oak. under bark. *Thanasimus ichneumonius*. (Col)
- " {Wood inj. by *Throscidae*. (Eu) (Col)
- " { " frequented by *Tillus umbellus* (Eu) (Col)

Oats. Avena.

- " {fol. & injured by *Aphis avenae*. (Hom)
- " {fol. inj. by *Blechnus (Microfus) leucopitoni*. (Chuck bug) (Holt)
- " {fol. & injured by *Prodenia autumnalis* (Lep)
- " {seed injured by *Silvanus sinuatus*. (Col)
- " {roots. injured by Cut worms. *L. of Agrotis*. (Lep)
- Ononis. *Album. coha*.
- " {roots injured by *Agrotis*. cut worms. (Lep)
- " {root & plant inj. by *Anthomyia caparum*. (Dip)
- " {root & plant. inj. by *Oralis flexa* (Dip)
- Ononis, *arvensis*. Root. Charrow.

Orange. Citrus aurantium.

- Orange. {fol. & twigs & injured by *Aspidiotus citricola*. (Hom)
- " {Bank. twig fol. & injured by *Aspidiotus glaucis*. (Hom)
- " {Bank. & fol. injured by *Lecanium hasperidum*. (Hom)
- " {fol. inj. by *Microconotum retic-* *ornis*. (Ort)
- " {fol. inj. by *Phylloptera oblongifol-* *ica* sp. (Ort)
- " {fol. inj. by *Pagulus ocrephontes*. (Holt) (Lep)
- " {trunk & limbs frequented by *Procus venosus*. (New)

J. Flower, Oct. 1877.

Pear. . . {twigs & small branches injured by *Psylla pyri*. (Hom)
 " . . . {buds & injured by *Rhopalos. lateralis*. (Hct).
 " . . . {bank wood, injured by *Scolytus pyri*. (Col)
 " . . . {fol. inj^d by *Scandonia cerasi*. (Hym)
 " . . . {fol. inj^d by *Sorica imicolor*. (Col)
 " . . . {young fruit injured by *Sciara pyri*. (Lph)
 " . . . {fol. inj^d by *Diophloeum pyri*. (a mite)
 " . . . {fruit, when ripe, inj^d by *vespa*. (Wasp.. (Hym)) & Hornet.
 Persica. vulgaria. Peach.
 Persimmon. or date plum. *Diospyros virginiana*.
 " . . . {fol. injured by *Hyphantria testab*. (Weaver) (Lep.)
 " . . . {twigs, girdled by *Oncideres cingulatus*. (Col)
 Peltay. injured by *Pinus* f. *Dormes* *vidua*. (Col)
 Phlox. injured by *Heliothis phloxiphaga*. (Lep.)
 Phaseolus. Fava. Beans
 Pigeons. girdled by Red Bugs *Acanthia lactularis*. (Hct)
 Pine. Pinus. wood. inj^d by *Alaus oculatus*. & *myops*. (Col)
 Pine. white (& gray) frequented by *Aphrophora* *4 notata*. (Spittle insect!) (Hom) & *A. parvella*. (Hom)
 Pine. {fol. injured by *L. anomala*. (Luccida. Col. & *A. pinicola* (Col)
 Pine. {wood & bank inj^d by *Autonum parallelopipedum*. (Col)
 " . . . {leaves & inj^d by *Aspidiotis pinifolia*. (Hom)
 " . . . {twigs & injured by a white scale. *Aspidiotis. n. nidens*. (Hom)
 " . . . {fol. injured by *Lophyrus. albicollis*. (Hym)
 " . . . {wood & fol. injured by *Buprestis. lineata*. (Col)
 " . . . {wood, inj^d by *Chalcophora whitei*. & *C. virginiana*. (Col)
 " . . . {wood injured by *Chrysobothris harrisii*. (Col)
 " . . . {wood injured by *Corticus Hesperobius parallelus*. (Col)
 " . . . {frequented by *Delphax tricarmata*. (Hom)

Pine. Wood bark & injured by *Dendroctonus. cylindrus* *tevelrans*. (Col)
 " (Pitch) wood inj^d by *Dianca punctulata* (Col)
 " (White) fol. inj^d by *Dichelonycha albicollis*. (Col)
 Pine. fol. inj^d by *L. Eccles. imperialis*. (Lep)
 " (Pitch) wood inj^d by *Popillius pales*. (Col)
 Pine. wood. " *Popillius picivorus*. "
 " " " *Hydropus bayalis*. "
 " White frequented by *Lachnus. strobi*. (Hom)
 Pine. wood inj^d by *Lophyrus albicollis*. (Hym)
 " (Austrian & Scotch) injured by *Lophyrus lecontei*. (Hym)
 " white. fol. inj^d by *Lophyrus Abbottii*. (Hym)
 " " wood inj^d by *Melanophla fulvoguttata*
 Pine. wood inj^d by *Monochamus titillator*. (Col)
 " white. sapling shoot & injured by *Pissodes strobi*. (Col)
 Pine. wood, inj^d by *Pronus cyathicus*. *Orthosoma brunneus*. (Col)
 " (under bark) frequented by *Ptych. depressus*. (Ew) & *P. americana*. in nests of *Phragmus Stenocorus lineatus*. (Es. (Col)
 " bark & wood injured by *Tomicus. pini*. (Col)
 " wood inj^d by *Xylotrechus saggi tatus*. (Col)
 Plantain. Ribgrass. Plantago.
 " fol. eaten by *Syrphoctia isabellae*. and most of the *Arctians*. (Lep)
 Plum. *Prunus domestica*.
 " bark, wood, root, & injured by *Algonia excitosa*. (Lep),
 " fol. inj^d by *Anisopteryx venata*. & (Lep)
 " round holes eaten in fruit by *Anthonomus quercoviridis*. (Col)
 " holes eaten to kernel, & *Corticus emus scutellatus pennsylvanica*. (Col)
 " bark inj^d by *Aspidiotis, anchiiformis*. (Hom)
 " fol. destroyed by *L. Clisocampa americana*. (Lep)
 " fruit destroyed by *L. Conotrochelus nemophar*. or *plum vesicul*. (Col)
 " wood inj^d by *L. of Liciorca devari cata*. (Col)
 " fol. inj^d by *Eccles. imperialis*. (Lep)
 " fol. inj^d by *Grapholera chalybea*. (Col)

