



ARTHUR WARD LINDSEY (1894 - 1963)

by EDWARD G. VOSS

"The teacher who gives up all efforts at investigation is not likely to be an inspiration to his students," wrote A. W. LINDSEY in 1938 in an article "On Teaching Biology." A better example than LINDSEY himself

could hardly have been found to illustrate the positive corollary of that statement: The teacher with a zest for investigation *will* be an inspiration to his students. I write these largely personal words of appreciation as one of those fortunate students — apparently the only one during LINDSEY's 39-year teaching career who shared and sustained any of that particular interest of his in the Skippers (Hesperioidae) for which his name is known among the members of our Society.

ARTHUR WARD LINDSEY was born January 11, 1894, in Council Bluffs, Iowa, the son of WILLIAM ENNIS LINDSEY and ELIZABETH ELLEN AGNES PHOEBE (RANDALL) LINDSEY. He attended both high school and Morningside College (A.B. 1916; hon. Sc.D. 1946) in Sioux City. It is therefore hardly surprising that his first publication, "The Butterflies of Woodbury County" (1914), should refer to the Sioux City area. This paper, completed when he was an undergraduate, with the aid and encouragement of his Morningside mentor, THOMAS CALDERWOOD STEPHENS, closed with what is in retrospect a statement more surprising: "It was my intention to include the Skippers in this paper but the greater difficulty attending a study of this group, and the limited time which I have been able to give to the work makes it necessary to omit them for the present."

Never again were the Skippers to be neglected! Five years later (1919) he put the finishing touches on his doctoral dissertation at the State University of Iowa: "The Hesperioidae of America North of Mexico" (published in 1921), thus meeting a serious need for literature on this group of insects.

During the "last stages" of his doctoral work, he visited the Barnes Collection of North American Lepidoptera in Decatur, Illinois, and became acquainted not only with BARNES but also with the late J. H. McDUNNOUGH, who had been curator of Dr. BARNES' private collection since 1910. When Dr. McDUNNOUGH left for Ottawa in 1919, LINDSEY succeeded him as curator of the Barnes Collection. (According to GUNDER [*Ent. news* 40: 250; 1929], LINDSEY was with BARNES from April 2, 1919, to August 19, 1921.) During the nearly two and one-half years which he spent as curator, the work was "largely routine," the major research being a revision of the moth family Pterophoridae, published in Volume IV of the Barnes *Contributions* (1921). (Although BARNES is listed as co-author, the work was LINDSEY's, as pointed out in Mrs. REMINGTON's biography of BARNES, *Lepid. news* 3: 53-54; 1949.)

Why LINDSEY, after so promising a start in professional entomology, turned to a career almost entirely of college teaching, I do not know. In any event, in 1921 he joined the faculty of his *alma mater*, Morningside College, and after a year came as professor and head of zoology to

Denison University, Granville, Ohio, where he remained until his retirement from teaching in 1960. Summers, which as a graduate student he had spent with the Bureau of Entomology, USDA (1916-1918), continued to provide opportunity for non-academic employment, or field work, or in some years for service on the staff of summer stations, as in 1928 (Franz Theodore Stone Laboratory), 1932 (Rocky Mountain Biological Laboratory), and 1940 (Chesapeake Biological Laboratory).

During his first two decades at Denison, he published over a dozen papers on Hesperioidea of North and South America, major contributions including a revision of his dissertation, "The Hesperioidea of North America," (1931) in collaboration with E. L. BELL and R. C. WILLIAMS, and "A Preliminary Revision of *Hesperia*" (1942).¹ Subsequent increased responsibilities (including chairmanship of the department of biological sciences from the merger of botany and zoology in 1940 until 1954), additional work during World War II, and an increasing interest in experimental evolution, cut the time available for taxonomic research.

