

any era is interesting and important if authentic, and it can be taken that this history, documented so efficiently, with so many references to statistics and ascertainable facts, is to be relied upon to give a true picture of events. Volume 4, subtitled "The Merger Era", is concerned with the period 1922-29, Part 1, in fact, being called "The Booming Twenties" when it could be said "Booming automobile, motion pictures, and radio industries create new chemical demands". "The Return to Normalcy", as Haynes calls it, followed on the First World War and witnessed the beginning of the "Boom"; "the reckless orgy of spending" ended it with the "resounding crash of 1929".

The value of the volume depends not so much on the philosophic comments of the author as on the development it details of the growth of new industries, the extravagant development of old industries and of the 'monopoly' which by arrangements and contracts between companies, not only in the New World but also in the Old, sought to restrain the outside from getting into the inside. Haynes describes this tendency in four chapters of general comment, "The Return to Normalcy", "The State of Trade", "American Chemical Mergers" and "Foreign Cartels and Trusts". These chapters form an interesting commentary on the period and lead up to the author's survey of chemical industry in the United States as evidenced by inorganic chemicals, organic chemicals, medicinal and other fine chemicals, and lastly a group which he calls "The Consuming Industries"—fertilizers, pest-control chemicals, plastics and resins, oils and pigments, rayon and other textiles, petroleum and tetraethyl lead—and the final two chapters, "Chemicals in Industry" and "Broadening Chemical Boundaries". So much for the scope of the volume.

It makes fascinating reading for anyone concerned with the various industries treated, but naturally is not generally for the personal bookcase. It is, in fact, a book of reference and a mine of information. The appendixes, too, are full of information, occupying some 120 pages and varying from tariff rates to personal letters to the author, and from lists of witnesses at trials to uniform sales contracts. Neither must the photographs of some scores of American industrial celebrities be overlooked.

The book is printed well up to the high standard of its well-known publishers.

in conformity with more recent observations, to make minor revisions and additions to the text, particularly in the nuclear physics section, and to add to or extend the experiments which, it will be remembered, are an important feature of each chapter. Nevertheless, the reader will be somewhat disappointed (particularly so after reading the preface to the new edition, where the impression is given that considerable changes have been made) that so little new material, concerning work done in recent years, appears in the new edition.

Honours students of physics should find the book most useful, as it provides, in a condensed yet clearly expressed form, a survey of the many aspects of electron and nuclear physics, as well as helpful hints regarding the laboratory techniques involved. Detailed information must be sought for elsewhere, in more advanced and specialized treatises. The forty-odd experiments of which details are given and which are suggested as student exercises require apparatus which, even in these days, is probably not available except in those university laboratories engaged on nuclear research. The experiments, however, are well chosen, and much benefit can be derived by reading through the descriptions of them even if the student cannot perform them himself. Together with the set of numerical problems that are provided at the end of the book, the student should find excellent basic information in addition to much that will stimulate him to think for himself.

The book is well produced. Some of the line diagrams have been redrawn for greater clarity; but there are still several which could be improved in this way.

Some confusion may arise from the 1938 edition preface, which is reprinted in the new edition, being called "Preface to first edition". The book is divided into three sections: electron physics, nuclear physics, and laboratory techniques. "Electron Physics" was first published in 1929; "Electron and Nuclear Physics" (the three sections) was published in 1938 (for review, see *Nature*, 143, 1,048; 1939) and was referred to at the time as the second edition. The fly-leaf of the present volume confirms this arrangement.

S. WEINTROUB

PHOTOGRAPHY IN FORENSIC SCIENCE

Photography in Crime Detection

By J. A. Radley. Pp. 186+72 plates. (London: Chapman and Hall, Ltd., 1948.) 21s. net.

THE preface states that this book is addressed both to the practising police photographer and to the interested layman. For this diverse public Mr. Radley has covered the subject with exemplary completeness. His approach is realistic and practical. In five chapters he deals successively with the routine uses of 'straight' photography in police work, and with the uses in the laboratory of photomicrography, the methods of document examination and photography by infra-red, ultra-violet and X-rays. He has some interesting ideas of his own about applications as yet untried. He has also assembled a large and representative collection of illustrations, knowing well, no doubt, that it is largely by these that such a book is judged; and they are convincing witnesses.

ELECTRON AND NUCLEAR PHYSICS

Electron and Nuclear Physics

By Prof. J. Barton Hoag. Third edition, revised by Prof. S. A. Korff. Pp. xi+522. (New York: D. Van Nostrand Co. Inc.; London: Macmillan and Co., Ltd., 1948.) 27s. 6d.

THE 1938 edition of Hoag's "Electron and Nuclear Physics" must be well known to all university teachers of physics, and the new revised edition by Prof. S. A. Korff, an authority on electron and nuclear counters, will, doubtless, be very welcome and valuable. The method of presentation, the arrangement, and to a large extent the content also, of the 1938 edition have been retained. The opportunity has been taken to revise the tables of data