Plum. fol. injured by *Staphylinaria texta* (Lep)
 " twig buds, inj^d by *Styrcanus curcu-*
leonoides. (Col)
 " {fol & blossom. *L. macradactylus* l. sub-
 " = *spinosus*. (Col)
 " {fol inj^d by *Macronaxia* (*Polyphylla*)
variolosa. (Col)
 " {branches punctured, by *Ucanthus*
romus. V. (Orth)
 " {injured by *Phyllobius ovivagus*.
 " (Col) (Europ)
 " {fol inj^d by *Phyllophaga fusca*, &c
 " (Col) & other May beetles.
 " {fol inj^d by *Platysamia acerifolia* (Lep)
 " {frequented by *Ormenis*. *Pecoloptera*
pininosa. (Hbt)
 " inj^d by *Aphodites cupreus*. (Col) &
 " injured by *Senaxia prunivora*.
 " (Lep)
 Plum Knot. a fungoid growth ser. *Sphaeria*
torulosa & frequented by various insects.
 Podophyllum peltatum. Mas. appl. mandrake
 " {frequented by *Ormenis*. *Pecoloptera*
septentrionalis. (Hbt)
 Pollen & petals of flowers injured by Slugs.
 V. by earwig (Forficula).
 Polygonum. Knot weed.
 " 2 sp. fed on by *Coccus polonicus* (Htg)
 Poplar. or Aspen. *Populus alba* &
 " {fol injured by *Cunithares vesicatoria*.
 " (Col) (Blister Fly)
 " {fol. injured by *Cotalpa*. (Arceuth)
lanigena. (Col)
 " {fol destroyed by *Ennomos subisig-*
naria. (Lep)
 " {fol injured by *Ichthyura inclusa*
Platana americana. Poplar spinner (Lep)
 " {decayed wood, frequented by
 " *Drepanus latirostris* & (Col)
 " {fol inj^d by *Popilliocha variis*.
Saturnia c. (Lep)
 Poppy. (Papaver)
 " heads frequented by *Cauterhynchus*.
 " macula (Col) Europ
 Potato. *Solanum tuberosum* -
 " roots inj^d by *L. Althorhinia* (Cotinis)
 " nitida. Col
 " {stalk bored by *Barys*. *Barydus*
truncatus (Col)
 " {fol V. inj^d by *Blissus*. *Microspus*
leucoderus. (Hbt)
 " {fol. injured by *Chrysomela*. *Leontopha-*
ra *lineata*. potato beetle (Col)

Potato fol. injured by *L. Chrysomela*.
 " *Doryphora juncta*. false potato bug
 " (Col)
 " {fol. frequented by *Entilia coronata*
 " (Hem.)
 " {fol inj^d by *Epicaeta comorea*.
 " & *Cervina*. & *comissata*. & *forma*.
 " *syronacea*. & *vittata*. & *Cantharis*
 " & *Lytta* (Col) Potato beetles.
 " {Stalks bored into, by *Gorytina*
 " *nitela*. "Spinule worm" (Lep)
 " inj^d by *Gryllotalpa borealis* (Orth)
 " {fol inj^d by *Lema trilineata* (Col)
 " " " *Lugus lineolaris*. (Hbt)
 " " " *Macrosela carolina*.
 " & *M. quinque maculata*. (Potato
 " worm) Lep
 " {fed upon by *Meloe angusticollis*.
 " (Col)
 " {fol. inj^d by *Nysius raphanus*. (Hbt)
 " {Seed disease said to be caused by
 " *Diura fucata*. & *S. quinque maculata*. (Eu
 " Lep) ?
 " {said to be injured, by *Phakellura*.
 " *nitidulalis*. (Lep)
 " {juv of fol. eaten by *Pedura*.
 " *velosa* (Orth)
 Pot herbs. fol & inj^d by *L. Pontia* *obovata*
 " & other white butterflies. (Lep)
 Prickly ash. *Lanthoxylum carolinianum*.
 " {fol eaten by *L. Papilio craphnomis*.
 " (Lep)
 " {bark & wood eaten by *Sternidius*
canthoxyla. (Col)
 Prickly pear. see Cactus
 Prunel Plum? *Lepus tinum vulgare*.
 " {frequented by *Ormenis*. *Pecoloptera*
 " *pininosa* (Col)
 Prunus. Plum. Cherry. Gray
 " *Pyrus americana* Am. Mountain ash.
 " *malus* appl.
 " *communis* pear.
 " Puff balls. fungi.
 " {frequented by *Canocara oculata*.
 " (Col)
 Pumpkins. *Cucurbita*?
 " {fol. inj^d by *L. P. Anasa*
 " *insis*. (Hbt) (*Ponocerus*)
 " {fol. inj^d by *Dialostica villata* (Col)
 " {Stk fed upon by *Cunijomta indo*. (Col)
 " {fruit & injured, by *L. Heliothis*
 " *armigera*. (Lep) (Bell worm)
 J Flower Oct 19 1877

Quails. (birds) destroy chinch bugs.
 Phisus leucopisus. Macropus Hb.

