

**Birds in Colour**

Illustrated by Karl Aage Tinggaard. With descriptions by Bruce Campbell. Pp. 103+256 plates. (Harmondsworth, Mddx.: Penguin Books, Ltd., 1960.) 21s.

IT must be exceedingly difficult to produce yet another moderately priced book on birds that has its own merits and justifies itself as a purchase both for beginners and experts. The compiler of "Birds in Colour" has managed to do this by producing an outstandingly straightforward reference book that makes bird recognition comparatively easy for "those who go about in the towns, in the country and by the sea in the British Isles—and those who look observantly out of their kitchen windows"; at the same time producing a very beautiful book of pocket-size.

The book has two main sections. First, there are 256 coloured paintings of all the birds likely to be seen and recognized in the British Isles, arranged, roughly, in the Hartert order. Each bird takes up half a page, and similar birds, likely to be confused, are on adjoining pages. This makes it possible for four similar birds to be compared at a glance. The second [part of the book is devoted to the descriptions, which bear the same number as the paintings earlier in the book, thus enabling speedy reference. This section gives such information as habitat, appearance, voice, habits; and a very helpful note on the other birds with which this one is likely to be confused. This is particularly helpful for a beginner. At the end of the book is a short section of flight sketches, followed by a list of books to read, an index of Latin names, and, lastly, an index of English names.

The book is of the standard 'Penguin' size, but has a stiff, colourful cover, and each of the 256 paintings are not only realistic but also pleasing to the eye. The simplicity of the book is its main asset, as, while giving the maximum help in bird recognition, it avoids all technical terms and irrelevant data. All essential points are lucidly written—fitting companion notes for the Danish artist's paintings, which cannot be too highly praised.

B. J. G. MATTLAND

**Flat Rolled Products**

Rolling and Treatment. Edited by T. E. Dancy and E. L. Robinson. (Metallurgical Society Conference, Vol. 1.) Pp. xix+128. (New York: Interscience Publishers, Inc.; London: Interscience Publishers, Ltd., 1959.) 30s.

THIS book, the first of a series on various branches of metallurgy, is a report of the proceedings of a conference arranged by the Mechanical Working Committee of the American Institute of Mining, Metallurgical and Petroleum Engineers, all the contributors being connected with steel firms in the United States or in Canada. To this extent, the title may be somewhat misleading, since non-ferrous practice is touched on only by implication.

Six papers are included of which half the book is devoted to two on the factors affecting strip profile in hot- and cold-strip mills and on the closely related influence of hot-strip profile on subsequent operations. The remaining contributions are concerned with heat-treatment practice, the continuous normalizing of flat-rolled products, the continuous annealing of deep-drawing sheet and the theory and evolution of coil-heating practice in steel mills.

To the reviewer the most interesting part of these proceedings is a two-page paper dealing with the

annealing of strip in liquid sodium. Considerable laboratory work has been done during the past few years with results sufficiently encouraging to justify pilot-scale operation. The main advantages envisaged include increased rapidity of heating and cooling, a reduction in the space required and lower maintenance costs due to simplification of the plant.

F. C. THOMPSON

**The Nuclear Handbook**

Consulting Editor: Prof. O. R. Frisch. Pp. xv+640. (London: George Newnes, Ltd., 1958.) 50s. net.

THIS book is described in the foreword as having been designed as a day-to-day reference for use by scientists and technicians working in nuclear science and related fields. There are nineteen sections of varying length written, generally, by specialists. The topics include, among others, the nuclear properties of isotopes and natural radioelements, and of fission product and transuranic elements; the theory of nuclear reactors and the properties of fuels and other materials used in them; and related technologies such as particle accelerators, vacuum techniques, and electronics.

The technical level and the style of the contributions vary a good deal. The first section, for example, contains an elementary description of the structure of the atom whereas the mathematical discussion of nuclear reactions in section 19 makes few concessions to the unsophisticated. This last section consists of a collection of equations and formulae, with tables and graphs, connected by the minimum of narrative; the section on natural radioactivity is prefaced by two pages of history beginning with Becquerel.

The "Handbook" was published shortly before the second Geneva Conference on atomic energy, so that some of the data were outdated within a short time of publication. Nevertheless the book is a compact source for a wide range of information and should be useful, provided that reference is made to the periodical literature to check data in fields known to be changing rapidly.

K. E. B. JAY

**Guide to Reference Material**

Edited by Dr. A. J. Walford, with the assistance of L. M. Payne. Pp. viii+543. (London: Library Association, 1959.) 80s.; 12 dollars. (Members of the Library Association, 60s.; 9 dollars.)

THIS volume provides an annotated list, classified on the 1957 abridgement of the Universal Decimal Classification, of leading reference books and bibliographies, with emphasis on current publications and particularly material published in Britain. Maps, anthologies and most source books have been omitted, as well as the vast majority of periodicals, but in certain scientific and technical subjects, textbooks have been included, for want of more comprehensive works. It is intended for librarians, in the building up and revision of reference library stock; for use in general and special library work; and for students taking the Library Association examinations. Its 3,000 selected entries are the result of the work of some 70 contributors, and an admirably produced volume is well designed to serve as a point of departure for a much-needed series of detailed annotated guides on specific subjects, as is the hope of the editor, Dr. A. J. Walford.

R. BRIGHTMAN