It was the fall of 1945 when, as a high school senior, I first met Dr. LINDSEY on a visit to Denison. (He had earlier, with characteristic generosity, favored me with reprints of many of his lepidopterological papers.) The following year, as a freshman at Denison, I was put to work, as soon as LINDSEY returned from a sabbatical semester in Florida, mounting moths. Thus began association with a teacher gifted both in guiding the individual and in classroom presentation. Seldom, if ever, had he previously had the opportunity to instruct an eager Denison student in such techniques, as he had deftly mastered them, as spreading, de-greasing, and making microscope preparations of Lepidoptera. But year after year his classes in evolution, genetics, embryology, and other subjects exposed countless students to his remarkable clarity and precision of expression. Toward the end of a semester of embryology, I discovered that I had taken scarcely two pages of notes; so logical and clear had his exposition been that it seemed as if embryological development *could* proceed in no other way than he had smoothly described it!

Under the leadership of LINDSEY, Denison attained an enviable reputation for producing exceptionally competent pre-medical students; a recommendation from him almost invariably meant acceptance in medical school. His habits of rigorous scientific thinking and explanation were contagious, and he inspired many with the excitement of research.

¹Copies of the issue containing the latter (Vol.37, Arts.1-2) may be obtained at \$1.00 each postpaid from the Editor, Journal of the Scientific Laboratories, Denison University, Granville, Ohio. The issue devoted to the former (Vol.26, Art.1) is in very limited supply, and its distribution (at \$1.50) is now restricted to libraries.

Numerous senior honors projects of high caliber were produced by his students, although I do not happen to know of any project besides my own ("On the Classification of the Hesperidae", *Ann. ent. soc. Amer.* 45: 246-258; 1952) on a lepidopterological subject. However, if my experience in working on higher categories in the Skippers was typical (and I have no reason to doubt that it was), he permitted his students a high degree of independence and in no way attempted to impose upon them whatever ideas he may have held. Seemingly, to many, he appeared a bit remote and aloof; yet in fact he was ever approachable and willing to counsel with students.

Certainly most of his students knew him only as an esteemed teacher, an author of textbooks (five altogether, in general zoology, evolution, and genetics), and an adviser. Some knew of his extraordinary garden of daffodils or his taste for the music of BACH. Relatively few were really aware of his international reputation as an authority on the Lepidoptera and his professional attainments. With little or no secretarial assistance or reduction in his teaching load, he served as editor ("Managing Editor") of the distinguished *Annals of the Entomological Society of America* 1945-1948, succeeding C. H. KENNEDY, whom he had aided previously as Assistant Managing Editor. He was Secretary of the Ohio Academy of Science 1941-1945 and President in 1948. One wonders what his future might have been had he continued, in 1921, to devote himself full time to taxonomic research, or had he succumbed later to offers to associate himself with a larger institution. Many are the grateful physicians, teachers, and researchers among Denison alumni whose good fortune it was that A. W. LINDSEY chose to spend his life at a small college in central Ohio, a friend and inspiration to his students. "Nothing relating to man can fail to be biological." Upon this premise, Dr. LINDSEY based his teaching and an occasional somewhat philosophical excursion — *e. g.*, his articles on "The Faith of Science" and "The Fallacy of Communism" (1948).

In 1950, he reached the decision to sell to the Carnegie Museum his *Hesperia* collection and whatever other North American material had accumulated since the disposition of his collection some 20 years before — to the same Museum. This time, he did not accumulate another collection, determining to devote what research opportunity he had to the field of evolution, especially involving *Paramecium*. A Charter Member of the Lepidopterists' Society (and a member of its original "Board of Specialists"), he finally allowed his membership to lapse. But although he was no longer actively working with Skippers, they never lost their fascination for him. Writing to me in October, 1958, as he approached retirement, he commented at some length on the work of the late Brigadier EVANS, and concluded: "EVANS, like so many taxonomists, depends too heavily on

genitalia alone. After my experience with *Erynnis afraninus* I am convinced that we need more information on early stages to solve some of these problems, but I'm afraid it will be gathered very slowly. If I should some day locate in the southwest I'd like to rear some of the skippers which seem to me to be valid species even though their genitalia are similar. It may be a vain hope, however, for as I approach 65 I realize that time for field work, particularly in the mountains, is running out."

