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A colon after initial designates the most common given name, as: A: Augustus; B: Benjamin; C: Charles; D: David; E: Edward; F: Frederic; G: George; H: Henry; I: Isaac; J: John; K: Karl; L: Louis; M: Mark; N: Nicholas; O: Otto; P: Peter; R: Richard; S: Samuel; T: Thomas; W: William. The initials at the end of each record, or note, are those of the recorder.

Corrections of errors and notices of omissions are solicited.

Anderson, T. J. The paucity of neuropterists. (Entomologist, May 1882, v. 15, p. 117-118.)

Some reasons why there are so few students of neuroptera. *G: D.* (3591)

Andrews, W: Valentine. The cynthia silk-worm. (Amer. nat., Aug. 1868, v. 2, p. 311-320.)

Discusses the insects which have been mentioned or figured as [*attacus*] *cynthia*, and says, "the insect I am writing about is the one figured, tolerably well, in Duncan's Exotic moths, Plate 14, fig. 1." Describes briefly the egg, four larval stages, and cocoon of this species, which feeds on ailanthus, and discusses its value in sericulture. *G: D.* (3592)

Andrews, W: Valentine. Ravages of the *alypia octomaculata*. (Amer. nat., Feb. 1869, v. 2, p. 666-667.)

Reprint, with slight omissions, in C: V. Riley's "Insects injurious to the grape-vine. No. 6" (Amer. entom., Mch. 1870, v. 2), p. 151-152.

Notice of a grape-vine in New York city from which the leaves were entirely stripped by larvae of *alypia octomaculata*. *G: D.* (3593)

Annual meeting of the Entomological club of the American association for the advancement of science. (Can. entom., 1878, v. 10: Sep. [Oct.], p. 170-178; Oct. [Nov.], p. 190-192.) [Rec., 1348.]

Minutes of the meetings of the Entomological club of A. A. S., held 20-21 Aug. 1878, at St. Louis, Mo.; annual address of the president [J. A. Lintner]; proposal of amendment of constitution; election of officers; communications and discussions.

Contents further analyzed under following captions:—ENTOMOLOGICAL CLUB [etc.].—President, 1878. Annual address [Rec., 3650].—GROTE, A: R. and WETHERBY, A. G. [Exhibition of moths, and on the number of broods of certain bombycid moths] [Rec., 3659].—SMITH, Emily A., et al. [On the life history of *lecanium acericorticis*, and on means of destroying this and similar insects] [Rec., 3670].—RILEY, C: V. [Abstracts of some papers proposed to be read to the association] [Rec., 3667].—LINTNER, J. A., et al. [On the collecting of noctuid mths by "sugaring," and on devices for collecting] [Rec., 3663].—SMITH, Emily A. [Damage done to oaks by *argyrolepis quercifoliiana*] [Rec., 3669].—[On instinct or reason displayed by insects] [Rec., 3662]. *B: P. M.* (3594)

Anthony, A: Cox. *Hydrophilus triangularis* at Swampscott, Mass. (Journ. Bost. zool. soc., April 1882, v. 1, p. 26.)

Records the capture of *hydrophilus triangularis* at Swampscott, Mass. *R: H.* (3595)

Anthony, A: Cox. New England *philampeli*. (Journ. Bost. zool. soc., April 1882, v. 1, p. 18-19.)

Gives a brief account of the life-history of species of *philampelus*. *R: H.* (3596)

Arnhart, Ludwig. [Ein secundärer sexualcharakter von *acherontia atropos*.] (Verhandl. k.-k. zool.-bot. gesells. in Wien, 1879, bd. 29; Sitz.-ber., p. 54-55; fig.)

Describes and figures an evaginable organ, of doubtful function, at the sides of the first two abdominal segments of the male of *acherontia atropos*. *G: D.* (3597)

Ashmead, W: Harris. *Antigaster mirabilis* in Florida. (Amer. entom., June 1880, v. 3, n. s., v. 1, p. 152, 5 cm.)

Antigaster mirabilis raised from eggs of *microcentrum retinerve* in Florida; comparison of *aphelinus* sp. with figure of *a. mytilaspidis*. *B: P. M.* (3598)

Ashmead, W: Harris. Mite preying on orange scale. (Amer. entom., Apr. 1880, v. 3, n. s., v. 1, p. 106-107, 13 cm.)

