extensive knowledge of chemistry. The historical recapitulation of the development of discoveries and theories has been avoided. Instead, the author plunges straight into what is known and thought to-day. Selected references are given in support of statements and from them the reader can trace the question further if he so desires. All this is well done and the scheme is attractive.

It is a worth-while and important book, coordinating a multiplicity of complex evidence with a direct simplicity and it will undoubtedly be useful to the immunologist engaged in research and teaching. But it would be delightful could it be believed that the average medical student could read this book with understanding, especially Chapter VI on "Antibody-Antigen Reactions."

This book can not supplant such books as Bordet's "Traité de l'Immunité" and Topley's "Outline of Immunity" but it is a very important supplement to them. The subject-matter undertaken is too large to be uniformly covered by a book of this size and by the experience of a single author, so it is to be expected that readers with particular interests will find disappointments. The fields in which the author has contributed so importantly are most exhaustively and satisfactorily treated. Other sides of the subject are not always balanced and some are not sufficiently comprehensive.

For example, though active immunity claims more attention than passive immunity throughout the book, the influence and importance of the antigenic character of antibody globulin in therapeutic applications of passive immunity is neglected. In fact, immunity processes and happenings in the living body are not developed. On the whole the possibilities, contributions and failings of so-called antigenic analysis of the bacteria are not convincingly presented and this leaves a feeling of lack of sympathy. Of the 21 pages of Chapter IV ("Cell Antigens") rather less than half are devoted to bacteria, whereas almost the entire 22 pages of Chapter V ("Blood Groups") deal with human blood groups only.

The strength of the book lies in the treatment of "Antibodies and Antibody Specificity" (Chapter II, 56 pages), "Antigens" (Chapter III, 26 pages), "Antibody Antigen Reactions" (Chapter VI, 84 pages) and "Human Blood Groups" (Chapter V, 22 pages). These chapters should earn for the book a place in every bacteriological laboratory and every biological library. They can be consulted with advantage for the information they contain, but, much more importantly, for the clarity with which they pose problems yet to be solved to further advance this progressive and very important subject. This is no mean virtue.

An important feature of this book, the abandonment of a chronological account of discoveries, experiments, theories and failures, deserves to be emphasized because it allows of a clear statement of present knowledge. There is, of course, a fascinating interest to the well-informed specialist in the history of the development of his subject and it has the undoubted value of giving perspective. No one can properly appreciate the weight and significance of an item of information without knowing the difficulties, disappointments and the toil which accompanied its revelation and the prejudices which had to be overcome to effect its acceptance. Nevertheless, the dragging of a student through the warp and woof of a confused pattern of failures and misinterpretations hinders his acquisition and appreciation of the proved truth. Dr. Boyd has steered clear of this and in doing so has exposed problems it is now important to solve. A book is not as valuable for the information it imparts as it is for the thought and investigation it provokes.

E. G. D. MURRAY

INORGANIC QUALITATIVE ANALYSIS

Inorganic Qualitative Analysis. By HAROLD A. FALES and FREDERIC KENNY. Illustrated. ix + 237 pp. D. Appleton-Century Company, 1943. $2.65.

THIS book is designed for a one-semester course in which selected exercises in qualitative analysis serve to illustrate an introductory discussion of physicochemical principles, as applied to aqueous solutions. The first one hundred and fifty pages, together with some ten pages of supplementary exercises, are devoted to the theoretical discussions, which appear to be clear and thorough, and include many numerical problems. Another sixty pages present procedures for the detection of basic constituents; while analysis for acidic constituents is omitted, save that tests for four of the commonest acids are given on the last three pages. The procedures, according to standard methods, are arranged for semi-micro technique and should confront the student with few difficulties and require a minimum of laboratory time. All analyses assumedly begin with solutions prepared for the student, and complications, such as might arise from the presence of certain anions or of involatile organic matter, are thus avoided. There is also no mention of the preliminary operations which would be necessary in the case of a substance originally solid.

The book is well arranged and indexed, and is provided with lists of the necessary apparatus and reagents. It seems well suited to serve as text for a smoothly running course having the strictly limited objective described in the first sentence above.

D. P. SMITH

PRINCETON UNIVERSITY