On the morning of March 8, 1963, following a bout with influenza, A. W. LINDSEY died of a heart attack on a downtown street in Lancaster, Ohio, where he is survived by his second wife, the former Edith (TOLLIVER) McMILLEN (whom he married in 1955), and three step-children and their families. He was buried in Lancaster. He is also survived by his former wife, Mrs. WINIFRED (WOOD) LINDSEY, whom he married in 1919.

On the numerous occasions I have had during the past dozen years to meet with Denison alumni at various gatherings, it is significant that former biology majors and pre-medical students have invariably asked about Dr. LINDSEY — and spoken in grateful terms of the training received at his hand. It is a deserved tribute to a great soul when his former students so universally remember him with such appreciation and affection.

The books, chapters in books, articles, notes, and reviews here listed all bear LINDSEY's name (or initials) as author. In addition, without any attribution of authorship of specific articles, he served as one of the Contributing Editors for the first, second, and third editions (1938, 1947, 1958) of *Van Nostrand's Scientific Encyclopedia*.

I am grateful to Dean PARKER E. LICHTENSTEIN and librarians Miss LOIS ENGLEMAN and Mrs. WALTER SECOR, of Denison University, for their aid in adding several titles to the bibliography and in locating for me a few publications which were not available in the University of Michigan libraries for verification of citations. I only hope that not too many titles have been overlooked in the following compilation.

BIBLIOGRAPHY OF A. W. LINDSEY

- 1914. The butterflies of Woodbury County. *Proc. Iowa acad.* 21: 341-346.
- 1917. A list of the butterflies of Iowa. *Ent. news* 28: 347-353.
- 1918. Notes on distribution. *Lepidopterist* 2: 30-31; 37-38.
- 1919. A new skipper from South America (Lepid., Hesperidae). *Ent. news* 30: 169-170.
- [With Wm. Barnes] A new geometrid from Arizona (Lepid.). *Ent. news* 30: 245-246.
- 1920. Some Iowa records of Lepidoptera. *Proc. Iowa acad.* 27: 319-335.
- 1921. [With Wm. Barnes] The Pterophoridae of America, north of Mexico. *Contr. nat. hist. Lepid. N. Amer.* 4: 279-481, 14 pls.
- [With Wm. Barnes] Further notes on "A rare pamphlet" (Hym., Lep., Neur.). *Ent. news* 32: 26-27.