Description of eggs, immature stages and habits of *tyroglyphus gloverii*, which preys upon *occidae* on leaves of *citrus*. *B: P. M.* (3599)

Ashmead, W: Harris. On the red or circular scale of the orange, *chrysomphalus ficus* Riley ms. (Amer. entom., Nov. 1880, v. 3, n. s., v. 1, p. 267-269, 67 cm., fig. 146.)

Rev. [by C: V. Riley], entitled "New species of scale insects." (*op. cit.*, p. 275-276, 12 cm.)

Superficial descriptions of egg, larva, and female scale of *chrysomphalus ficus*, with references to the literature, remarks on the first appearance of this insect in Florida, on its probable origin and spread, its food-plants, and natural history, and means against it; figure of infested leaf of *citrus*. *B: P. M.* (3600)

- Austin, E:** Payson. Collecting *stylopidae*. (Journ. Bost. zool. soc., April 1882, v. 1, p. 12-13.)
Describes a day's collecting of *stylopidae*, at Readville, Mass. The males of *xenos* far outnumber the females.
R. H. (3601)
- Austin, E:** Payson. Notes on collecting certain *buprestidae*. (Journ. Bost. zool. soc., Oct. 1882, v. 1, p. 45-46.)
Habitats of and modes of collecting *buprestidae*.
G: D. (3602)
- Austin, E:** Payson. [Use of air-bubbles carried by water-beetles.] (Can. entom., Sep. 1879, v. 11, p. 176.)
Reply to an inquiry by J: G. Morris as to the purpose served by the globule of air which certain water-beetles carry with them when they dive; method of retention of this bubble; its gradual disappearance supposed to be due to its inhalation by the insect. *B: P. M.* (3603)
- Austin, Mrs. R. M.** *Darlingtonia californica*, Torr. (Bot. gazette, Aug. 1878, v. 3, p. 70-71, 6 cm.)
Notes the presence of large numbers of carnivorous larvae in the pitchers of *darlingtonia californica*, both in summer and winter. *W: T.* (3604)
- Bacon, W. D.** Season of 1816. (Memoirs Phil. soc. promot. agric., 1818, v. 4, p. 219.)
Means against *cecidomyia destructor*.
B: P. M. (3605)
- Bailey, James Spencer.** [Noctuid moths coming to sugar and decomposing animal matter.] (Can. entom., Nov. 1879, v. 11, p. 203-204.)
Reply to inquiry by A: R. Grote whether *cucullia* ever comes to "sugar"; capture of *cucullia* and *plusia* "at sugar"; noctuid moths found feeding on decomposing animal matter, especially on partially decomposed deer hides. *B: P. M.* (3606)
- Balding, G:** On the urticating properties of the hairs of *liparis chrysorrhæa*. (Entomologist, Nov. 1884, v. 17, p. 256-257.)
Describes poisonous effects of hairs of chrysalis of *liparis chrysorrhæa* on the skin. *G: D.* (3607)
- Barbier, Fr.** Éducation des larves de dytiscides. (Feuille des jeunes naturalistes, June 1883, an. 13, p. 103.)
Mode of rearing larvae of *dytiscidae*. *G: D.* (3608)
- Barbour, James.** Cultivation of wheat. (Amer. farm., 17 Dec. 1819, v. 1, ed. 3, p. 301-302, 84 cm.)
"The two principal enemies to wheat are the hessian fly and the smut;" discussion of these; hessian fly [*cecidomyia destructor*] first appeared in this locality in 1798; "Lawler" wheat is proof against it.
B: P. M. (3609)
- Bargagli, Piero.** Note intorno alla biologia di alcuni coleotteri. (Bull. soc. entom. ital., 1884, anno 16, p. 92-96.)
Ptinus fur obtained from the nest of *vespa crabro*; notes on other beetles belonging solely to the European fauna. *G: D.* (3610)
- Barlow, T:** *Atropos pulsatorius*. (Amer. journ. agric. and sci., Oct. 1847, v. 6, p. 195-196.)
Direct testimony that *atropos pulsatorius* makes a tapping noise. *B: P. M.* (3611)
- Barnard, W:** Stebbins. *Bucculatrix* cocoons. (Amer. entom., Mch. 1880, v. 3, n. s., v. 1, p. 76, 7 cm.)
Letter from "W. S. B.," with note [by C: V. Riley]; hibernation of *bucculatrix pomifoliella*; situations in which its cocoons are spun. *B: P. M.* (3612)
- Barnard, W:** Stebbins. *Campodea fragilis* Meinert. (Amer. entom., Aug. 1880, v. 3, n. s., v. 1, p. 199, 22 cm., fig. 104-105.)
Occurrence of *campodea fragilis* and *degeeria lanuginosa* at Ithaca, N. Y.; food-habits and systematic position of the former; figures of both species.
B: P. M. (3613)
- Barnard, W:** Stebbins. The cotton worm, (Our continent, 22 Mch. 1882, v. 1, p. 93-116 cm., 1 fig.)
Importance of the ravages of *aletia argillacea* and difficulty of preventing them; habits of the larva and of its parasites, especially of *tachina aletiae*; course of transformations of the *aletia*; figures of larva, pupa and imago and of injured cotton plant; habits and migrations of the imago of the *aletia*; improvements in devices for the application of poisons to the plants.
B: P. M. (3614)
- Barnard, W:** Stebbins. Dominican case-bearer. (Amer. entom., Sep. 1880, v. 3, n. s., v. 1, p. 227, 9 cm., fig. 118)
Food-habits of *coccinoptera dominicana*; figures of eggs, larva, imago, larva-case and anatomical details of this species. *B: P. M.* (3615)
- Barnard, W:** Stebbins. European tussock-moth. (Amer. entom., Mch. 1880, v. 3, n. s., v. 1, p. 77, 8 cm.)
Ravages of *orgyia antiqua* and of "canker worms" at Ithaca, N. Y., in 1879; description of egg-mass of the *orgyia*; no cocoons of males discovered. *B: P. M.* (3616)
- Barnard, W:** Stebbins. [Habits of *phymata erosa*.] (Can. entom., Oct. 1879, v. 11, p. 196.)
Carnivorous propensities of *phymata erosa*; *pieris rapae* killed by it; habitation of the insect. *B: P. M.* (3617)
- Barnard, W:** Stebbins. Notes on the development of a black-fly, *simulium*, common in the rapids around Ithaca, N. Y. (Amer. entom., Aug. 1880, v. 3, n. s., v. 1, p. 191-193, 94 cm., fig. 103.)
Description of eggs, larva, pupa and imago of *simulium* sp.; figures of eggs; habits of larvae of this species and of imagos of the genus; method of raising larvae of this species in confinement. *B: P. M.* (3618)

