

the most beautiful and graceful of butterflies, as well as the most interesting. As representing most nearly the primeval butterfly, *Papilio machaon*, for instance, may still be considered as typical of the group in a wide sense, no less than as typical of the particular family *Papilionide* to which it belongs.

Dr. Chapman's paper must be read and studied to be fully appreciated as it deserves. To draw attention to its merits, this brief notice is penned. It adds largely to the store of scientific facts; it is well and clearly written, and is the product of a mind which not only seizes small circumstances, but is able to build from them a theory of the way in which Nature has gone to work.

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"A Manual for the Study of Insects," by John Henry Comstock and Anna Botsford Comstock, Ithaca, N. Y. Comstock Publishing Co., 1895. (Price, \$3.75.)

This is a work of 700 pages, profusely illustrated. A table of the classes of the Arthropoda is given, followed by a short characterization of the Crustacea. Thirty-three pages are devoted to the Arachnida, and a table is given for separating the principal families of the Araneida. The Myriapoda are briefly referred to, and Chapter III. begins the discussion of the true insects (Hexapoda). Nineteen orders are recognized, and a careful table is given for their practical determination.

In the remainder of the work, 618 pp., the several orders are treated, with tables carrying the student to the families, each illustrated by typical common species, of which brief accounts are given.

In the Lepidoptera, Diptera, and Hymenoptera, the uniform system of nomenclature of the wing-veins discussed by Prof. Comstock in "Evolution and Taxonomy" is applied throughout the orders. As stated in the preface, but slight changes are made from the usual classification of the families, except in the Lepidoptera, where the system proposed in "Evolution and Taxonomy" is adopted with slight changes. This is remarkably like Dr. T. A. Chapman's classification from pupal characters and the present writer's one on larval characters. All three agree on breaking up the old groups *Zygænidæ* and *Bombyces*, and the several members are referred to essentially the same places. The work affords