- [With Wm. Barnes] On some species of *Hesperia* (Lepid., Hesperidae). *Ent. news* 32: 78-80.
- [With Wm. Barnes] Oberthür's "Études," Vol. XVII. An appreciation and some notes. *Ent. news* 32: 253-254.
- [With Wm. Barnes] Notes and new species (Lep., Arctiidae). *Ent. news* 32: 295-298.
- [With Wm. Barnes] A new species of *Heterocampa* (Lep., Notodontidae). *Psyche* 28: 150-151.
- [With Wm. Barnes] Notes on Noctuidae with descriptions of some new species (Lep.). *Psyche* 28: 156-159.
- The Hesperioidea of America north of Mexico. *Univ. Iowa stud. nat. hist.* 9 (4): 1-114. [Erroneously given as No. 2 on cover and title page.]
1922. [With Wm. Barnes] A review of some generic names in the order Lepidoptera. *Ann. ent. soc. Amer.* 15: 89-99.
- [With Wm. Barnes] A new genus and species of Noctuidae. (Lep.). *Bull. Brooklyn ent. soc.* 17: 56-57.
- [With Wm. Barnes] New Noctuidae (Lep.). *Bull. Brooklyn ent. soc.* 17: 71-76.
- [With Wm. Barnes] Descriptions of two new species of Aegeriidae (Lep.). *Bull. Brooklyn ent. soc.* 17: 122-123.
- [With Wm. Barnes] New synonyms in the Noctuidae (Lep.). *Ent. news* 33: 9-10.
- Notes on the distribution and synonymy of some species of Pterophoridae (Lepid.). *Ent. news* 33: 211-213.
- The authorship of the Lepidoptera described in the Encyclopédie Méthodique, Vol. IX. *Ent. news* 33: 281-282.
- Iowa microlepidoptera. *Proc. Iowa acad.* 29: 157-161.
1923. New names in the order of Lepidoptera. *Ent. news* 34: 123.
- On the authorship of the Encyclopédie Méthodique, Vol. IX. A correction. (Lepid.). *Ent. news* 34: 123-124.
- New North American Hesperidae (Lepid.). *Ent. news* 34: 209-210.
- The egg and larva of *Hesperia juba* Bdv. *Journ. sci. labs. Denison univ.* 20: 121-126, 1 pl.
1924. *Trichoptilus pygmaeus* Wlsm. and the neurulation of the family Pterophoridae. *Journ. sci. labs. Denison univ.* 20: 187-192, 1 pl.
- Some problems of taxonomy. *Journ. sci. labs. Denison univ.* 20: 289-305.
1925. The types of hesperioid genera. *Ann. ent. soc. Amer.* 18: 75-106.
- The Cornell University entomological expedition to South America of 1919-1920. Scientific results. No. II. Hesperioidea. *Journ. sci. labs. Denison univ.* 21: 71-114, 6 pls.
1926. Lepidoptera collected by the Barbados-Antigua expedition from the University of Iowa. *Univ. Iowa stud. nat. hist.* 11 (7): 33-35.
1927. Factors in phylogenetic development. *Amer. nat.* 61: 251-265.
- Notes on phylogeny in *Erynnis* Schr. (*Thanaos* auct.). *Journ. sci. labs. Denison univ.* 22: 109-115.
- Use and disuse in the chromosomes. *Science* 66: 382-329.
1928. *Hesperia eos* Edwards (Lep.: Hesperidae). *Ent. news* 39: 91-93.
- *Pyrgus centaureae* and *freija* (Lep.: Hesperidae). *Ent. news* 39: 239-241.
- Hesperioidea from the Kartabo district of British Guiana. *Journ. sci. labs. Denison univ.* 23: 231-235.
1929. *Textbook of evolution and genetics*. Macmillan, N. Y. 459 pp.
1931. [With E. L. Bell & R. C. Williams] The Hesperioidea of North America. *Journ. sci. labs. Denison univ.* 26: 1-142.
1931. *The problems of evolution*. 236 pp. Macmillan, N. Y.
1932. *A textbook of genetics*. 354 pp. Macmillan, N. Y.
1934. Leland Ossian Howard, gentleman and entomologist. *Bios* 5: 37-43.
- Pseudo-hemophilia. *Eugenical news* 19: 145.