Quince. Cydonia vulgaris.
 " injured by Conotrachelus nemu-
lar & many of the insects inju-
 ring the apple. (Col)
 " fol. & fruit injured by Lepus.
leucolavis. (Hb)
 " fol. & fruit injured by Stegis.
arcuatus. Hb.

Radish. Raphanus.
 { Root inj. (Europe) by Anthonomya
raphani. & A. radicum. (Lep)
 " fol. inj. by Maryanthea. (Strachis)
inlucronilcha (Hb)
 " fol. inj. by Myzus. raphanus. (Hb)

Ragweed. Ambrosia.
 frequented by Aphrophora? (Hb)

Raspberry. Rubus, idiosus.
 " fruit. inj. by Cosmoleuca atra
 { 95:1 Hb)
 " { Rth in stem eaten by Agnelus.
ruficollis. (Col)

" { leaves frequented by Byturus.
tomontanus. (Europe, Cal)
 " { flowers cut off by Dasyle. flavipes.
 (Europe Cal)

" fol. inj. by Lepus lineatus & Hom
 " stem bored into by Oberca tri-
 = dentata. (Col)
 " { branches punctured by Leanthus
ruicis. ♀. (Orth)

Rattle box. Crucifera.
 { seeds in pods, form food of Uthetis
sa. (Diopra) bella. (Lep)

Red leaf. water color paint, even eaten
 by Octobea germanica. Cock
 = roach. (Orth)

Red pepper. Capsicum.
 " fol. eaten by L. Macroscia caro.
 = leui. (Lep)

Reeds. stems form hybernating quarters
 of Cyphon pluridus. (Col)

Roseda Mimus.
 * Rhus glabra smooth Sumach, V:
 * Rhus glabra. Ononis americana.
 { roots frequented by Berytus
laevis. (Hb)

Ribes grossularia. Gooseberry.
Ribes. ribesii. Currant.

Rhubarb. Rheum.
 (31lover Oct. 20. 1874.)

Rhubarb. fol. frequented by Ormenis (Pacil-
optera) pruinosa. (Hom)
 { bug & injured by Sitotropha panicea.
 (Col)

Rice. Oryza sativa.
 " { grain inj. by Calandra Sitophilus
Oryzae. (Col) V:
 " { frequented by Mormidus ovalis.
 (Europe) (Col)

Ricinus. common. Castor oil plant.

Rosa Rose. R. rugiflora Sweet briar &
 Rose. fol. injured by Cantharis vesicas
torica. & blister fly (Col)

" fol. inj. by Strobilacina (Tortrix)
rosaceana. (Lep)
 " { flower. fol. inj. by Macroctylus
trichopneus. (vel Rose bug.) Col.
 " { fol. inj. by Selandra rosae.
Rose slug. (Hym)
 " fol. inj. by Sorica respertoria. (Col)
 " " " Tortrix. Loxotaenia rosaceae.
 (Lep.) -

Robinia. pseud acacia. Locust. x

Rotton wood. fed upon by L. Melanotus (Col)

Rubus. Bramble. R. idiosus. Raspberry.
R. villosus & Blackberry &c

Rye. Secale cereale.
 " fol. & injured by Albus arvenae. (Hom)
 " grain inj. by Dichosis leucostigma
 { tritice.

" { Swelling in joint, caused by Isosoma
Eurytoma. hordei. (Hym)
 " grain. inj. by Casini. (Lep)
 " plant. fol. inj. by L. Prodenia -
autumnalis. (Lep)

" grain. inj. by Silvanus summom
ensis. & other grain destroying
 { beetles. (Col)

Sabal. palmetto. Palmetto. ?

Sals. cultiva

Saccharum. officinorum. Sugar cane.
 Sap of tree fed upon by Licania clavata
 = leonia & other Cecobora or
 { beetles.

Sassafras. Sassafras officinale
 " fol. fed upon by Carpocoma promis.
 { thea. (Lep.)
 { buds & shoots inj. by Diapheromera
thuctum fenestrata or stick insect
 (Orth)

Secale. cereale. Rye.
Sorvie berry Amelanchier canadensis.

