

dimensions are thus placed within easy reach of the student.

Although so rich in material, one or two omissions might with advantage be remedied in a future edition. In the chapter on measurement of pressure, no apparatus such as the differential manometer suitable for the measurement of very small pressures is described. The methods and apparatus so frequently employed in the investigation of transition phenomena of different kinds should also find a place. Such are the use of the Bremer-Frowein tensimeter, the dilatometer, the electric transition cell, &c. Apart from these omissions, the book is undoubtedly excellent. It will be found invaluable to teacher and student alike, and should find a place in every chemical and physical laboratory.

H. M. D.

*London Birds and Other Sketches.* By T. Digby Pigott. New and enlarged edition. Pp. xiii + 256; illustrated. (London: E. Arnold, 1902.) Price 7s. 6d.

MR. PIGOTT is of opinion that every man, especially as he grows older, ought to have a "hobby," his own being the observation of birds in their native haunts. That he has recorded the results of these observations in a manner acceptable to the public taste may be taken for granted from the fact of his book having reached a third edition. Whether, indeed, he is treating of the wood-pigeons in Kensington Gardens, of the gulls and cormorants on the ornamental water in St. James's Park, of London insects, of the bearded tit in the Norfolk fens or of the sea-birds of the Shetlands and Farne Islands, the author is equally interesting; while the exquisite frontispiece by Mr. Thorburn and the other illustrations confer an additional attraction on a very charming little volume. In several instances, as in the case of gulls essaying to perch on the trees in St. James's Park, Mr. Pigott has new facts regarding bird life to place before his readers. The statement that rooks are not likely again to build in Kensington Gardens will be read with regret by all. On the other hand, bird-lovers will learn with pleasure that the bearded tit is on the increase in the Norfolk reed-brakes. Among the most interesting chapters in the volume are those on birds nesting in the Shetlands and bird life in St. Kilda.

It is, perhaps, a pity that the author did not get some professional ornithologist to look through his proofs. Had this been done, we should not have found the kingfisher, the swift and the nightjar classed as "Passeres" (p. 253) or "Regulus" given as the name of the wren (p. 22), while the statement (p. 5) that the shrikes form a link between other passerines and the birds of prey would perhaps have been modified.

R. L.

*How to Buy a Camera.* By H. C. Shelley. Pp. xii + 144. The "How to Buy" Series. (London: George Newnes, Ltd., 1902.) Price 1s. 6d. net.

THERE are no doubt many people who would have continued to practise photography if they had had the advice contained in this handy little volume. The amateur has been, and is now, too often led to invest his money in a camera the size and bulk of which renders it impossible for him to carry it about and use except with great inconvenience. The utility, and therefore the value, of a camera to the average photographer is gauged by its facility of erection, lightness and portability, and when these qualities are combined with good workmanship in every respect, photography becomes a pleasure. In the present book, the author gives some very sound advice to the would-be photographer, and he has not forgotten to bear in mind the different sizes of pockets which have to be considered. Chapters are devoted to each of the principal items that the photographer requires, and the author seems to have shown a very fair and impartial judgment in his suggestions as to the best or most serviceable articles to be purchased. A thorough perusal of

this book will effectively help anyone who wishes to take up this delightful subject, either as a hobby or as an aid to some portion of his daily work.

*Recent Advances in Science.* By A. E. Ikin, B.Sc. Pp. 83. (London: Normal Correspondence College Press.) Price 1s. net.

ACCORDING to the preface, this book has been written mainly with the object of giving pupil teachers an opportunity of obtaining some general information on the advances made in the past ten or twelve years. Unfortunately, the author shows only a superficial knowledge of his subject, and much of the information is in consequence incorrect. A good deal of it is also out of date, some of the inventions described having long since passed out of use. It may also be objected that technical terms are used much too freely in a book intended for those having no technical knowledge. Mr. Ikin's object in providing the pupil teacher with a sort of general guide to modern scientific progress is a very laudable one, but we fear it will not be realised by the book he has written. A correct description, in non-technical language, of present-day practice in the various branches of applied science would be far more valuable than a book such as this, which is likely, we fear, to do more harm than good to its readers.

M. S.

*Agricultural Industry and Education in Hungary.* Compiled by T. S. Dymond. Pp. 177; with 98 illustrations. (Chelmsford: John Dutton, 1902.) Price 2s. 6d. net.

THIS is an account of a visit, arranged under the auspices of the Essex Technical Instruction Committee, made by the Essex farmers' party to Hungary in May and June of this year. The tour was conducted by Mr. Dymond, the lecturer in agricultural chemistry in the Essex County Technical Laboratories at Chelmsford. It would appear from these pages that excellent results are likely to follow the opportunities then given to Essex farmers to acquaint themselves with agricultural methods in Hungary. The visitors were impressed by the good farming, the abundant grain and forage crops, the breeding of excellent horses and cattle, the organisation of agricultural industries and the complete measures taken by the State to foster agricultural improvements of every kind. One of the pleasantest pieces of reading in the volume is that describing the hearty welcome extended to the party by the Hungarian authorities and people generally. A guide book, edited by the Minister of Agriculture, containing an itinerary of the journey planned under his direction, and descriptions in English of Hungarian agriculture, was, at Vienna, presented to each visitor. The party was accompanied throughout the fortnight's journey by Mr. György, Dr. Goger and Mr. Szilassy, who, as Hungarian experts in agriculture, gave invaluable assistance.

*Le Ciment Armé et ses Applications.* By Marie-Auguste Morel. Pp. 158. (Paris: Masson et Cie., 1902.)

THIS book, belonging to the well-known "Aide-mémoire" series, deals briefly with structures produced by the association of cement with iron or steel, distributed in such a manner as to utilise to the fullest extent the special characteristics of each. The volume opens with a description of results obtained in this field of work by numerous French engineers. Among other matters dealt with are the principal systems of applying this plan of construction to floors, girders, arches and pillars, and the materials employed. The book concludes with a set of mathematical expressions for the forms of structure approved by engineers. The text is simplified by the hundred illustrations, which, with a few exceptions, are very clear, and the book is provided with a bibliography.