1937. *The science of animal life*. Harcourt, Brace, N. Y. 656 pp.
1938. [Rev. of] *A catalogue of the original descriptions of the Rhopalocera found north of the Mexican border. . . . Part one*. *Ann. ent. soc. Amer.* 31: 648.
 On teaching biology. *Bios* 9: 59-65.
 [Rev. of] *A monographic study of the red crossbill*. *Wilson bull.* 50: 148-149.
1939. A new species of *Hesperia* (Lepidoptera, Hesperidae). *Ann. ent. soc. Amer.* 32: 171-172.
 Variations of insect genitalia. *Ann. ent. soc. Amer.* 173-176.
 [Rev. of] *A catalogue of the original descriptions of the Rhopalocera found north of the Mexican border. . . . Part two*. *Ann. ent. soc. Amer.* 32: 478.
 Research and teaching. *Bios* 10: 28-34.
 The processes of evolution. *Quart. rev. biol.* 14: 220-225.
1940. [Rev. of] *The principles of heredity*. *Ann. ent. soc. Amer.* 33: 356.
 Two new forms of *Hesperia*. (Lepidoptera, Hesperidae). *Ann. ent. soc. Amer.* 33: 373-376.
 [Rev. of] *The spider book*. *Ann. ent. soc. Amer.* 33: 481.
1941. [Rev. of] *Butterflies*. *Ann. ent. soc. Amer.* 34: 646.
 A new form of *Hesperia colorado* Scudder (Lepidoptera, Hesperidae). *Ann. ent. soc. Amer.* 34: 770-772.
1942. Premedical education. *Assoc. Amer. colleges bull.* 28: 293-298. [By a "Committee of the Ohio Academy of Science," A. W. Lindsey, chairman.]
 The Life Science Building at Denison University. *Journ. sci. labs. Denison univ.* 36: 156-159, 1 pl.
 A preliminary revision of *Hesperia*. *Journ. sci. labs. Denison univ.* 37: 1-50, 6 pls.
1944. [Rev. of] *Lycaenidae of the Antilles* (Lepidoptera, Rhopalocera). *Ann. ent. soc. Amer.* 37: 192.
 [Rev. of] *Revision of the North American genera of the phalaenid subfamily Plusiinae* (Lepidoptera). *Ann. ent. soc. Amer.* 37: 324.
 [Rev. of] *The caddis flies, or Trichoptera, of Illinois*. *Ann. ent. soc. Amer.* 37: 392.
 [Rev. of] *Insects of Porto Rico and the Virgin Islands, Rhopalocera or butterflies*. *Ann. ent. soc. Amer.* 37: 408.
 [Rev. of] *Studies in neotropical Mallophaga (III). Tinamidae No. 2*. *Ann. ent. soc. Amer.* 37: 413.
 [Rev. of] *Studies on the biology of the webbing clothes moth* (*Tineola bisselliella* Hum.). *Ann. ent. soc. Amer.* 37: 413.
 [Rev. of] *Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America, Part 2*. *Ann. ent. soc. Amer.* 37: 419.
 [Rev. of] *The biotic provinces of North America*. *Ann. ent. soc. Amer.* 37: 440.
1945. [Rev. of] *A history of science and its relations with philosophy and religion*. *Ann. ent. soc. Amer.* 38: 162.
 [Rev. of] *Tyroglyphid mites in stored products. I. A survey of published information*. Supplement, 1944. *Ann. ent. soc. Amer.* 38: 206.
 [Rev. of] *Emotional factors in learning*. *Ann. ent. soc. Amer.* 38: 222.
 [Rev. of] *Hesperidarum Rei Publicae Aequatoris catalogus*. *Ann. ent. soc. Amer.* 38: 280.
 [Rev. of] *Acta zoologica lilloana*. *Ann. ent. soc. Amer.* 38: 301.
 [Rev. of] *The imported long-horned weevil, Calomycter setarius Roelofs*. *Ann. ent. soc. Amer.* 38: 301.
 [Rev. of] *Dynastinae of North America, with descriptions of the larvae and keys to genera and species* (Coleoptera: Scarabaeidae). *Ann. ent. soc. Amer.* 38: 301.
 [Rev. of] *Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America, Part 3*. *Ann. ent. soc. Amer.* 38: 313.