Barnard, W: Stebbins. Parasitic rove-beetle: *aleochara anthomyiae*, Sprague. (Amer. entom., Aug. 1880, v. 3, n. s., v. 1, p. 199-200, 13 cm.)

Occurrence and habits of a beetle alleged to be *aleochara anthomyiae*, at Ithaca, N. Y. B: P. M. (3619)

Barnard, W: Stebbins. Parthenogenesis in *orgyia antiqua*. (Amer. entom., Sep. 1880, v. 3, n. s., v. 1, p. 227, 6 cm.)

Statement of conclusions drawn from finding many cocoons of the female and none of the male of *orgyia antiqua* in winter and spring; this species believed to have no enemies, to be perfectly fitted to withstand the climate [at Ithaca, N. Y.], and to reproduce parthenogenetically. B: P. M. (3620)

Barrett, C: Golding. Notes on British *pterophoridae*. (Entom. mo. mag., Jan. 1882, v. 18, p. 177-180.)

Includes notes upon *platyptila bertrami* and *pterophora monodactylus*, both American species. G: D. (3621)

Bassett, Homer Franklin. Arrangement of N. A. *cynipidae* by Dr. Mayr. (Amer. nat., Apr. [22 Mch.] 1882, v. 16, p. 329-330.) (RILEY, C: V. Entomology . . . [Apr. 1882], p. 329-330.)

Review of [author's] "List of North American *cynipidae*" (*op. cit.*, Mch. [24 Feb.] 1882, p. 246) [Rec., 3356]; Mayr enumerates in his list probably less than half the North American species of *cynipidae*; geographical distribution of the genera mentioned; note [by C: V. Riley] on the value of this list, which will replace, so far as it embraces the North American species, that given in C: R. Osten Sacken's "Contributions to the natural history of the *cynipidae* of the United States. . . Article 4th" (Proc. entom. soc. Philad., May 1865, v. 4) p. 379-380. B: P. M. (3622)

Bassett, Homer Franklin. [Former injuries by *pissodes strobi* at Waterbury, Conn.] (Can. entom., Sep. 1879, v. 11, p. 176-177.)

