

It is probably because Professor Wright is so secure in his position that he can afford to pass by in silence the statements that any sane man can see are unwarranted, and the attention of the world at large may have been directed to him by these very attacks, as well as arranged on his side by their baselessness. The writer does not wholly agree with the professor; but he can thank him for a good example of a disputant. The time has passed when the progress of knowledge can be dammed by the straws of a few determined opponents, and the examples of the primordial and cretaceous controversies cannot be safely repeated. It has been the shame of America that it has been so taken up in petty fights over side issues that it has left to others abroad the building of the science of geology.

In the future the combatants in the arena had better take as their type, the old-fashioned town pump. It always works best in the cold and deliberation of winter, and the quality of its product is beyond question. When the heats of spring come it begins to diminish its flow, and during the controversial dog-days it dries up.

EDWARD P. WILLIAMS, JR.

Bethlehem, Pa., Feb. 6

BOOK-REVIEWS.

The Hemiptera Heteroptera of the British Islands. A descriptive account of the families, genera, and species indigenous to Great Britain and Ireland, with notes as to localities, habits, etc. By EDWARD SAUNDERS, F.L.S. London, L. Reeve & Co., 1892. With 32 plates. Price, £4, 8s.

THE late well-known naturalist, the Rev. J. G. Wood, used to deliver a popular and entertaining lecture on "unappreciated insects." Among these he included the one which is familiarly termed the black beetle. To this he endeavored to reconcile feminine taste and intelligence by representing that its approach infallibly scares from our chambers the more dreaded and more vicious bed-bug. But this latter is itself one of the unappreciated, for which even a very skilful advocate will not easily

conciliate our esteem. The best perhaps that can be said for it is that the barest suspicion of its presence is an incentive to cleanliness. The modern feeling about this special nocturnal terror is happily, however unintentionally, expressed in that old version of the Psalms, which brought home to the reader a deep sense of comfort and security by the wording, "so that thou shalt not need to be afraid for any bugges by night." It is singular that collectors of insects should have adopted for themselves as a kind of pet name the title of bug-hunters. Perhaps they have wished to wrest a weapon out of the hands of the scornful, with the feeling that it is more agreeable to call oneself names than to be called names by other people.

The students of bugs in particular, as distinguished from those who study insects in general, are comparatively few. It is probable that, for the sins of a single and not very characteristic species, a prejudice has been evoked in the public mind against the whole order to which the objectionable species happens to belong. There has been plenty of time for prejudice to gather strength, since the genus *Cimex* is said to have made its first ascertained appearance in the far-distant Liassic period. There is something wonderfully romantic in the thought of this blood-thirsty genus biding its time, waiting, craftily waiting through so many ages till man should appear upon the mundane scene with lodgings to let! But as it must be confessed that its habits, however venerable for their antiquity, have placed all its kindred more or less under a cloud, there is the more reason to acknowledge the spirited enterprise of Messrs. Reeve in publishing an expensive work on this rather neglected department of zoology. There is, however, good reason to think that the volume, being such as it is, will largely help to cure the neglect of the subject. The beginner learns at the outset that most of the species are vegetable-feeders, and that, from the few that are less temperate, the collector runs practically little or no risk of harm. From the beautifully colored plates it is obvious that many of the species must be in nature highly attractive. The clear descriptions of all the species at present known in Great Britain and Ireland

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Feb. 7. — O. T. Mason, Co-operation in Anthropological Work; Clifford Howard, The Philosophy of Sin; W. H. Holmes, Early Man on the Upper Mississippi.

Biological Society, Washington.

Feb. 11. — M. B. Waite, The Destruction of Lichens on Pear Trees; C. H. Townsend, The Propagation of the Atlantic Coast Oyster on the Pacific Coast; Charles Hallock, The Geographical Distribution of the Musk-Ox; C. Hart Merriam, The Four-Toed Kangaroo Rats (with exhibition of specimens); F. A. Lucas, The Food of Humming-Birds.

Society of Natural History, Boston.