Shad bush or Service berry, Wood in?
 { by *Saperda canadensis*, *bruttata* (Col)
 Sheep - injured by Scab. see *Canes*.
 { injured by head maggot see
Melophaga ovis. (Sep)
 " { smothered by Sheep tick, louse
 or fly, *Melophagus ovinus* (Dip)
 Ship biscuit, inj^d by *Sitonaepa panicea*.
 { Col)
 Skins, tungs, & buds, eaten by *Phasmodon*.
 (Cata) *Diaphoromera* &
 Sial hemp, fol fed upon by insects. see
 also *penaques*.
 Sonchus mustard.
 * Sick weed. *Asclepias*.
 Skins, dried, injured by *Anthonomus varius*
Dermestes undulatus, & *Plinus*
 { Can. & 9th (Col)
 Skin of living birds & infested by
 { *Mallophaga*, or biting louse, &
acarus &
 Snakes, when dead eaten by *Syrphus amicus*
vicaria, & (Col)
 Snails, form food of *Lampyridae* (Col)
 " " " *Silphidae* & (Col)
 Snow in Europe, sometimes frequented, by
 { *Heteronidae*. (Col). *Chionoclept*
 " &
 Sod grass, injured by *Gryllotalpa borealis*.
 { (Cata). L of cut worms *Agrotis*
 " & (Sep)
 Solanum dulcamara, Bitter Sweet.
 " *esculentum*. Egg plant.
 " *tuberosum*. Potatoes.
 " *canadense*. Horse nettle.
 " *canadense*. fed upon by *Chrysomel*
 { (a. *Porphora*) *juncta* & 10.
lineata. (Col)
 Sorghum, fol & inj^d by *Phisus macropus*
leucopneus. (Chenoke bag, & many
 other insects injuring mass & (He)
 Sorghum, Sugar melle.
 * Sombus, *Pyrus americana*. Mountain ash.
 Spear ment. fol eaten by *Sphinx erom-*
zites. (Sep)
 Spruce, or fir, Abies.
 " wood inj^d by *Ancylorhina*
 { *Balrestis* *stomatia*. (Col)
 " (ceding shoot & inj^d by *Risodes*.
 { *strobi*
 " fol inj^d by *Thyridopharys ephem-*
eracipennis - Hung or basket worm. (Sep)

Squash. *Cucurbita melopepo*.
 " fol, fruit & inj^d by *Anasa*. *Gonocerus*
 { *bruti*. (Squash bug). (Het)
 " growing plants, fol, inj^d by
Diastolica vittaticus. (Col)
 " fol & fruit, inj^d by *L. Epilachna*
borealis. (Col)
 " fol, & inj^d by *L. Phakellura nitid-*
alis. (Sep)
 Strawberry, *Fragaria*.
 Plants frequented by *Aleurodes*. (Het)
 " blossom inj^d by *Anthonomus ligig-*
natus. *stagnatus*. (Col & S)
 " inj^d by *Anthonomus incurvus*.
zurbe. (Col)
 " fruit, inj^d by *Corneliaena*, *atra*
 " & (Het)
 " fol inj^d by *Empythes maculatus*.
 { (Hm). Strawberry worm, or saw
 fly.
 " fol, & inj^d by *Lygus lineolaris*.
 { Het
 Starwort. *Aster*.
 Stuffed animals, birds, & injured by
Plinus fur, *Dermestes*, *anthonomus*
 & (Col)
 Sugar cane. *Saccharum officinarum*
 " inj^d by *Gryllotalpa didactyla*
 { (Cata. in West India &
 " frequented by *Naucisibus dentatus*
 { Col
 " fed upon by *Pyrrophora noctula*
ces (Col) (Cane in West India 328.)
 " *Silvanus dentatus*. Col.
 Sumack smooth. *Rhus glabra*. &
 " frequented by *Alydus curvipes*. (Het)
 Sumack. fol, inj^d by *Chromola varians*. &
 { Col)
 " fol frequented by *Pylletho's* (Hem)
 Sugar millet. Sorghum. x
 Swallows, infested with bed bugs. *Acan-*
thia lactulana. Het
 Sweet bear. *Besa rubiginosa*
 " fol inj^d by *Seneca vespertina* & Col.
 Syringa vulgaris. Lilac.
 Tamarack. *Taxodium*. Amⁿ Larck.
 { *Lami americana*.
 " fol inj^d by *Tolyte larvis*. Larck
 { *cheator*. (Sep)
 Taraxacum. dars. *Lamis*. Dandelion.
 Thistle *Cnicum lanceolatum*.
 " frequented by *Eschschol*. *pentatoma*
 { *punctipes* & (Het)
 Thrice Oct 22, 1877.

Thorn. *Crataegus*.
 " Wood inf^d by *Saperda candida*.
livittata (Col).
Thuja occidentalis. Com. Cedar tree. White
 cedar.
Thuja. London. Basswood.
 Timber. (Naval Ship) wood. inf^d by
Gymexylon navale. (Col) Eu
 Tobacco. *Nicotiana tabacum*.
 " { fol. inf^d by *Mucosia* (Sphax)
carolina & *M. quinque maculata*.
 Tobacco worm. Horn blower. (Lep.)
 " fol. inf^d by *Acantus rufus*. (Orth)
 " when cured & dry destroyed by
Sitotrupa portorica. (Col)
 Tamale. *Lycopersicon Esculentum*.
 " fol. frequented by *Aerodes*. (Hom)
 " fol. inf^d by *Chrysomela Dorypho*
ra 10 lineata? (Col)
 " Starts. bored into by *Coryza*
nitida. (Strinda worm). (Lep.)
 " Fruit inf^d by *Heliothis ornigera*.
 (or boll worm) (Lep.)
 " Fruit. fol. inf^d by *Macrosia* (Sphax)
carolina & *M. quinque maculata*?
 (Lep.)
 " Fruit & inf^d by *Prodenia* -
commercia. (Lep.) & *Prodenia*
autumnalis. (Lep.)
 Tree. Saps. sucked by *Brochymena arborea*.
 (Hol) 4^o 9^o see apple Oak 4^o
 " (Saps) Sucks, catch^d by *Phasmodae*.
Staphylinia femorata? (Orth)
 " Saps. blighted by *Phytomyza*. (Hol)
 { inf^d by insects see under
 Oak, apple. 4^o 9^o
 Trifolium. see Clover.
 Triticum. Wheat.
 Tropaeolum. Nasturtium.
 Tulip. *Lilium dendron luciferum*.
 " { fol. inf^d by *Caterpochus*. (Col)
 { or *Phytomyza*? (Col) forms blisters.
 under bark. frequented by *Endea*
colonus (Col)
 Turnip. *Brassica rapa*
 " { fol. inf^d by *Murgantia Strachan*
hispidicrura (root)
 " fol. inf^d by *Pieris protidica* (Col)
 { *P. brassicae*. & *P. rapae* (Lep.)
 " { fol. 4^o inf^d by *Prodenia* -
autumnalis. & *P. commelinae* (Lep.)

