

The Popular Handbook of Rarer British Birds
By P. A. D. Hollom. Pp. xiv+133+40 plates.
(London: H. F. and G. Witherby, Ltd., 1960.)
37s. 6d.

THIS useful book supplements the "Popular Handbook of British Birds" (1952), edited by Mr. P. A. D. Hollom, which excluded species that had been recorded in the British Isles on less than a dozen occasions. Both works are based on the five volumes of the authoritative "Handbook of British Birds" (1938-41) by H. F. Witherby and others, and although much detail is necessarily omitted they include information of more recent date. The latter feature is especially noticeable in this instance, as accounts and illustrations are given of some thirty species which were not included in the original work at all, having been added to the British list in the intervening two decades.

Many of the new birds are vagrants from America, others from Asia or from southern Europe. Some of them represent groups which found no place in earlier books on British birds—frigate-birds, vireos, New World warblers, New World orioles, tanagers and American sparrows. Several of the newcomers have already been reported more than once, and there are further records of others previously on the list, thanks to the activity of our coastal bird-observatories and the expertise of our field workers. Many of the species are thus likely to come to notice again, and a hand-book covering this aspect of British ornithology is very welcome. The information given for each species is in convenient form, covering identification in some detail and with briefer notes on habits, British occurrences and general distribution. The colour plates not available from the original work are by D. M. Reid-Henry and Peter Scott. LANDSBOROUGH THOMSON

Elementary Titrimetric Analysis

By Dr. A. M. G. Macdonald. Pp. viii+133. (London: Butterworths Scientific Publications, 1960.) 12s. 6d.

THIS book deals exclusively with titrimetric procedures, and although it has been written primarily for students in schools and junior technical colleges, it also deals in an informative manner with the application of redox titrations and the use of complexanes in titrimetry, and these chapters would be well worth the attention of somewhat more advanced students.

The chemical purist might quarrel with Dr. Macdonald's definition of the gram equivalent weight of the acid as the weight which "furnishes one gram of hydrogen ion", and might prefer the more exact definition which would relate to '1.008 gm. of hydrogen ion'. Indeed, the 1957 "Table of Atomic Weights" given at the end of the book quotes atomic weights to three decimal places, and the student might often ponder as to why the gram equivalent weight of sulphuric acid is given as 49 and not as 49.041.

The reviewer also feels that some chapters could have been presented in a clearer manner to the student if diagrammatic illustrations were used; for example, in the chapter on oxidation potentials, a sketch of a redox electrode with salt bridge to a calomel electrode would have been most informative.

These points are, however, minor criticisms, for the book is well balanced and introduces the student

gradually to the more difficult exercises of volumetric quantitative analysis. The general descriptions of indicator applications, hydrogen ion concentration, etc., are considered to be completely adequate for the average student, and the theoretical implications have been clearly and concisely described.

In this context the book will prove valuable not only to the student, but also to the teacher of chemistry who has to present the subject of titrimetric analysis to his classes in a manner which makes the theoretical implications easily comprehensible, and the practical exercises suggested are well balanced and cover a wide and useful range of analytical procedures. D. T. LEWIS

Life's Long Journey

By Kenneth Walker. Pp. 191. (London: Victor Gollancz, Ltd., 1960.) 21s. net.

THE aim of Dr. Kenneth Walker's latest book is to show that mechanistic views of life are long outdated, and that the universe is essentially spiritual in essence. To arrive at his ultimate conclusion that "it is to religion . . . that man will have to turn for help if he is to evolve any further", Walker roundly assails all neo-Darwinians as well as those who condition our minds by too much science.

The book is unsatisfactory in many respects. Few people will accept Walker's disarming prefatory note that his amateur acquaintance with biology makes him in some way more fitted to interpret its main hypothesis than those who have studied more deeply. His interpretations of Darwin's theory of natural selection do not always represent the views of the progenitor. Dogmatic reiteration of the purposefulness of life does not necessarily make life more purposeful, and is scarcely in keeping with a scientific mode of thinking. The mystical references to Eastern religions as sources of revelation to those to whom the mysteries are vouchsafed are unlikely to console those who profess Western faiths, and who read that "we live in a post-Christian age and an age in which economic man has been allowed to usurp the rights of the whole man". Walker's wish was that this book would help many to look again at the meaning of life; it is unfortunate that its appeal will, for the most, be to those whose minds are already made up. T. H. HAWKINS

The Lichen Flora of the United States

By Bruce Fink. Second printing. Pp. xii+426+47 plates. (Ann Arbor: University of Michigan Press; London: Angus and Robertson, Ltd., 1960.) 12.50 dollars; 50s.

THIS is an exact copy of the original edition published in 1935, even to such obvious errors as the transposition of captions on Plate 42. Unfortunately, the erratum slip issued with the former volume has not been reproduced. It seems a pity the opportunity was not taken to rewrite the accounts of such genera as have been revised in North America during the past quarter century, but to do so would doubtless have led to a somewhat uneven treatment of the flora as a whole. Naturalists in the United States will be glad to have this convenient basic summary of their lichen flora once more available. R. W. G. DENNIS