- [Rev. of] *Studies in the genetics of Drosophila. IV Papers dealing with the taxonomy, nutrition, cytology and interspecific hybridization in Drosophila*. Ann. ent. soc. Amer. 38: 320.
- [Rev. of] *General catalogue of the Hemiptera*. Ann. ent. soc. Amer. 38: 342.
- [Rev. of] *Tempo and mode in evolution*. Ann. ent. soc. Amer. 38: 396.
- [Rev. of] *In honor of Alexander Petrunkevitch. . . .* Ann. ent. soc. Amer. 38: 411.
- [Rev. of] *The Asilidae or robber flies of Georgia*. Ann. ent. soc. Amer. 38: 440.
- [Rev. of] *Bibliography of the Homoptera (Auchenorrhyncha)*. Ann. ent. soc. Amer. 38: 454.
- [Rev. of] *An annotated list of the Scolytoidea of Washington*. Ann. ent. soc. Amer. 38: 454.
- [Rev. of] *Cercopidae of Cuba*. Ann. ent. soc. Amer. 38: 454.
- [Rev. of] *The nature of the beast*. Ann. ent. soc. Amer. 38: 454.
- [Rev. of] *La vie des Scarabées*. Ann. ent. soc. Amer. 38: 455.
- International Commission on Zoological Nomenclature. Ann. ent. soc. Amer. 38: 455.
- [Rev. of] *The Rockefeller Foundation, a review for 1944*. Ann. ent. soc. Amer. 38: 455.
- [Rev. of] *Bibliography of biographies of entomologists*. Ann. ent. soc. Amer. 38: 456.
- [Rev. of] *The genus Fundella Zeller: A contribution toward a revision of the American pyralidoid moths of the family Phycitidae*. Ann. ent. soc. Amer. 38: 456.
- [Rev. of] *South America called them*. Ann. ent. soc. Amer. 38: 456.
- [Rev. of] *The environment, life history and structure of the water boatman, Ramphocorixa acuminata (Uhler) (Hemiptera, Corixidae)*. Ann. ent. soc. Amer. 38: 481.
- [Rev. of] *The nearctic species of Tendipedini*. Ann. ent. soc. Amer. 38: 504.
- [Rev. of] *The head and mouthparts of the sucking lice (Insecta: Anoplura)*. Ann. ent. soc. Amer. 38: 601.
- [Rev. of] *Catalogo das Aves do Brasil e lista dos exemplares existentes na colecao do Departamento de Zoologia*. Ann. ent. soc. Amer. 38: 601.
- [Rev. of] *Boletim fitossanitario*. Ann. ent. soc. Amer. 38: 601.
- [Rev. of] *Revision of nearctic Bibionidae including neotropical Plecia and Penthetria (Diptera)*. Ann. ent. soc. Amer. 38: 601-602.
- [Rev. of] *A monograph of the beetles associated with stored products*. Ann. ent. soc. Amer. 38: 602.
- [Rev. of] *Tecnicas gerais seguidas no estudo do ordem Mantodea Burmeister, 1838 [and] Sobre a família Acanthopidae Burmeister, 1838, emend. (Mantodea)*. Ann. ent. soc. Amer. 38: 602.
- [Rev. of] *Papéis avulsos do Departamento de Zoologia, Vol. IV*. Ann. ent. soc. Amer. 38: 602-603.
1946. [Rev. of] *The Elateridae of New York state*. Ann. ent. soc. Amer. 39: 32.
- [Rev. of] *Revista Chilena de historia natural pura y aplicada*. Ann. ent. soc. Amer. 39: 68.
- [Rev. of] *A review of the literature on soil insecticides*. Ann. ent. soc. Amer. 39: 100.
- [Rev. of] *Science and the planned state*. Ann. ent. soc. Amer. 39: 118.
- [Rev. of] *The ichneumon-flies of the genus Cryptanura Brulle, mainly tropical American*. Ann. ent. soc. Amer. 39: 144.
- [Rev. of] *Contributions to the genetics, taxonomy, and ecology of Drosophila pseudoobscura and its relatives*. Ann. ent. soc. Amer. 39: 151.
- [Notice of 11 Bulletins of National Museum of Brazil] Ann. ent. soc. Amer. 39: 152.