Turnip. (root), a disease said to be caused
 by *Sciana facata* & *Scypha*.
 (Lata (Dij) Europe
 " (An. inf^d, a disease falsely attributed
 to *Trichocera hyemalis* or turnip
 winter gnat. - (Dij)
 " *Trichocera hyemalis* a small gnat
 lately supposed to cause the disease
 called turnip
 " being injured by a *Smynthana*. (Col)
 Umbelliferae. said destroyed by *Leprosoria*
orientalis (syn *heracleina*) (Lep)
 " inf^d by *Sticus*. (Col) (Hol) flowers.
 " frequented by *Clasmodidae*. (Col)
 " fol. inf^d by *L. Populi aslerica*.
 (Lep)
 Vaccinium. Blueberry. *Vaccinium*. 4^o
 " *Oxycoccus macrocarpum*. Cranberry.
 Vegetable & animal substances fed upon by
 { *Calodes conopsea*. *Staphylinia*
maculosa *Harpalus herbivagus* &
 (Col) 2^o 4^o
 vegetable substances eaten by *Podura villosa*
 (Orth) *Pomphilieta americana*. (Col)
 vegetable. destroyed by *Achetis vittata*
 { & several other cecidids. 4^o (Orth)
 " inf^d by *Blechnus* (*Microtus*) few
 explored. (Chinch bug) (Hol)
 " injured by *Diatraea dus decor*.
maculata. (12 Spotted). (Col)
 " injured by *Phyllotaxia bonalis* (Orth)
 (substances). *Trypeta domestica*. (Hol)
 { cecidite 4^o (Orth)
 Vegetables. inf^d by *Episcata vittata*. & other.
 { *cantharides*. (Col)
 " inf^d by *Remania vittata* (Orth)
 " " *Orchestris striolata* (Col)
 " " *Promela microplera* &
 { numerous other *Graschoppers*. (Orth)
 " roots injured by *L. of melanotis*.
 { common. Numerous other wire worm.
 (Col) (to Lake edge)
 " not inf^d by *L. Siqua olivacea*
 (Col) Numerous other crane flies (Dij)
 Verbascum. Mullein.
 Verbena hastata.
 " " frequented by *Archamia galca*
ta. (Hom) *Smilia auriculata*
 Virginia creeper. *Pomphilieta*.
 " fol. inf^d by *Acrostichus fulvius* 4^o 9^o
 " Virginia. lower see *Clasmodae*. (Lep.)
 39 Nov. Oct. 23. 1877.



- Walnut. Juglans.
- " {fruit inj^d by *Conotrachelus nemus*.
 - " {thorn.
 - " {wood inj^d by *L. Dysphaga tenuipes* (Col).
 - " {twig cut off (from inside) by *Elateridion pitulata* & *Stenocranus* (Col).
 - " {wood inj^d by *Helicomonas maculatus* (Col).
 - " {fol inj^d by *Laesonus caryae* (Hom).
 - " {twig girdled (from outside) by *Conotrachelus angulatus* (Col).
 - " {frequented by *Oticus amygdali* (Hom) & *Smilia* var. (Hom).
- Warts. growth parasitic insect in body.
- " {Stylops (Col) Star of Malaco (Col)
- Wax (Bees) destroyed by *Galleria cerasana*.
- " — {formed by *Flata limbata* in China. (Hom)
- Wheat. *Triticum vulgare*.
- " {grain sucked inj^d by *L. of Agromyza tritici* (Step)
 - " {fol & inj^d by *Anabaes simplex* (Orth)
 - " {grain inj^d by *Anacamptis cerealella* (Step)
 - " {fol & grain inj^d by *Aphis avonae* or oat plant (Hom)
 - " {fol & grain inj^d by *Pissus (Microgus) leucophaea* (Hes)
 - " {Stalk & stem inj^d by *Promecyphaboles* (Cw) (Col)
 - " {grain injured by *Calandra Sitophila* (= *Cal.*) *granovus romotepunctata* & *C. ovata* (Col)
 - " {when young inj^d by *Calathus latus* (Col) & *Exopis*.
 - " {Stalk & inj^d by *Cephus pygmaeus* (Col) (Carpus)
 - " {Swelling of stalk, or joint, caused by *Chlorops tenuipes* (Step)
 - " {Grain inj^d by *Diobasis Cerdomyia tritici* (Wipf) (Wheat midge)
- x " {Stem & plant inj^d by *Cerdomyia* (destroyer of wheat) (Step) (L. inj)
- " {grain inj^d by *Telechial cerealella* (Step)
 - " {injured by a swelling in the stem called "Gall" ?
 - " {grain said to be inj^d by a beetle *Cantharus caliginosus* (Pangw) (Col)

