reads like a *Who's who* of physics during the last century—James Clerk Maxwell; Lord Rayleigh, who, it is interesting to learn, gave his Nobel Prize money to the Laboratory; J. J. Thomson; Ernest Rutherford; and the present professor, Sir Lawrence Bragg. The book contains a good portrait of Rayleigh also one of Maxwell.

A further evaluation of importance of the Laboratory may be made on the basis of the men who have worked there. Included among these are C. T. R. Wilson, W. D. Aston, R. T. Glazebrook, W. N. Shaw, and J. Chadwick.

Peter Kapitza, Russia's leading physicist, for whose research the Mond Laboratory was built, was at the Cavendish for 13 years, eventually holding the Messel Professorship. On a visit to Russia in 1934 he was detained by the Government. His equipment was shipped to Russia so that he could continue his researches.

The book is worth any scholar's time.

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The North American clear-wing moths of the family Aegeriidae. **George Paul Engelhardt. (Smithsonian Institution, U. S. National Museum Bull. 190.) Washington, D. C.: Government Printing Office, 1946. Pp. vi + 222. (Illustrated.) $.75.**

For over 40 years George P. Engelhardt devoted his life to the study of natural history, with special emphasis on entomology. In the latter field he was particularly interested in the Aegeriidae, a distinctive family of moths with clear wings. The present monograph, substantially finished as to species and genera when he died in 1942, has been carried to completion and publication under the auspices of the Smithsonian Institution. It reflects Engelhardt's activity as an unusually able field biologist over four decades and embodies his mature observation of this group during that time. He possessed a rare knowledge of the natural history of the various sections of the United States in detail, and in the course of his many field trips he made numerous friends who cooperated actively in supplying material for study. A reflection of some of these contacts is found among new species he described: *clarkei, dammersi, hennei, richardsi.*

The Aegeriidae have a readily recognizable habitus, although their only diagnostic character is a locking system between the forewings and hindwings, first pointed out by A. Busck in 1909. The larvae are all borers and are easily recognized by the special arrangement of their ocelli and crochets. Several of them are of economic importance, notably as fruit pests.

The monograph divides the family on the basis of adult characters with particular reference to antennae, venation, and male genitalia. Nine groups are set up, which in turn are combined in two main divisions of subfamily rank. The larger of these divisions includes seven groups characterized by a club-shaped antenna with the apex ending in a minute hair tuft. The other two groups, *Bembicia* and *Zenodoxus,* form the smaller main division with antenna tapering toward the apex, without a tuft. A key to the genera includes all except *Palmia* Beutenmüller. However, this genus, which contains only a unique female specimen described by Henry Edwards, is retained by the author. Separate keys are provided for the species in a number of individual genera.

New descriptions by the author add 7 genera, 19 species, 4 varieties, 9 races, and 7 forms. With one exception, all the genera shown under Aegeriidae in Dr. McDunnough's *List of the Lepidoptera of Canada and the United States* (Pt. II) are retained. *Parharmonia* Beutenmüller with its two species is merged into *Vespamima* Beutenmüller, thus combining the three North American species confined in host association to coniferous trees.

The principal genus, *Synanthedon* Hübner, is reduced from 69 species to six species and two subordinate forms. The remainder of this genus is mainly distributed among three restored genera, *Carmenta* Hy. Edwards, *Conopia* Hübner, *Thamnosphecia* Spuler, and a new genus, *Ramosia.* Four of the six other new genera have been created to cover single species each, and two for small groups. Of the 19 new species described, *Euhagenia hirsuta* is based on a single male, and *Carmenta austini* is described from a male and a female. Most of the others are based on series of some size.

The author, in his discussion of individual species, has contributed a wealth of biological data of great value that adds immensely to the scope and interest of his study. A special index of food plants lists some 200 host plants with which specific aegeriids are associated.

The Smithsonian has included 16 plates in black and white, containing 25 illustrations of wing venation, including the diagnostic wing lock, and 62 drawings of genitalia. Sixteen additional plates, provided through the generosity of the author's family, portray 100 illustrations of adult moths in color. It is particularly helpful that the color plates contain representations of all the new material described with the exception of three new races and one new form. Drawings for 79 of these illustrations were made for the author by Mrs. Mary F. Benson and for the other 21 by Mrs. William Beutenmüller. Reference to the text suggests that the scale of the illustrations of adult moths is about 2×. The scale for the genitalia is not apparent.

Too often the death of a scientist before publication of his lifelong observations robs him of adequate recognition and deprives science of the full fruits of his knowledge. It is fortunate that the Smithsonian Institution, through the National Museum, has undertaken the task of carrying this manuscript through to publication, in conformance with its high standards. Consideration of the adequacy of the taxonomic concepts may be left to the specialists. The comprehensiveness of the basic data speaks for itself, while the detailed biological treatment, the readability in content and form, and the notable provision for illustrations give the work a distinctive character of its own. The Engelhardt monograph will be the authoritative source on the Aegeriidae of North America for a long time.

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