

methods of interpolation by differences. Here the usual formulæ are given and illustrated, but no mention is made of the remainder terms. About forty pages of interpolation coefficients with a two-figure argument are included for use with the formulæ, and a bibliography in which attention is mainly paid to functions of the kind for which the work is intended. The tables in the present volume relate to the gamma and psi functions and comprise about 140 pages, at various intervals of the argument, and to 10 or more decimal places. This forms the most complete collection at present available of values of these functions.

These tables are to be welcomed on account of their fundamental importance in the numerical applications of difference equations. The type used is the flat variety and forward differences are printed on the same line as the tabular values. These are points which may not meet with universal approval. On the other hand, the printing is clear, and one should not grumble at an author who has produced such a useful set of tables.

L. M. M.-T.

*An Introduction to Biochemistry.* By Dr. W. R. Fearon. Pp. x+313. (London: William Heinemann (Medical Books), Ltd., 1934.) 10s. 6d. net.

THIS book is by the professor of biochemistry of Trinity College, Dublin, and is obviously intended primarily for medical students. One may be permitted to venture a doubt whether the average medical student, at any rate in Great Britain, is likely to wish, or be able, to probe quite so deeply into the intricacies of organic chemistry as he would be encouraged to do by a thorough study of Prof. Fearon's book, in spite of the fact that the author claims to have approached "the living organism . . . along the less worn path of *inorganic biochemistry*". However much this detailed approach may unsuit the book for the British medical student, it makes it all the more useful as a general reference book for medical practitioners and scientific workers. As such, it is thoroughly up to date, and apparently free from serious typographical or other errors, though the attribution to ergosterol of two different formulæ on two consecutive pages indicates somewhat hasty revision or proof reading.

The scope of the book is evident from the fact that it includes such diverse subjects as methods for identifying the common carbohydrates, the inter-relationship between the pituitary and the reproductive systems, food and vitamins, an introduction to glutathione, cytochrome and other oxidation catalysts, a rapid account of the chemistry and constitution of the sterols and bile acids, and so on.

In spite of the existence already of a number of excellent introductions to biochemistry, we see no reason why Prof. Fearon's book, with its somewhat novel method of approach and attack, should not find a useful rôle in the training of medical and other students.

A. L. B.

*Minerals and the Microscope.* By H. G. Smith. Third edition. Pp. xiii+124+13 plates. (London: Thomas Murby and Co.; New York: D. Van Nostrand Co., Inc., 1933.) 5s. net.

THE third edition of this well-known book has been partly rewritten but, in the general method of treatment of the subject, it preserves the characters which have commended it to students throughout the last twenty years.

In the first two sections, which deal with the optical properties of minerals and descriptions of rock-forming minerals, no essential changes have been introduced. The final part, which is concerned with the study of rocks, has, however, been entirely rewritten and brought up to date. The method of treatment is genetical rather than descriptive, and aims at supplementing the knowledge gained from the study of specimens and thin sections. Difficult subjects such as gravitative differentiation, liquid immiscibility and magmatic assimilation are discussed in simple language and with a minimum of highly technical terms.

Dr. Smith provides an excellent summary of the technique of sedimentary petrography in addition to a short general description of the principal sedimentary rock-types. About seven pages are devoted to the metamorphic rocks, which are also considered from the genetical point of view.

The simple presentation of the essential facts, and the abundant photomicrographs with which the descriptive portion of the book is illustrated, provide an excellent introduction to a difficult subject.

*Name this Bird.* By Eric Fitch Daglish. Pp. xiii+215+64 plates. (London and Toronto: J. M. Dent and Sons, Ltd.; New York: E. P. Dutton and Co., Inc., 1934.) 7s. 6d. net.

THE avowed purpose of this book is to provide a sure guide for those who can scarcely be said to have even a nodding acquaintance with the birds of the field and garden; enabling them to name any bird that they may see, or be so fortunate as to have in the hand. For their benefit a set of 'Keys' for identification has been prepared, but these are of little practical use. The confused arrangement of the species described in these pages will be apparent when it is pointed out that the coot, the starling, and the capercaillie are all bracketed together! These 'Keys' form Section I. In Section II the species follow one another in their natural order, and are briefly described. Unfortunately, however, nothing is said about the coloration of the *immature* bird, so that those who turn to these pages to enable them to identify, say, a young starling, or robin—to take but two examples—will turn in vain.

A number of coloured plates, and of crudely drawn figures, may help in the identification when the sexes are alike. The females differing from the males are not shown. But why are the knot, rednecked phalarope, and sanderling shown only in their winter dress, and the ruff and godwits only in their breeding-plumage?