Pissus strobus greatly injured by *pissodes strobi* at Waterbury, Conn., from 1864 to 1869, but very little since. B: P. M. (3623)

Bates, H: Walter. Contributions to an insect fauna of the Amazon valley. Lepidoptera: *heliconidae*. (Trans. Linn. soc. Lond., 1862, v. 23, p. 495-566, pl. 55-56.)

Extr. [from p. 509], entitled, "Mimetic forms among insects." (Amer. nat., May 1867, v. 1, p. 155-156.)

Classification, relationship, systematic position, and habits of species of *heliconidae*; discusses mimicry and its causes in these and other insects; freedom of the *heliconidae* from attack on account of their odor given as a reason why they are mimicked by other insects; discusses reasons for mimicry between species of *heliconidae* themselves; notes on the species of *heliconidae* of the Amazon valley; describes the new genera *callithomia*, *napeogenes*, and *melinaea* (of the *heliconidae*), and *ithomeis* (of the *erycinidae*). G: D. (3624)

Beling, Theodor. Beitrag zur biologie einiger käfer aus den familien *dasyllidae* und *parnidae*. (Verhandl. k.-k. zool.-bot. gesells. in Wien, 1882, bd. 32; Abh., p. 435-442.)

Describes larva and pupa of *elodes coarctatus*, *e. serri-cornis*, *pomatinus substriatus*, and *parnus auriculatus*; and pupa of *elmis volkmari* and *e. aeneus*. G: D. (3625)

Berg, Carlos. Analecta lepidopterologica. Contribuciones al estudio de la fauna de la República Argentina y otros países americanos. (Anales Soc. cient. argent., 1882, v. 14, p. 275-288.)

Separate, Buenos Aires, 1882. t.-p. cover, 16 p. [t.-p., p. 275-288], 25 X 16, t 18.5 X 10.5.

Synonymical and other notes on species of *heterocera*; describes 7 new species, viz.: *oecilicus platensis*, *mi-mallo cordubensis*, *chloridea molochitina*, *acontia venusta*, *erastria nubila*, *trochisa (thalpochares) margavita*, and *plusia bonaerensis*, all from South America. Some species of North American *noctuidae* are noted from South America. G: D. (3626)

Berg, Carlos. Miscellanea lepidopterologica. Contribuciones al estudio de la fauna argentina y países limitrofes. (Anales Soc. cient. argent., 1883, v. 15, p. 151-169.)

Separate, Buenos Aires, 1883. t.-p. cover, 21 p. [t.-p., p. 151-169], 25 X 16, t 18.5 X 10.5.

Synonymical and other notes on species of *heterocera* (all exclusively South American except *ciudaphia bicoloralis*, which also occurs in North America); describes new species, viz.: *sphinx baruta*, *psoloptera meisteri*, *dirphia caisa*, *hyperchirya lama*, *micrattacus fulviventris*, *coenopeta fucosa*, *chadaca missionum*, *rhopalodes argentina*, *tomopteryx viduaria*, and *lagynopteryx valdiviana*, all from South America. G: D. (3627)

Bethune, C: James Stewart, *et al.* [Food-habits of larvae of Colorado potato beetle and other insects.] (Can. entom., Nov. 1879, v. 11, p. 202.)

Remarks by C: J. S. Bethune, W: S. Barnard, J. A. Lintner, W: Saunders, S: H. Scudder and J: H: Comstock, on the feeding of larvae of *doryphora decemlineata* on *asclepias* and other plants and on one another, and on the carnivorous propensities of larvae of *noctuidae* and *lycaenidae*, especially of *heliopsis armigera*; phytophagic variation of *doryphora decemlineata*. B: P. M. (3628)

Blaney, Dwight. Entomological notes from Laconia, N. H. (Ornithologist and oologist, Aug. 1884, v. 9, p. 101-102, 20 cm.)

List of butterflies taken in Laconia, N. H., with notes on the habits of a few species. G: D. (3629)

Bowditch, F: C. Notes on certain coleoptera. (Journ. Bost. zool. soc., July 1882, v. 1, p. 27-28.)

