

BRITISH BUTTERFLIES; by J. W. Tutt, F. E. S. London: George Gill & Sons, 1896. Pp. 469. (Price, 5s.)

It is only a few months since we spoke in terms of commendation of Mr. Tutt's Manual of the British Moths, and now we have before us an even better work on the butterflies by the same industrious author. About one-fourth of the book is taken up with the general subject, presenting a series of chapters on the four life-stages of butterflies, their variation and its causes, hibernation and æstivation, classification, collecting, and arranging and preserving specimens, and the inflation of larvæ. These are written in the author's pleasant, easy style, with which his previous works have made us familiar, and convey much information of interest to butterfly-hunters anywhere. We are glad to observe that he insists very strongly upon the importance of labelling specimens with the place and date of capture; though the English mode of using short pins and setting the specimens low down makes this a matter of difficulty.

The descriptive portion of the work is excellent and much more complete than that of any manual of British butterflies that we have met with. In the case of each species there are given the English and scientific names, reference to the plate where it is figured, synonymy and bibliography, a concise description of the imago, a paragraph on "variation" in which are mentioned any known aberrations, forms or varieties, as well as sexual distinctions, descriptions of the egg, larva, pupa, notes on the time of appearance, habitat, and geographical distribution. Thus it will be seen that proper regard is paid to the whole life-history of the insect, and that the author does not confine his attention to the imago alone. The plates (uncoloured) on which each species is depicted are admirable, and should enable any collector to identify his specimens without difficulty; there are also a considerable number of wood cuts throughout the text.

In the arrangement of species the author begins with the "lowest"—the Skippers, Hesperidæ—and proceeds upwards to the Satyridæ, among which he strangely places "the Purple Emperor," *Apatura iris*. His classification, a thorny subject which we do not propose to discuss here, may thus be considered fully "up to date."

To our readers in the British Isles, and to those who have collections of British butterflies, we heartily commend this excellent Manual. We only hope that it may not be very long before we have some handbook equally good dealing with the butterflies of Canada. C. J. S. B.

Mailed December 10th, 1896.