- Wheat swelling of joint, caused by *Isosoma (Eurythma) hordei* (Hym)
- " {plants inj^d by *L. Lophomyza macra* (Step)
 - " inj^d by *Elabus typhaeus* (Hes)
 - " young grain inj^d by *Oscinis* (Step)
 - " {fol. grain & injured by *S. Prodenia autumnalis* (Step)
 - " {seed inj^d by *Siloanus summatensis* (Step)
 - " grain inj^d by *Silo dnoha panicea* (Ces)
 - " { " *Tenebrionides Progesta*
 - " { " *Mauritanica* (Ces) & also *Tenebrionida*
 - " {said to be inj^d by *Thrips Lemo* = *Thrips cereal. s.* (Orth)
- Whortleberry. Huckleberry. (Gaylussacia)
- " {frequented by *Conica unicolor* (Ces)
- White cedar. *Abies balsamea*, *Thuja occidentalis*
- Willow. *Salix*
- " twig inj^d by *Ceresa bubalus* (Hom)
 - " {fol inj^d by *Calappa lanigera* & *Cacoecia* (Col)
 - " {Wood inj^d by *L. of Dynastes titanus* (Col)
 - " {fol inj^d by *Ichthyura inclusa* & *Chloroda americana* (Step)
 - " {Wood inj^d by *Laccanus dama* (Ces)
 - " {fol inj^d by *Pieris rapae* (Step)
 - " { " " *Hypocirria varia* & *Saturria* (Ces) (Step)
 - " {fol inj^d by *Tingis juglandis* (Hes)
- Wigelia. fol inj^d by *Stygas lineatus* (Hes)
- Wood said to be eaten by *L. Cistelidae* (Ces)
- " ? eaten by *Orthoplossa danicornis* (Ces)
 - " ? rotten frequented by *Pezomachia* (Ces)
 - " ? when decaying frequented by *Tormes flavus* (Hes)
 - " ? injured or bored by *Procerodes* (Hom)
- Yellow in peach, not caused by insect. { but said to be a fungus growth. }
Lanthoxylum possibly arb. (see *Sphaeria*)
Zeus myrs. Indian corn. Maize.
Zinc. great zinc hole eaten through by *L. Elythrodes* (Ces) *capitata* (Ces)
Zingiber officinale. Ginger.

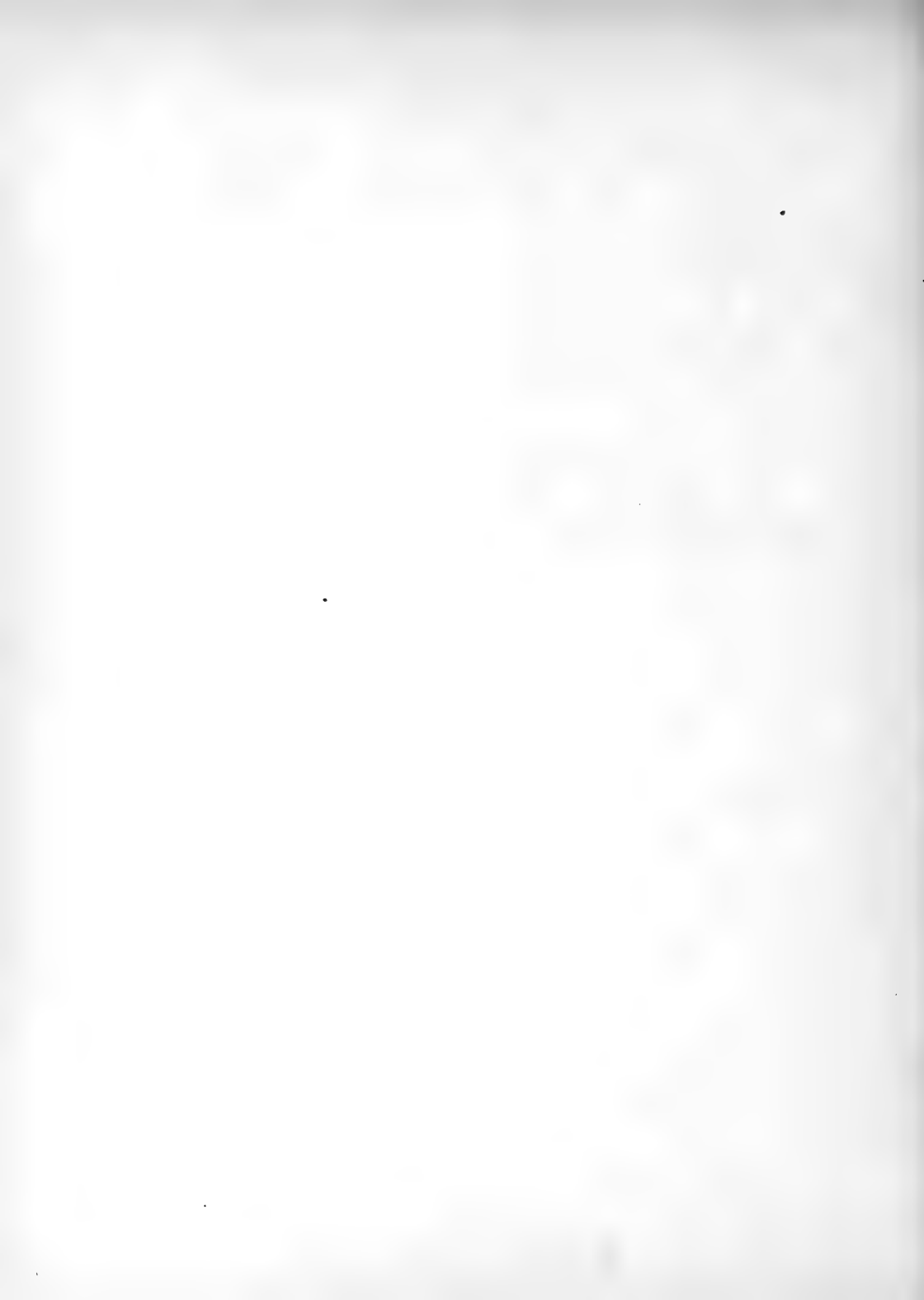


Uddeland. & Errata.