- [Rev. of] *Entoma, a directory of insect and plant pest control*. Ann. ent. soc. Amer. 39: 152.
- [Rev. of] *Brazil, orchid of the tropics*. Ann. ent. soc. Amer. 39: 176.
- [Rev. of] *The Fulgoroidea, or lanternflies, of Trinidad and adjacent parts of South America*. Ann. ent. soc. Amer. 39: 189.
- [Rev. of] *Entomological nomenclature and literature*. Ann. ent. soc. Amer. 39: 192.
- [Rev. of] *Insetos do Brasil, Vol. V, Lepidopteros, Part I*. Ann. ent. soc. Amer. 39: 241.
- [Rev. of] *Monograph of the family Mordellidae (Coleoptera) of North America, north of Mexico*. Ann. ent. soc. Amer. 39: 241.
- [Rev. of] *Simulidos del nuevo mundo*. Ann. ent. soc. Amer. 39: 258.
- [Rev. of] *Insect dietary*. Ann. ent. soc. Amer. 39: 264.
- [Rev. of] *On some diplopods from the Indo-Australian archipelago*. Ann. ent. soc. Amer. 39: 291.
- [Rev. of] *Catalogo de los Dipteros de Chile*. Ann. ent. soc. Amer. 39: 382.
- [Rev. of] *Common insects of Hawaii*. Ann. ent. soc. Amer. 39: 396.
- [Rev. of] *Taxonomic studies of nearctic Cryptini (Ichneumonidae, Hymenoptera)*. Ann. ent. soc. Amer. 39: 445.
- [Rev. of] *La vie des sauterelles*. Ann. ent. soc. Amer. 39: 445.
- [Rev. of] *Papéis avulsos do Departamento de Zoologia, Vol. VI*. Ann. ent. soc. Amer. 39: 450.
- [Rev. of] *Insect microbiology*. Ann. ent. soc. Amer. 39: 542.
- [Rev. of] *Checklist of the coleopterous insects of Mexico, Central America, the West Indies and South America, Part IV*. Ann. ent. soc. Amer. 39: 543.
- [Rev. of] *Catalogo de los insectos que atacan a las plantas economicas de Cuba*. Ann. ent. soc. Amer. 39: 560.
- [Rev. of] *The naturalists' directory, thirty-fourth edition*. Ann. ent. soc. Amer. 39: 563.
- [Rev. of] *Dispersion of small organisms, distance dispersion rates of bacteria, spores, seeds, pollen, and insects; incidence rates of diseases and injuries*. Ann. ent. soc. Amer. 39: 606.
- [Rev. of] *The Tabanidae or horseflies and deerflies of Georgia*. Ann. ent. soc. Amer. 39: 618.
1947. [Rev. of] *DDT and the insect problem*. Ann. ent. soc. Amer. 40: 55.
- [Rev. of] *The North American clear-wing moths of the family Aegeriidae*. Ann. ent. soc. Amer. 40: 68.
- [Rev. of] *Apes, giants and man*. Ann. ent. soc. Amer. 40: 122.
- [Rev. of] *The butterflies of Washington*. Ann. ent. soc. Amer. 40: 136.
- [Rev. of] *Arquivos de zoologia do estado de Sao Paulo, Vol. IV*. Ann. ent. soc. Amer. 40: 136.
- [Rev. of] *Man the animal*. Ann. ent. soc. Amer. 40: 153-154.
- Clarence Hamilton Kennedy. Ann. ent. soc. Amer. 40: 169-171, 1 pl.
- [Rev. of] *Review of the new world species of Hippodamia Dejean (Coleoptera: Coccinellidae)*. Ann. ent. soc. Amer. 40: 202.
- [Rev. of] *A review of the North American species of Philanthus, north of Mexico (Hymenoptera: Sphecidae)*. Ann. ent. soc. Amer. 40: 212.
- [Rev. of] *The Coleopterists' Bulletin*. Ann. ent. soc. Amer. 40: 220.
- The Lepidopterists' Society. Ann. ent. soc. Amer. 40: 317.
- [Rev. of] *The Rockefeller Foundation, a review for 1946*. Ann. ent. soc. Amer. 40: 328.
- [Rev. of] *Ladybeetles of the genus Epilachna (sens. lat.) in Asia, Europe and Australia*. Ann. ent. soc. Amer. 40: 349.
- [Rev. of] *General catalogue of the Hemiptera, fascicle V, Polyctenidae*. Ann. ent. soc. Amer. 40: 371.