Describes briefly the transformations of *eucrada humeralis*; records the hibernation of several *buprestidae* in the loose bark at the foot of the trees and mentions the liking for sugar exhibited by *purpuricenus humeralis*. R. H. (3630)

- Brauer, Friedrich.** Biologisches über blut-saugende insecten mit besonderer berücksichtigung ihrer mundtheile. (Schr. d. vereins zur verbreitung naturw. kenntnisse in Wien, 1880-1881, bd. 21, p. 255-273.)
Habits and mouth-parts of *pulicidae*, *culex*, *simulium*, *phlebotomus*, *tabanidae*, *stomoxys*, *glossina*, *asilus*, *cmex* and *pediculus*; on phthiriasis. *G: D.* (3631)
- Bruner von Wattenwyl, Carl.** [Neues organ bei acridiern.] (Verhandl. k.-k. zool.-bot. gesells. in Wien, 1879, bd. 29; Sitz.-ber., p. 26-27.)
Notice of an organ of doubtful function on the femur of certain *acrididae*. *G: D.* (3632)
- Brush, E. F.** Ameisen gegen skorbut. (Deutsch-amer. apotheker-zeit., 1 Apr. 1883, jahrg. 4, p. 49, 7 cm.)
Wood-choppers in Maine eat masses of black ants as a remedy for scurvy; a concentrated tincture of the ants, or other preparation of formic acid, useful for the same purpose. *B: P. M.* (3633)
- Buckler, W:** Description of the larva, &c., of *hydroecia nictitans*. (Entom. mo. mag. Feb. 1882, v. 18, p. 195-197.)
Describes larva and pupa of *hydroecia nictitans*. *G: D.* (3634)
- Buckler, W:** Some points in the natural history of *papilio machaon*. (Entom. mo. mag., April 1882, v. 18, p. 244-249.)
Account of the egg and different larval stages of *papilio machaon*. *G: D.* (3635)
- Buckton, G:** Bowdler. Note on the action of potassium cyanide on organic colouring matter. (Entom. mo. mag., Sept. 1884, v. 21, p. 82.)
The mode by which potassium cyanide acts in killing insects and in changing their colors. *G: D.* (3636)
- Bush, Isidor.** Phylloxera galls: inconstancy in their appearance. (Amer. entom., Sep. 1880, v. 3, n. s., v. 1, p. 226, 6 cm.)
Apparent change in the preferences of *phylloxera vitifoliae* for varieties and species of *vitis* on which to produce its galls. *B: P. M.* (3637)
- Butler, Arthur Gardiner.** Descriptions of some apparently new species of *arctiidae* from North America. (Entom. mo. mag., Nov. 1881, v. 18, p. 135-136.)
Describes *arctia dodgei*, *a. ochreatea*, and *a. rhoda*, 3 new species. *G: D.* (3638)
- Cameron, P.** On parthenogenesis in the *tenthredinidae*. (Entom. mo. mag., Oct. 1884, v. 21, p. 103-104.)
Gives a list of the thirteen British species of *tenthredinidae* known to be parthenogenetic. *G: D.* (3639)
- Cameron, P.** On a simple method of mounting objects for microscopic examination. (Proc. nat. hist. soc. Glasgow, 1880-1881, v. 5, pt. 1, p. 4-7.)
Mode of mounting specimens dry or in Canada balsam in pieces of cardboard so as to be pinned in a collection of insects; mode of drying small larvae for preservation in collections. *G: D.* (3640)
- Candèze, Ernest.** [La *doryphora decemlineata*.] (Ann. soc. entom. Belg., 1875, v. 18; Comptes-rendus, p. 12-17.)
Separate, entitled, "La *doryphora decemlineata*. Lecture faite à la séance du 6 février 1875, de la Société entomologique de Belgique." [Bruxelles, 1875.] 6 p., 25 X 16, t 18 X 10.5.
Opposes the prohibition of importation of American potatoes into Belgium, claiming that there is little to be feared in Europe from *doryphora*. *G: D.* (3641)
- Candèze, Ernest.** La *doryphora decemlineata*. Lecture faite à la séance du 6 février 1875, de la Société entomologique de Belgique. [Bruxelles, 1875.] 6 p., 25 X 16, t 18 X 10.5.
Separate of author's " [La *doryphora decemlineata*]" (Ann. soc. entom. Belg., 1875, v. 18; Comptes-rendus, p. 12-17) [Rec., 3641]. *G: D.* (3642)
- Carrington, J: T.** Sallows. (Entomologist, April 1883, v. 16, p. 85-89.)
Modes of collecting the insects that frequent the catkins of sallow [*salix*] in England. *G: D.* (3643)
- Chapman, T.** Note on a dark variety of *cicindela campestris*. (Entom. mo. mag., April 1867, v. 3, p. 251.)
Note upon the capture of *cicindela campestris* var. *funeris*, in Scotland. *G: D.* (3644)
- Christy, Robert Miller.** Memoranda on insects in their relation to flowers. (Entomologist, 1883, v. 16: July, p. 145-150; Aug., p. 177-181.)
Details of observations upon the methodic habits of insects — principally fossorial hymenoptera — when visiting flowers. *G: D.* (3645)
- Edwards, H:** The caterpillar pest. An interesting communication from a well known actor and entomologist. (Evening telegram [N. Y.], 3 July 1883, v. 17, no. 5543, p. 3, col. 2, 25 cm.)
Ravages of and means against *orgyia leucostigma* in New York city. *B: P. M.* (3646)
- Edwards, W: H:** Description of the preparatory stages of *papilio philenor*, Linn. (Can. entom., Jan. 1881, v. 13, p. 9-14.)
Describes egg, larva, and chrysalis of *papilio philenor*. See also C: V. Riley's "Notes on *papilio philenor*" (Amer. nat., April [25 Mch.] 1881, v. 15, p. 327-329) [Rec., 3668]. *G: D.* (3647)