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 Lithographic 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 LXXII/24 instead of LXX/24
 { in Alivaxas
 " 4. " 16. alter to 11/4 instead of 11/4
 " " 30. Insert. (Anisomorphus huprestoides)
 { Spectrum bicinctatum (Orth.) feeds
 { on Juruga & buds SS 1/6 after
 { Amivaxas
 Page 9, line 27. Insert. Atlacus Bankhena;
 { see Bombix, Faidherbia.
 { SS. XI/11 (Sep.) after Atleuchus.
 * Page 10 line 17. Insert. Palata lower. SS. XII/32
 { after Bandus.
 Page 14, line 46. Alter word Macetes to Magacotes
 " 16. " 6. Insert the word Epicauta, between
 { Conthams & Comino.
 Page 16, line 23. Alter Weigelia & Diatria to
 { Weigelia, & Diatria. (& wherever
 { these two words occur in the Met.
 Page 17, line 18. Insert the word "Grain" after
 { wheat.
 Page 18, line 1. Alter Pryol Walnut moth to
 { Em. Sphinx.
 Page 20, line 19. Omit, 1865 p. 456.
 " 23. " 23. Alter. VII/8 after SS. to VIII/14 Orth.
 " 24. " 15. Insert "Corynetes necrotica noia.
 { see Ins feeds on Carion SS. XII/32
 { (Col) after Corynetes saufipes.
 Page 27, line 19. Insert "Dalana ministrata. L feeds
 { on Fol. of Apple & SS. XI/7 LXXXII/4.2.
 { (Col) before "Day Fly".
 Page 27, line 33. Insert "Depressaria Ortovella -
 { herachana (Bp.) L feeds on lary
 { Pansley & SS. XVI/11 (Sep.)
 " 27, line 51. Insert "Deutria fol injured by
 { Luzus lineatus (SS. 1/4 Hom)
 { after Devils darning needle.
 * 27, line 51. Insert "Diabrotica Galeruca
 { duodecimpunctata, Ag. Rev. 1858.
 { p. 60. 1855 p. 90 pl VIII fig 1. eats
 { holes in vegetables. Flowers of Cotton
 { 189 (Col) after Devils darning needle

- Page 29, line 44. alter Sityrus to Sityrus
 " 29, line 50. Bottom of page insert Syphaxia
 { Ceseraria tenuipes SS. XLV/10 (Col)
 { after Dysdercus.
 Page 31, line 2. Insert "Em. See Sphinx see Arats
 { Emia quadricornis, emulator. L. feeds
 { on Fol. of Linden, Em. 7. SS. VIII/11
 { XII (Sep.)" after Elisria.
 Page 32, line 13. Insert "Ephraia circumensis. see also
 { Craedodora pubescens SS. XXIV/2 (Col)
 { after Ephelachna.
 Page 33, line 49. Insert "of cucumber 7". after young
 { plants.
 Page 36, line 22. Alter "XII/43 to XII/33 end of
 { Galeruca
 Page 35, line 33. Insert "house" between cor. & fly.
 " 36. " 36. Alter XXXV/9 to XXX/9, after Gardiodora
 " 40. " 23. Insert "Hypenychia varia, see
 { Saturnia is SS. VI/6 XLVII/12 (Sep.)
 { after Hypochantia testor.
 Page 46, line 2. alter Magelia to Weigelia.
 " " 33. insert "Macronoxia pseudonika
 { or Polyphylla, variolosa SS. XXII/20
 { Col. after Macroglenes penetrans.
 Page 50 line 1. alter pr. stescent to pr. stescent.
 " 51 " 2. Insert "Nephopterax undulata
 { see Phycita nebulosa, SS. XVI/1, LXX/2
 { (Sep)", after net.
 " " 2. Insert, "Nemophila plumifera, silk
 { producing spider. by Mr. Kelder
 { Proc. Ent. Soc. Lond. vol 6 after Nepa
 { apiculata.
 Page 53, line 25. Insert "Ormenis pumilio, &
 { after to Realoptera SS. 1/46. (Hom)
 { after Oriental cockroach.
 Page 53 line 47. Insert "Orthosoma brunnea see
 { Protonus cylindricus SS. XVI/2. Col"
 { after Orthoptera sallatoris.
 Page 55 line 30 read P. - a.
 " 55 " 33. Insert "Pellis surinamensis, see
 { Necrody, SS. 1/3. Col. "the one Pemph
 { gus pyri. SS. Glover, Nov. 1. 1877.



