Stebbing was appointed forest entomologist to the government of India; and the other in 1903, when Mr. H. Maxwell Lefroy was appointed entomologist to the government of India, or, as appears from his later reports, "Imperial Entomologist," leaving his position in the British West Indies to be succeeded, as is shown elsewhere, by Mr. H. A. Ballou. By Mr. Stebbing have been published a series of circulars on agricultural economic entomology issued by the trustees of the Indian Museum. Under Mr. Maxwell Lefroy has been started an entomological series of the memoirs of the Department of Agriculture in India, beginning with April, 1906. Five numbers have appeared, the last one bearing the date June, 1907. Mr. Stebbing has also published certain forest bulletins dealing with tree-boring beetles. In addition to these appointments, Mr. E. Ernest Green, well known for his able studies on the Coccidæ, has been made government entomologist for Ceylon with headquarters at the Royal Botanic Garden at Peradenyia, Ceylon, an admirable step and an appointment which Mr. Green can not fail to fill in the most satisfactory manner.

CONCLUSION

Looking over the whole field, it becomes obvious that very great advances have been made in economic entomology in the last thirteen years; greater advances, in fact, than during the entire previous history of the study. It becomes obvious, also, that the greatest advances have been made in the United States of America. In spite of this fact, however, it is plain that the United States is behind most of the other countries of the world in one most important particular.

Six years ago, visiting Hamburg, I found a most perfect system of inspection of all foreign fruits, trees and fruit products in operation. Nothing containing or carrying an insect was allowed to enter Germany through that port. To-day this holds true of most other countries. Even in the colony of Natal, as has been pointed out, there is a qualified agent stationed permanently at Durban, and his work protects Natal and the inland colonies from invasion by new insect pests and new plant diseases from abroad.

In the United States we have no such protection, except the one port of San Francisco, where under the state law, that has been upheld in the courts, California is protected. A crying need in this country is the passage of a general quarantine act by which the other great seaports of the United States should be protected.

L. O. HOWARD

SCIENTIFIC BOOKS

A Text-book of Organic Chemistry. By A. F. HOLLEMAN, Ph.D., F.R.A. (Amst.), Professor Ordinarius in the University of Amsterdam. Translated from the third Dutch edition by A. JAMIESON WALKER, Ph.D., B.A., head of the Department of Chemistry, Technical College, Derby, England, assisted by OWEN MOTT, Ph.D., with the cooperation of the author. Second English edition, rewritten. New York, John Wiley and Sons. 1907. Pp. 589. $2.50.

Walker's first translation of Holleman's "Organic Chemistry" was published in 1903. It met with so favorable a reception that a reprint was made, while Walker was translating the present edition.

This book differs from other larger text-books of organic chemistry in the restriction of the field by the omission of a great number of isolated compounds, and by the prominence given to theory. In the words of the author "this book is essentially a text-book and makes no attempt to be a 'Beilstein' in a very compressed form."

Thanks to the limitation of the field, the student's attention is fixed on the more important classes of organic compounds, and on

the theory of their formation, structure and decomposition. A student who has mastered this book should find it an easy matter to gradually enlarge his knowledge by study of some larger book and by reading chemical literature and journals.

That the book is thoroughly revised and brought up to date is shown by the references to the work of Baeyer and Villiger and Collie and Tickle on oxonium compounds, of Thiele on partial valence, of Ciamician on pyrrol, of Emil Fischer on amino acids, and by the application of physical chemistry where it serves to explain reactions, as in the formation and saponification of esters.

The reviewer feels no hesitation in recommending this book as one of the best text-books—perhaps it is *the* best—extant for those students for whom it was written, students of chemistry. It is not suited to students in high schools or colleges or to medical students who are "taking a course" in organic chemistry.

E. Renouf

Die Spiele der Tiere. Karl Groos. 2 Aufl. Jena, G. Fischer. 1907. Pp. viii + 341.

This new edition is apparently different from the first chiefly in the changes that were necessary to make it appeal to the lay reader. This impression is given by its appearance in German type, and the omission of a considerable amount of theoretical discussion. The anecdotes and instances cited are almost identical with those of the first edition. The only important change in theoretical standpoint is with reference to imitation. In the former edition Groos followed James Mill and current tradition in regarding imitation as an instinct. In the present edition he takes the ground that it must rest upon individual acquirement and presupposes practise based on experimentation. Instincts imply definite reactions to definite stimuli, while imitative movements are essentially variable in response to many different stimuli. The tendency to imitate, however, is made to rest upon an inherited disposition. The only considerable change in text is found in the concluding chapter, which has been reduced about three quarters, by the omission of all controversial matter and expository statement of theories. In this edition the author limits himself to the statement of his conclusions, that play is a form of experimentation, derives its pleasure from the feeling of power in self-activity, or from self-exhibition, and is closely related to the esthetic impulses of mankind.

W. B. Pillsbury

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SCIENTIFIC JOURNALS AND ARTICLES

The New York Zoological Society has issued the first of a series of papers which will appear from time to time and give the results of the scientific work carried on by members of its staff. The title of the publication is, or was to have been *Zoologica,* but by an error it appears as *Zoologia.* This reminds one of the German University that proposed to issue an absolutely perfect *Festschrift,* and did issue it with a glaring error on the title page. A somewhat similar mistake recently occurred in a number of the *Bulletin of the American Museum of Natural History,* where the name of the author was misspelled.

The Museums Journal of Great Britain for October contains articles "On Preparing Artificial Ground-work for Mounting Individual Specimens, Economic Sets, etc., in Spirit," and "A Method of Utilizing Small Wall-areas in Museums for Spirit Preparations," by F. G. Pearcey, and "The Aims and Objects of Museums," and especially the Western Australian Museum, by B. H. Woodward.

A *Bulletin* on "Unutilized Fishes and their Relation to the Fishing Industries," by Irving A. Field, has just been issued by the Bureau of Fisheries. This contains some important observations on the food of the smooth dogfish, *Mustelus canis,* and horned dogfish, *Squalus acanthias,* showing that one is extremely destructive to lobsters and the other to the more important food fishes. Incidentally, attention is called to the fact that the numbers of edible fishes have been greatly lessened, nothing has been done to destroy their enemies, which have increased.