Edwards, W: H: On the length of life of butterflies. (Can. entom., Oct. 1881, v. 13, p. 205-214.)

Paper read before the American association for the advancement of science, at Cincinnati, 19 Aug. 1881, containing many notes on the longevity of diurnal lepidoptera. *A. K. D.* (3648)

Edwards, W: H: List of species of the diurnal lepidoptera of America north of Mexico. Boston, *Houghton, Mifflin & Co.*, 1884. t.-p. cover + t.-p. + adv. p. + 12 p. [without pagination], 32 X 25, t 19.5 X 14.5.

A list of the 612 species of diurnal lepidoptera of America north of Mexico, with their varieties. *G: D.* (3649)

Entomological club of the American association for the advancement of science

—*President, 1878* (Joseph Albert Lintner). Annual address. (Can. entom., Sep. [Oct.] 1878, v. 10, p. 171-176.) [Rec., 1348.]

Increase in the number of known species of North American insects within forty years; progress made and making in the knowledge of the life-histories of our insects and in the extent and value of entomological collections and of entomological study and the publication of its results; the encouragement of entomological investigations by the United States government; commendation of biological investigations. *B: P. M.* (3650)

Fauvel, Albert. Annuaire entomologique pour 1873. Caen, 1873. t.-p. cover, t.-p., 2 + 122 p., 15 X 10, t 11 X 7. fr. 1.50.

Contents:—Calendar, with blanks for memoranda; address-list of coleopterists of France, Belgium, Holland, Rhine provinces and Switzerland; lists of entomological societies and periodicals in Europe; bibliography, new species and synonymy, captures, excursions, habits of species, and other notes mostly on coleoptera; modes of collecting and preserving insects; necrology; exchanges desired and books for sale. *G: D.* (3651)

Fauvel, Albert. Annuaire entomologique pour 1874. 2e année. Caen, 1874. t.-p. cover, 140 p., 15 X 10, t 11 X 7. fr. 1.75.

Contents of similar nature to those of preceding year [Rec., 3651]. *G: D.* (3652)

Fauvel, Albert. Annuaire entomologique pour 1875. 3e année. Caen, 1875. t.-p. cover, t.-p., 140 p., 15 X 10, t 11 X 7. fr. 1.75.

Contents of similar nature to those of preceding years [Rec., 3651-3652]. *G: D.* (3653)

Fauvel, Albert. Annuaire entomologique pour 1876. 4e année. Caen, 1876. t.-p. cover, t.-p., 150 p., 15 X 10, t 11 X 7. fr. 1.75.

Contents of similar nature to those of preceding years [Rec., 3651-3653]. *G: D.* (3654)

Fauvel, Albert. Annuaire entomologique pour 1877. 5e année. Caen, 1877. t.-p. cover, 148 p., 15 X 10, t 11 X 7. fr. 1.75.

