

method are bad: (1) One can not tell in many cases if it is the valid species, under the number cited which is the type or if it is one of often several synonyms entered under that number. (2) Clerical error is almost inevitable when this method is employed in a large catalogue like the one now under review. Thus in a goodly number of cases the genotype cited by Mr. Kirby is obviously wrong, often being a species but recently described or not one originally included. Such errors are evidently due to adding a species to the genus, or taking one away, after citing the type. An indication of the method by which the genotype was determined in each case would have been a valuable addition to the catalogue.

The differentiation of actual species in synonymy from mere misidentifications would have materially enhanced the value of the catalogue. The use of a "†" to distinguish misidentifications is a method to be commended.

Relative to the general construction of the catalogue it seems that the author is prone to recognize as valid too many genera and species, as well as subfamilies, being rather over conservative as to the suppression of names. Here and there, also, occur nomenclatorial matters about which not all will agree. Thus the choosing of Achetidæ for the Gryllidæ and Phasgonuridæ, rather than Tettigonidæ, for the long-horned grasshoppers are actions seemingly unjustified.

The omission of genera and species from this catalogue, while aggregating quite a goodly number, are not many when the vast field covered by it is considered. No catalogue of even a tithe the volume of this one is free from errors and omissions and thus the leaving out of a few genera and species is not a matter deserving adverse criticism. As a whole these three volumes form a creditable and lasting monument to their eminent author.

The undersigned has critically reviewed those portions of the first two volumes pertaining to the United States forms.¹ It is his

¹ *Proc. Ent. Soc. Wash.*, Vol. VII., pp. 84-88, 1905; *Can. Ent.*, Vol. XL., pp. 287-292, 1907.

intention to review this third volume in a like manner in the near future.

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U. S. NATIONAL MUSEUM

SCIENTIFIC JOURNALS AND ARTICLES

BEGINNING in January next there will be published bimonthly a *Journal of Animal Behavior* and at irregular intervals an *Animal Behavior Monograph Series*. The journal will accept for publication field studies of the habits, instincts, social relations, etc., of animals, as well as laboratory studies of animal behavior or animal psychology. It is hoped that the organ may serve to bring into more sympathetic and mutually helpful relations the "naturalists" and the "experimentalists" of America, that it may encourage the publication of many carefully made naturalistic observations which at present are not published, and that it may present to a wide circle of nature-loving readers accurate accounts of the lives of animals.

Reviews of especially important contributions within its field will be published as they are prepared, and, in addition, a number especially devoted to reviews, digests, and a bibliography of the contributions to animal behavior and animal psychology for the year will be published annually.

The journal is under the editorial direction and management of:

- I. Madison Bentley, assistant professor of psychology, Cornell University.
- Harvey A. Carr, assistant professor of psychology, The University of Chicago.
- Samuel J. Holmes, assistant professor of zoology, The University of Wisconsin.
- Herbert S. Jennings, professor of experimental zoology, The Johns Hopkins University.
- Edward L. Thorndike, professor of educational psychology, The Teachers College of Columbia University.
- Margaret F. Washburn, professor of psychology, Vassar College.
- John B. Watson, professor of experimental and comparative psychology, The Johns Hopkins University.
- William M. Wheeler, professor of economic entomology, Harvard University.

Robert M. Yerkes, assistant professor of comparative psychology, Harvard University.

The Animal Behavior Monograph Series will be published in connection with the *Journal* as a provision for papers which are too lengthy, or, for other reasons, too costly to be accepted by the *Journal*. The monographs of this series will appear at irregular intervals and will be grouped in volumes of approximately 450 pages.

The Journal of Animal Behavior and *The Animal Behavior Monograph Series* will be published for the editorial board by Henry Holt and Company, New York. Manuscripts for the *Journal* may be sent to the managing editor, Professor Robert M. Yerkes, Emerson Hall, Cambridge, Massachusetts, or to any other member of the editorial board. Manuscripts for the Monograph Series should be sent to the editor, Professor John B. Watson, Johns Hopkins University, Baltimore, Maryland, from whom information may be obtained concerning terms of publication. Books and other matter for review in the *Journal* should be sent to the editor of reviews, Professor Margaret F. Washburn, Vassar College, Poughkeepsie, New York.

THE concluding (October) number of volume 11 of the *Transactions of the American Mathematical Society* contains the following papers:

Virgil Snyder: "Conjugate line congruences contained in a bundle of quadric surfaces."

Jacob Westlund: "On the fundamental number of the algebraic number field $k(p\sqrt{m})$."

G. C. Evans: "Volterra's integral equation of the second kind, with discontinuous kernel."

H. Beck: "Ein Seitenstück zur Moebius'schen Geometrie der Kreisverwandtschaften."

Louis Ingold: "Vector interpretation of symbolic differential parameters."

L. P. Eisenhart: "Surfaces with isothermal representation of their lines of curvature and the transformations (second memoir)."

G. E. Wahlin: "On the base of a relative number field, with an application to the composition of fields."

L. M. Hoskins: "The strain of a non-gravitating sphere of variable density."

Also Table of Contents of Volume 11.

The opening (October) number of volume 17 of the *Bulletin of the American Mathematical Society* contains: "Note on implicit functions defined by two equations when the functional determinant vanishes," by W. R. Longley; "Sturm's method of integrating $dx/\sqrt{X} + dy/\sqrt{Y}$," by F. H. Safford; "A property of a special linear substitution," by F. R. Sharpe; "On the factorization of integral functions with p -adic coefficients," by L. E. Dickson; Review of Hensel's *Theorie der algebraischen Zahlen*, by L. E. Dickson; Shorter Notices: Lehmer's Factor Table for the First Ten Millions, by L. E. Dickson; Staude's *Analytische Geometrie des Punktepaars, des Kegelschnittes und der Fläche zweiter Ordnung*, by D. D. Leib; Dette's *Analytische Geometrie der Kegelschnitte*, by D. D. Leib; Lebon's *Henri Poincaré, Biographie, Bibliographie*, by J. W. Young; André's *Notations mathématiques*, by G. A. Miller; Hancock's *Applied Mechanics for Engineers*, by E. W. Ponzer; "Notes"; "New Publications."

The November number of the *Bulletin* contains: Report of the summer meeting of the society, by F. N. Cole; Report on "The preparation of college and university instructors in mathematics," by the American sub-committee of the International Commission on the Teaching of Mathematics; Review of works on vector analysis (Coffin, Gans, Ignatowsky), by H. B. Phillips; "Notes"; "New Publications."

A SECOND EARLY NOTE ON THE TRANSMISSION OF YAWS BY FLIES

IN SCIENCE for January 7, 1910, I communicated a note giving observations made by Edward Bancroft in 1769 on the transmission by flies of this malignant tropical skin disease. Recently in looking over Henry Koster's "Travels in Brazil in the Years from 1809 to 1815," published in Philadelphia in 1817, I found the following more specific statement as to the means of transmission of this loathsome disease. In Vol. II,