

and, one hopes, sufficient excuse for the less pleasing aspects of Peary's life. He was, throughout his career, dependent on others for financing his expeditions; he was therefore living on his reputation, and forced by circumstance to bolster his own fame by his own writings, and to attack

any force that tended to dim it. This book has not given us the real Peary—perhaps it was impossible to do so—but it gives us a clearer view than any other biography of a man whose name is much too great to be affected permanently by the snappings of minor detractors. F. DEBENHAM.

Butterflies of the Genus *Erebia*

Monograph of the Genus *Erebia*

By B. C. S. Warren. Pp. vii + 407 + 104 plates. (London: British Museum (Natural History), 1936.)

IT might be difficult to decide whether a description of much of the taxonomic work that has been and still is being done as merely careless can be regarded as lenient or just. It certainly would not be harsh. In the latter half of the eighteenth century it was not unusual for one author to tackle the whole of the natural world, and, considering the magnitude of the task and the degree of development of knowledge at the time, the result was at least comprehensive. Since that time, our knowledge has grown to such an extent that the size of the taxonomic group with which any single author can hope to grapple effectively has become more and more restricted, and the superficial character of much of the work that has been done has added so much to the labour involved in revising even a single genus, that the systematist confronted with the classification of a suborder no larger than the Rhopalocera may well stand dismayed at the prospect.

It is not surprising, therefore, to find a volume of some 400 pages and more than 100 plates entirely devoted to a revision of the genus *Erebia*, which comprises some 69 known species, represented by 225 subspecies (geographical races), in addition to which there are 90 named forms and nearly 280 aberrations. The task of dealing with the nomenclature alone is no light one, as the number of names involved exceeds 900, nearly 600 of which are actually used to designate species, subspecies, forms and aberrations.

In directing attention to the need for this revision, Mr. Warren points out that of the many systematic works which include a treatment of *Erebia*, Dr. T. A. Chapman's paper is the only one in which any attempt is made to study the structural characters of all the known species of the genus.

The author puts forward the following five points, which in his opinion "cover the essentials

of a genuine systematic work", and which have been aimed at in the production of this book:

"(1) To supply definite proof, on an anatomical basis, of the real affinities of every hitherto described species, subspecies, form and aberration of *Erebia*; (2) to establish the correct use of every valid name, and to eliminate those that are only synonyms or homonyms; (3) to provide reliable data for the identification of species; (4) to treat the variation of each species comprehensively, but at the same time in as simple a manner as possible; (5) to give the distribution of each race accurately, but not in great detail, avoiding long distribution lists which would encumber the work without being of compensating value."

It is becoming more generally recognized that many of the distribution lists published are based on identifications of questionable accuracy, and that they unnecessarily increase the bulk and cost of production of any taxonomic work.

There is great need for more treatises like the volume under review, monographs in which every effort is made to state and display facts with simplicity, but with absolute precision. In the matter of illustrations, Mr. Warren has not confined himself to a single aspect of a subspecies or form, either in displaying the facies of the insect or the structure of the genitalia, and a study of the figures of different specimens of the same subspecies, even from the same locality, indicates that the book is fully, though not in any way too lavishly, illustrated. There has been a good deal of controversy in the past over the respective merits of photographs and drawings, particularly in connexion with the figuring of genitalia. Mr. Warren has taken the trouble so to dissect and photograph these structures that it has been possible to give a perfectly satisfactory picture, admirably arranged for purposes of comparison.

An interesting feature of this valuable and beautifully produced monograph is an original discussion on the androconial scale and its development in the genus *Erebia*, which it may be hoped will encourage students to make a special study of these scales in other butterflies.