Contents of similar nature to those of preceding years [Rec., 3651-3654]. *G: D.* (3655)

Fauvel, Albert. Annuaire entomologique pour 1878. 6e année. Caen, 1878. t.-p. cover, 137 p., 15 X 10, t 11 X 7. fr. 1.75.

Contents of similar nature to those of preceding years [Rec., 3651-3655]. *G: D.* (3656)

Fauvel, Albert. Annuaire entomologique pour 1879. 7e année. Caen, 1879. t.-p. cover, 136 p., 15 X 10, t 11 X 7. fr. 1.75.

Notice. (Bericht...d. entom., 1879, p. 111.)

Rev. (Entom. nachrichten, 1 Sept. 1879, jahrg. 5, p. 233.)

Contents of similar nature to those of preceding years [Rec., 3651-3656]. *G: D.* (3657)

Fauvel, Albert. Annuaire entomologique pour 1880. 8e année. Caen, 1880. t.-p. cover, 139 p., 15 X 10, t 11 X 7. fr. 1.75.

Notice, by [F.] K [atter]. (Entom. nachrichten, 1880, jahrg. 6; Lit. rev., p. 49-50.)

Contents of similar nature to those of preceding years [Rec., 3651-3657]. *G: D.* (3658)

Grote, A: Radcliffe and Wetherby, Albert Gallatin. [Exhibition of moths, and on the number of broods of certain bombycid moths.] (Can. entom., Sep. [Oct.] 1878, v. 10, p. 176.) [Rec., 1348.]

Exhibition, by A: R. Grote, of some bombycid moths from Georgia, specifically named; *actias luna*, *samia cecropia*, *telea polyphemus* and *saturnia io* double-brooded in southern United States, but *citheronia regalis* only single-brooded there; statement, by A. G. Wetherby, that many of the above-named moths are also double-brooded in north-western [northern central] United States. *B: P. M.* (3659)

Harrington, W: Hague. List of Ottawa coleoptera. (Trans. Ottawa field-nat. club, 1883-1884 [Oct. 1884], v. 2, no. 1, p. 67-85.)

List of 1003 species of coleoptera belonging to 524 genera and representing 67 families which were taken in or near Ottawa, Ontario. *G: D.* (3660)

Harrington, W: Hague, **Fletcher, James, and Tyrrell, J. B.** Report of the entomological branch for the season of 1883. (Trans. Ottawa field-nat. club, 1883-1884 [Oct. 1884], v. 2, no. 1, p. 134-140.)

Notes on numerous species of insects from Ottawa, Ontario, and vicinity; notes are chiefly upon hymenoptera, lepidoptera, diptera, coleoptera and arachnida. *G: D.* (3661)

