

Hagen, E. C. Howe, D. S. Kellicott, J. L. LeConte, B. P. Mann, T. L. Mead, C. V. Riley, W. Saunders, C. G. Siewers, Emma A. Smith, F. H. Snow, C. E. Webster, O. S. Westcott, C. E. Worthington, and G. D. Zimmerman—a quite incomplete list of the contributors to this department.

Results of anatomical studies of insects have been published by Messrs. C. F. Gissler, J. D. Hyatt, E. L. Mark, and C. V. Riley.

It would be inexcusable in a notice of biological work to omit reference to what is being done in this direction at the Museum of Comparative Zoology at Cambridge. Under the hand of the eminent Curator of the Entomological Department, Dr. H. A. Hagen, a biological collection of insects has been brought together that is far in advance of any similar collection in the world. It was my privilege recently to give it a partial examination, and when I say that I know not how to express my high estimation of it, I give it but imperfect praise. No one, whose studies have prepared him for the appreciation of such a collection, can examine it without wondering when, where and how the material was obtained. As an illustration of the natural history of species in their several stages, architecture, depredations, food-plants, diseases, parasites, etc., it is difficult to see how its plan of arrangement can be improved. In consideration of its high value, it is very gratifying to see that such unusual means have been resorted to for its preservation, as, with a reasonable supervision and without the operation of other than the ordinary causes of destruction, will extend its benefits to our successors in coming centuries. In addition to the biological collection, two others have been arranged: the one comprising the insects of North America, and the other those of the world. Of the number of type specimens contained in these collections, there is not the time at present, nor is it the occasion, for more than simple mention. The student in American Entomology, who aims to be fully abreast of the most advanced progress in his line of study, cannot neglect the means of information which the Collections and Library of the Entomological Department at the Cambridge Museum offer him.

The published results of economic investigations during the year have been quite limited. In consideration of the exceeding importance of these studies, it is painful to have to record the fact of the issue of but one Annual Report of a State Entomologist—that of Cyrus Thomas. This second report of Dr. Thomas, forming the seventh in the series of the Illinois reports, is a volume of nearly 300 pages. In it Dr. Thomas discusses the depredations of some of the Orthoptera, Coleoptera and Hemiptera. Prof. G. H. French, Assistant Entomologist, presents brief descriptions of a large number of diurnal and nocturnal Lepidoptera and their larvæ, with notices of their habits, accompanied by analytical tables for their identification. Miss Emma A. Smith, special Assistant Entomologist, offers the results of original investigations in some species of special economic importance. The publication of this and the preceding Report, without, as is evident, the opportunity of the revision and correction of proof by the authors, is much to be regretted, as serious errors in the nomenclature and elsewhere have thereby been given extensive circulation.

The Annual Report of the Entomological Society of Ontario, making the ninth in the series, contains its usual amount of matter of interest to the Entomologist, and of value to the agriculturist and horticulturist.

Several articles treating of insect depredations have appeared in our scientific journals, which cannot now be referred to.

The United States Entomological Commission, continued by an appropriation by the last Congress of \$10,000, is actively engaged in its second year's operations. In its investigations of the Rocky Mountain Locust, its labours have been almost entirely confined to that portion of country designated as the Permanent region, with a view of determining the limits of these permanent breeding grounds, and to obtain the requisite data for the preparation of a map, and a scheme to be recommended to the Government, by which the excessive multiplication of the species in that region, and the consequent migration therefrom, may be prevented. It is understood that the recommendation to the Government will be, that in connection with the authorities in British America, efforts be made to restrain the extensive prairie fires in autumn which are common to that region, and subsequently to burn them in the spring after the hatching

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