

the side farthest away, where the pull is weakest" (p. 436). While literally true, the statement is likely to mislead the student who does not notice the sudden change from "because" in the first part of the sentence, to "where" in the second part. The reason for the existence of two waves is not referred to.

Throughout the volume one sees abundant evidence of the author's extended field experience and untiring industry in collecting illustrations of physiographic features. While the book is, in its present condition, of value to teachers, for general school use the subject-matter will require, possibly in another edition, more carefully considered and systematic treatment.

D. W. JOHNSON

SCIENTIFIC JOURNALS AND ARTICLES

The Journal of Experimental Zoology, Vol. V., No. 1 (November, 1907), contains the following papers: "Determination of Sex in *Hydatina senta*," by David Day Whitney. "A New Explanation of the Mechanics of Mitosis," by Arthur B. Lamb. It is suggested that the characteristic configuration of the chromatin substance in dividing cells may be due to a synchronous pulsation or oscillation of the astral centers and it is shown that this explanation presents certain unique advantages as contrasted with previous explanations. "The Reactions of Planarians to Light," by H. E. Walter. The action of light upon planarians is a function of its intensity, which, under certain conditions, is emphasized by the direction of the light. The orientation and phototaxis of planarians is more consistently explained by the theory of tropisms than by the theory of trial and error. The evolution of the photoreceptive apparatus of planarians stands at such a low stage of differentiation that the light environment of these worms is of slight importance to them.

At the recent Chicago meeting of the Association of Economic Entomologists a stock company was organized for the purpose of publishing a *Journal of Economic Entomology*. This bimonthly publication is devoted to economic entomology in its widest aspects.

The first number will appear in February. It has a board of editors and advisory board composed of well-known investigators. E. P. Felt, state entomologist, Albany, N. Y., is editor; A. F. Burgess, secretary of the Association of Economic Entomologists, Washington, D. C., associate editor, and E. D. Sander-son, business manager. On the advisory board are Dr. S. A. Forbes, Illinois; Dr. James Fletcher, Canada; Dr. L. O. Howard, Washington; Dr. H. T. Fernald, Massachusetts; Professor Herbert Osborn, and Professor H. A. Morgan, Tennessee.

SOCIETIES AND ACADEMIES

THE TORREY BOTANICAL CLUB

THE regular meeting of the club for December 10, 1907, was held at the American Museum of Natural History at 8:30 P.M., with President Rusby in the chair and fourteen persons present. In the absence of the secretary, Mr. Charles L. Pollard was appointed acting secretary. The minutes of the last preceding meeting were read and approved.

The following scientific program was presented:

Dictionaries and their Relation to Biology:

CHARLES LOUIS POLLARD.

The speaker referred to the fact that a large part of the increment in our language in recent years has consisted of scientific terms, including new Latin classificatory names, biological descriptive words and phrases, and vernacular names. In spite of this there is a very general lack of interest among working scientists in the average dictionary, and it is not the indispensable reference book which it should be. The reasons for this are to be sought in the attitude of the publishers toward the style of definitions, the effort to avoid undue technicality often resulting in scientific inaccuracy. Obsolete words and meanings are frequently given too great prominence and are not properly differentiated from those in current usage. There is also a tendency to magnify the importance of so-called popular names, many of which are coined by the writers of manuals and are not used elsewhere.