- Instinct** or reason displayed by insects (On.) [Can. entom., Sep. [Oct.] 1878, v. 10, p. 192.] [Rec., 1348.]
 "Instinct and reason differ in degree and not in kind."
B: P. M. (3662)
- Lintner**, Joseph Albert, *et al.* [On the collecting of noctuid moths by "sugaring", and on devices for collecting.] (Can. entom., Sep. [Oct.] 1878, v. 10, p. 191-192.) [Rec., 1348.]
 Remarks, by J. A. Lintner, on the successful result of attempts to collect *noctuidae* by the process known as "sugaring"; by A. G. Wetherby, on the question of the rarity of certain species of insects; and by Emily A. Smith, E. B. Reed and J. A. Lintner on devices by which collecting-bottles might be handled conveniently, and on the proper use of lanterns. *B: P. M. (3663)*
- Moseley**, H: Nottidge. On the sound made by the death's head moth, "*acherontia atropos*." (Nature, 20 June 1872, v. 6, p. 151-153, 115 cm., 1 fig.)
 Rev., by A. W. Bennet, entitled "The sound produced by the death's head moth." (Amer. nat. Mch. 1873 v. 7, p. 173-174.)
 Outline of previous researches to discover the mode of sonification of *acherontia atropos*; experiments by which the author is led to believe that "the sound is produced by expiration through the proboscis," the air being expelled from a dome-shaped cavity in the upper part of the head. *G: D. (3664)*
- Packard**, Alpheus Spring, *jr.* The hessian fly. Habits and natural history. (Amer. entom., May 1880, v. 3, n. s., v. 1, p. 118-121, 127 cm., fig. 46.)
 Advance reprint, with slight changes and omissions, of section entitled "Habits of the hessian fly" in author's "The hessian fly, its ravages" . . . (Bull. no. 4 U. S. entom. comm.) [Rec., 2207], p. 12-15, pl. 1; seasons and number of broods of *cecidomyia destructor*; method of oviposition; habits of larva. *B: P. M. (3665)*
- Packard**, Alpheus Spring, *jr.* The hessian fly. . . . (Amer. entom., June 1880, v. 3, n. s., v. 1, p. 140-141, 44 cm.)
 Advance reprint of section entitled "Summary of the habits and remedies against the hessian fly" in author's "The hessian fly, its ravages" . . . (Bull. no. 4 U. S. entom. comm.) [Rec., 2207], p. 38-39, and of paragraph entitled "Probable limits of the hessian fly" (*l. c.*, p. 38); summary of the life-history of *cecidomyia destructor*; its parasites, present and prospective geographical distribution, and means it. *B: P. M. (3666)*
- Riley**, C: Valentine. [Abstracts of some papers proposed to be read to the association.] (Can. entom., Sep. [Oct.] 1878, v. 10, p. 177-178.) [Rec., 1348.]
Hornia is parasitic on *bombus*, and differs in several points from other *meloidae*; application of vernacular names to larva and imago of *corydalus cornutus*; objections to A. S. Packard, jr's explanation of the manner in which *bombycidae* issue from their cocoons. *B: P. M. (3667)*
- Riley**, C: Valentine. Notes on *papilio philenor*. (Amer. nat., Apr., [25 Mch.] 1881, v. 15) (RILEY, C: V. Entomology. . . . [Apr. 1881]), p. 327-329, fig. 1-3.
 Describes egg and newly-hatched larva of *papilio philenor*; figures imago, larva and pupa of this species; its food-plant (*aristolochia*) and geographical distribution, and its occurrence in swarms. *G: D. (3668)*
- Smith**, Emily Adella. [Damage done to oaks by *argyrolepis quercifolia*.] (Can. entom., Sep. [Oct.] 1878, v. 10, p. 192.) [Rec., 1348.]
 Statement that oak trees in Wisconsin and Illinois are injured by the larvae of *argyrolepis quercifolia*. *B: P. M. (3669)*
- Smith**, Emily Adella, *et al.* [On the life history of *lecanium acer corticis*, and on means of destroying this and similar insects.] (Can. entom., Sep. [Oct.] 1878, v. 10, p. 176-177.) [Rec., 1348.]
 Abstract of communication to Entomological club of A. A. A. S., by E. A. Smith, with remarks by T. Bassnett and C. V. Riley; life-history of *lecanium acer corticis*; the use of carbolic acid or of kerosene, applied with a fire extinguisher, recommended for the destruction of *coccidae*. *B: P. M. (3670)*
- Suffrian**, E. Synonymische miscellaneen. 30. (Entom. zeitung. . . . Stettin, 1867, bd. 28, p. 445-449.)
 Compares the varieties of *cicindela sexguttata* with those of *c. campestris*, with especial reference to the elytral markings. *G: D. (3671)*
- Townsend**, C: H: Tyler. Further remarks upon the variation of the elytral markings in *cicindela sexguttata*. (Can. entom., July 1884, v. 16, p. 125-127.)
 Additional remarks in continuation of the author's "On the variation of the elytral markings in *cicindela sexguttata*." (Can. entom., Nov. 1883, v. 15, p. 205-208) [Rec., 3559]. *G: D. (3672)*
- Trelease**, W: The fertilization of *aquilegia vulgaris* [Rec., 2202].
 Rev., by T: Meehan, entitled "Fertilization of *aquilegia*." (Amer. nat., Feb. [25 Jan.] 1881, v. 15, p. 134-135, 4 cm.)
W: T. (3673)
- Trouvelot**, L: The American silk worm. (Amer. nat., 1867, v. 1: Mch., p. 30-38; Apr., p. 85-94; May, p. 145-149; pl. 5-6.)
 Description and figures of different stages of *telega polyphemus*, with an account of its life-history; its mode of exit from cocoon, expanding of wings, oviposition, hatching, rate of growth and consumption of food, number of molts, mode of molting, food-plants, enemies, power of sight in larva, presence of immature eggs in larva, structure of silk-glands; effect of temperature on pupae, and of exclusion of air from pupae; figure of *ophion macrurum*, a parasite; processes of silk-culture with this species. *G: D. (3674)*



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