- [Rev. of] *Fleas of western North America*. *Ann. ent. soc. Amer.* 40: 372.
- [Rev. of] *The thoracic muscles of the cockroach* *Periplaneta americana* (L.). *Ann. ent. soc. Amer.* 40: 396.
- [Rev. of] *Fragments of entomological history, Part II*. *Ann. ent. soc. Amer.* 40: 400.
- [Rev. of] *An insect book for the pocket*. *Ann. ent. soc. Amer.* 40: 416.
- [Rev. of] *The insect cranium and the "epicranial suture"*. *Ann. ent. soc. Amer.* 40: 474.
- [Rev. of] *A catalogue of the Hesperioidea of Venezuela*. *Ann. ent. soc. Amer.* 40: 517.
- [Rev. of] *General catalogue of the Hemiptera, fascicle IV, Fulgoroidea, Part 8, Dictyophoridae*. *Ann. ent. soc. Amer.* 40: 544.
- [Rev. of] *Chronica palmarum*. *Ann. ent. soc. Amer.* 40: 556.
- [Rev. of] *Les insectes des palmiers*. *Ann. ent. soc. Amer.* 40: 556.
- [Rev. of] *Chemical insect attractants and repellents*. *Ann. ent. soc. Amer.* 40: 575.
- [Rev. of] *Nature and prevention of plant diseases*. *Ann. ent. soc. Amer.* 40: 603.
- [Rev. of] *A generic revision of the ichneumon-flies of the tribe Ophionini*. *Ann. ent. soc. Amer.* 40: 649.
- [Rev. of] *A plea for brevity — and sanity — in zoological nomenclature*. *Ann. ent. soc. Amer.* 40: 651.
- [Rev. of] *Papéis avulsos do Departamento de Zoologia, vol. VII*. *Ann. ent. soc. Amer.* 40: 655.
- [Rev. of] *A revision of the tribe Scaphytopini (Homoptera, Cicadellidae) in America north of Mexico*. *Ann. Ent. soc. Amer.* 40: 661.
- [Rev. of] *Basic botany*. *Ann. ent. soc. Amer.* 40: 671.
- [Rev. of] *The dates and editions of Curtis' British entomology*. *Ann. ent. soc. Amer.* 40: 676.
- [Rev. of] *Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America, Part 5*. *Ann. ent. soc. Amer.* 40: 687.
- [Rev. of] *Review of the weevils of the tribe Opharyastini of America north of Mexico*. *Ann. ent. soc. Amer.* 40: 704.
- [Rev. of] *Pulgas, bibliografia, catalogo e hospedadores*. *Ann. ent. soc. Amer.* 40: 704.
1948. Scent. Chapter 3 in *American Sporting Dogs* (Eugene V. Connett, editor): pp.21-38. Van Nostrand, New York.
- [Rev. of] *Insects and human welfare*. *Ann. ent. soc. Amer.* 41: 16.
- [Rev. of] *Catalogus Hesperidarum Rei Publicae Colombianae*. *Ann. ent. soc. Amer.* 41: 26.
- [Rev. of] *Hesperioidea Argentina, XVI, XVII, XVIII*. *Ann. ent. soc. Amer.* 41: 40.
- [Rev. of] *Sexual behavior in the human male*. *Ann. ent. soc. Amer.* 41: 57.
- The fallacy of communism. *Ohio journ. sci.* 48: 169-175.
- The faith of science. *Sci. monthly* 66: 395-398.
1951. Biology. Chapter 3 in *College Teaching and Christian Values* (Paul M. Limbert, editor): pp. 33-53. Association Press. N.Y.
- [Rev. of] *The Karanasa butterflies, a study in evolution*. *Ann. ent. soc. Amer.* 44: 294-295.
- [Rev. of] *A catalogue of the Hesperidae from Europe, Asia and Australia in the British Museum (Natural History)*. *Quart. rev. biol.* 26: 75-76.
1952. *Principles of organic evolution*. 375 pp. Mosby, St. Louis.