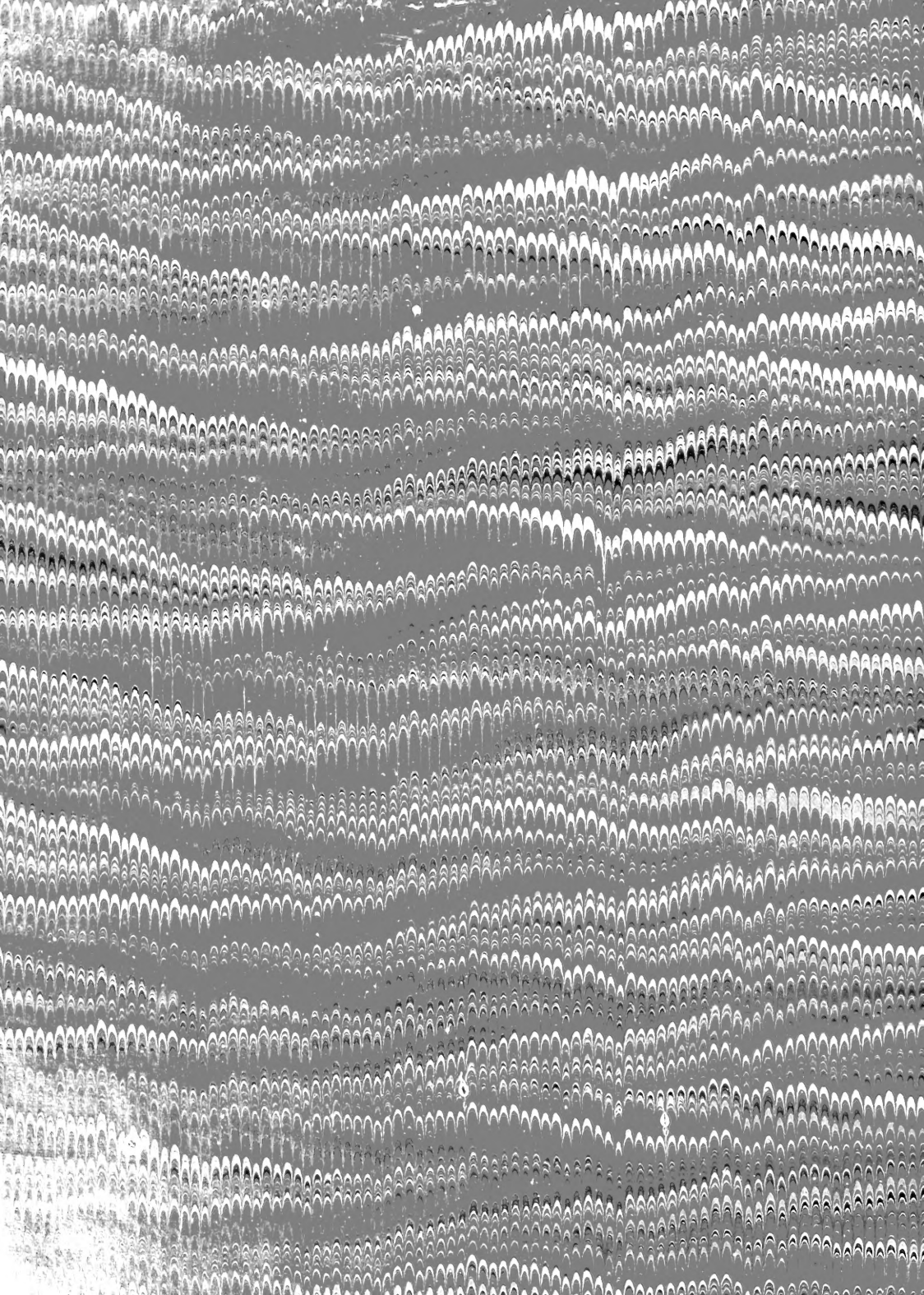
Addenda, & Errata.

- Page 56, line 40. Insert *Lechnosterna*, as a Syn.
 { at the end after *Col. Umate quecama*
 { line 38 as merely a Synonym.
- Page 57, line 12 Read, *Walgelia* instead of *Walgelia*.
 " 57, " 25. Alter *Macronema*, JG VII/18, to
 { *Macronema*, JG. XXII/2. (Col.) "
- Page 62, line 18 alter *Bete noir*, to *Bete rouge*.
 " 68, " 21. Insert "*Smerinthus exaccatus*,
 { see *Sphax* *exaccatus* JG. II/4. XXXI/4
 { (Sep.) before *Smilia auriculata*.
- Page 71, line 35. Insert "*Silea* see *Attacus*
 { *polyphemus*, JG VII/5. 4/14 (Sep.)
 after *Telamona*.
- " 71, line 52 Bottom of page. Insert "*Tenebrionides*
 { *duba*, see *Strogosila*, Syn. JG. IV/25. (Col.)
- " " " Bottom of page. Insert *Tenebrionides*.
 { *mauritavica*, see *Strogosila caraboi*.
 { les. JG. XXI/3 (Col.)
- Page 74, line 65. make *Tenebrionellus*, a synonym "
 { *Strogosila caraboides*.
- Page 74, line 74. Alter *Tenebrionellus* to *Tenebrionides*
 " 76, line 41. Insert "*Scigou*" for injured by
 { *Lygus lineatus*, " after *ruce weeni*.
- page 77, line 33. Insert *Strophidium fasciatum* see
 { *Orchelimum gracile* JG. V/1. (Orth)
- page 82, line 35. Insert. *Chrysocnus curatus* JG. XXIV/10
 { (Col.), alter *Col.*
- page 84, line 19. alter *Commelinia*, to *Commelyna*.
 " 85, " 4. alter *panicea*, to *panicea*.
 " 89, " 22. (Sol. injured, by *linomata lucciola*
 { *U. varians* ? (Col.)
- page 94, line 28. Alter *Sonnenmonis*, to *Sonnenmonis*
 " 96, line 42. make *Scatallatus* the right name
 { & *prunicea* the synonym

J. Glover Nov 2 1877

Plants for notes.





incl.
in app. reports

SMITHSONIAN INSTITUTION LIBRARIES



3 9088 00820 7177