By W. Eric Kelsey. Pp. viii+264+49 plates., (London: Chapman and Hall, Ltd., 1945.) 15s. net.

'HIS work stands out above the usual level of beekeeping guide-books. It is written in a pleasant style, beautifully and copiously illustrated, provided with many working drawings of appliances (fully dimensioned) and almost free from errors in its references to mathematics and physics-a pleasant change from some we have read. The order adopted is a good one-the history of a colony throughout the year, with diversions to practical beekeeping as occasion suggests. This is followed by a section on hives and appliances, and their making, the practical management of an apiary, the handling of bee pro-The duce, and information on pests and diseases. book concludes with chapters on pollination, bee anatomy and 'mental processes'.

There are some matters that could be improved. The author has put too much trust in Cheshiresixty years out of date-and that author's disciples. The chapter on diseases requires thorough revision. The cells of the comb are scarcely ever of the ideal geometrical forms suggested, being the result of the action of statical forces on plastic wax. There is confusion in the account of the sugars occurring in honey. If these and a few other matters are set right, the book would become the best practical guide book for British beekeepers. It is certainly the bestillustrated, and the artists-they deserve that appellation-who produced the 146 figures in the text and plates are most heartily to be congratulated. They are: Messrs. Douglas Dingle and H. W. Howard, the Rev. G. H. Hewison, Mr. P. S. Milne (of Rothamsted) and the author himself (responsible for the line drawings). The eminently readable style adds to the attractiveness of a fine piece of work. A. D. B.

The Physical Structure of Alloys

An Introduction to Modern Physico-Chemical Theories. By C. E. Beynon. Pp. 126. (London : Edward Arnold and Co., 1945.) 6s. 6d. net.

HIS book, of less than 120 pages, is designed to interest the industrial and student metallurgist in a province of science which is on the boundary of physics and chemistry. Within its pages is a brief survey of the present state of our knowledge of the structure of matter, with special reference to metals and alloys. The book starts at the beginning of things-the electron-and goes on to describe the structure of the atom and the ordering of atomic species in the Periodic Table. The next step in the architecture of solids is the structure of molecules and crystals and the relation of metallic to other types of crystals. The results of X-ray analysis are clearly presented with a number of good illustrations, and the growth of ideas about the nature of solid solutions and intermetallic compounds is set out in an The book concludes easily understandable form. with a chapter on the physical theory of metals and a bibliography for further reading.

In so small a space the author could not hope to deal adequately with any particular phase of his subject, but the book can be confidently recommended to all who are interested in metals and alloys and who wish to know more about them. The specialist will not need it, but as a guide to a student for a course of reading or to a teacher for a course of lectures, it should prove valuable.

## How to Study Birds

By Dr. Stuart Smith. Pp. 192+12 plates. (London: Wm. Collins, Sons and Co., Ltd., 1945.) 8s. 6d. net. Birds of the Sea

By R. M. Lockley. (King Penguin Books.) Pp. 32+24 plates. (Harmondsworth and New York : Penguin Books, Ltd., 1945.) 2s. net.

## The Swallow

By Eric Hosking and Cyril Newberry. Pp. 60+28 plates. (London: Wm. Collins, Sons and Co., Ltd., 1946.) 7s. 6d. net.

"HE circle of non-specialists who are becoming interested in birds and their behaviour is increasing at a fairly rapid pace. These three books will, therefore, find a ready-made market, and each of them is worth purchasing on merit. Dr. Smith's book, despite some minor defects, is undoubtedly the best book yet written to guide the layman in pursuit of a new hobby. Besides anticipating the kind of questions which the beginner would be likely to ask, Smith also provides those kinds of practical hints, drawn from his own experience, which would be invaluable to a beginner. Lockley's book is as good as anything which has been published in this admirable series, while "The Swallow" is a simple account which could easily be followed by the most elementary student. The photographs and illustrations in all three books are generally excellent.

The British Pharmaceutical Codex, 1934. Supplements 1-7

Pp. 408. (London : Pharmaceutical Press, 1946.) 21s.

"HE last edition of the British Pharmaceutical Codex appeared in 1934. This most valuable book provides an indispensable extension of the brief official monographs of the British Pharmacopœia. It has been kept up to date by the publication of seven supplements during the years 1940-45, and these have now been published together in one volume, which is much easier to handle than seven thin booklets. The first supplement deals with standard dressings and the fifth with quinine preparations. The other supplements contain a large number of new monographs and amendments to old monographs. The list of proprietary names has been considerably extended. A complete index covering all these supplements is included, and this makes it easy to find any information about specific preparations; but it is hoped that it will not now be long before this rather cumbrous accumulation of supplements will be replaced by a new edition of the Codex.

## Textbook of Botany

By J. M. Lowson. Ninth edition, revised and largely rewritten by Dr. W. O. Howarth and Dr. L. G. G. Warne. Pp. viii+584+8 plates. (London: University Tutorial Press, Ltd., 1945.) 12s. 6d.

THE appearance of Lowson's well-known "Textbook of Botany" in its ninth edition is a tribute to the soundness of the principles on which the book was originally based. Now Dr. W. O. Howarth and Dr. L. G. G. Warne have revised and very largely re-written the entire work to make it more than adequate for the needs of most students taking present-day intermediate examinations. The chapters have been planned both to supplement oral tuition and to reinforce the student's practical work. Most of the original drawings have been re-drawn by Miss M. W. Jepson and make the book of even greater value than the earlier editions.