Feb. 15. — Henry W. Haynes, More Evidence of Cannibalism among the Indians of New England; R. T. Jackson, Notes on the Development of Palms; S. J. Mixer, A Massachusetts Beaver Dam.

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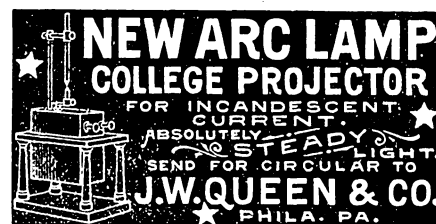
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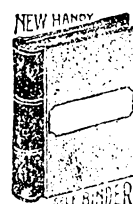
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will, in the first instance, appeal especially to British students, but from one point of view they may still more court the attention of students elsewhere, for, when specimens are unattainable, good descriptions and figures are an exceedingly welcome substitute. Every one must value the facilities for work provided by the elaborate synoptic tables.

Those who can remember the devotion to natural history of the late Mr. Wilson Saunders and the vast and admirable collections of insects which he accumulated from all parts of the world, may be disposed to believe that his son, the author of the present work, was born as well as bred an entomologist. The name of Edward Saunders, to those acquainted with his lifelong studies and with his previous writings, will be an ample guarantee that in this book also they will find the most conscientious accuracy and all the thoroughness of treatment that the subject admits. It is commonly reported in England that the revenue officers of the United States levy duty upon meteorites which descend from the sky, but probably the hemiptera pass the frontier without the least regard to tariffs, or quarantine regulations, or laws against the importation of destitute aliens. How little, then, can the free-trade precincts of Great Britain and Ireland hope to defy the invasion of any new bug that may choose to enter! But, at any rate, the collector who finds within those precincts one of the Heteroptera that has not been described in the volume now under review, may well suspect that it has been recently introduced into them from without.

In a work so sumptuously printed one may be permitted to wonder why there is no index to the plates and why no references are given in the text to the excellent figures which those plates contain. As a matter both of good taste and convenience it would surely also have been better to give in full the names of authorities, instead of such abbreviations as Muls. and Put. for Mulsant and Puton. The reader may find a chance of guessing that Boh. and Fall. stand for Bohemann and Fallen, but Lap. and Spin. and Duf. find no explanation within the four corners of the book itself. The title, "Hemiptera Heteroptera," is quite

justified by the usage of other authors, and Hemiptera seems really a better title than the alternative Rhynchota, but in the division of the order into Heteroptera and Homoptera it is very unsatisfactory that the names applied to the suborders should have the same termination as that appropriated to so many orders of the Insecta. A protest may be made, too, against the use, now becoming common, of the word "asymmetrical." Those who are discontented with "unsymmetrical" ought to write "asymmetric," and be pedantic at both ends of the word. From misprints and similar blemishes the volume is very agreeably free, although there is some obscurity in the account of *Corixa*, which is said to contain twenty British species divided into four subgenera, whereas the synoptic table shows six subgenera and twenty-five species, to which a twenty sixth is doubtfully added in the descriptions.

The zeal of collectors will be stimulated to find again such prizes as *Aradus Lawsoni* and *Pygolampis pidentata*, or the greenish black *Prostemma guttula*, with scarlet legs and elytra, and antennæ pitchy brown. But the study of the group has more to commend it than the tantalizing rarity of some of the species. It is no little advantage that a great many of them are on the contrary common and easy to obtain. They do not, it is true, flaunt themselves in mid-air like butterflies or birds, but rather keep themselves quiet on trees and various lowlier plants, in mosses, in ponds, and other retreats, from all of which they can without much difficulty be induced to come forth. The search for Hemiptera is pleasantly united to the observation of plant life, and when a collection has been made, the curious shapes and bright colors of the specimens are likely to be associated with treasured memories of holiday excursions, fair scenes, and delightful rambles, that have been enlivened by this quest. Few of those who make themselves acquainted with Mr. Saunders' volume will continue to despise the Hemiptera, and few of those who take any deep interest in the Hemiptera will care to be without Mr. Saunders' volume. THOMAS R. R. STEBBING.

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