

and ammonia. The halogen family is next, comprising a section of five chapters, in which is also included a study of inorganic acids. The alkali metals, coinage metals (copper, silver and gold), alkaline earths, beryllium and magnesium and their compounds; boron, together with aluminum and the metals of Group III, Group IV; the phosphorus family; Group VI, and a section covering iron, cobalt and nickel follow, as the other main divisions of subject matter in the sequence listed.

The plan of the various chapters is a uniform one. First, the element to which the chapter is devoted is studied. Then each of its official and pharmaceutically important compounds are discussed. The material involved is set forth consecutively under the heads history, occurrence, physical properties, chemical properties, tests for identity, commercial methods for manufacture (considerably elaborated), laboratory methods of manufacture, quantitative determination, pharmaceutical preparations and uses. Where the author has deemed advisable the pharmacological action of the various ions have been inserted.

Viewed as a compilation of facts regarding the chemical tools of pharmacy the book has adequately fulfilled its destiny, although possibly a little too much weight has been placed on methods of manufacture, and not enough on the reactions of the chemicals. It does represent an advance in its field and points the way to standardization of such material. Perhaps it will aid in restricting the number of definitions of pharmaceutical chemistry, thus making the work taught under that name more uniform and rendering thereby a service of great value.—LOUIS WAIT RISING.

Recent Advances in Analytical Chemistry. By C. AINSWORTH MITCHELL. Publishers, P. Blakiston's Son & Co., Inc., Philadelphia. Price \$3.50.

Volume I of "Recent Advances in Analytical Chemistry," covering certain important analytical methods of organic compounds and edited by C. Ainsworth Mitchell, makes a definite contribution to the field of analytical chemistry.

The fact that each of its ten chapters has been written by a person with very special knowledge of the subject he is treating, makes it presumptuous for any one person to pretend to pass critical judgment on the details of the many different methods presented.

Rarely has an author succeeded in doing more exactly that which is stated in the preface as his purpose. The object of the work according to the editor is to present a brief summary of the older analytical methods for the subjects treated, together with ample literature and abstract references. The more recently developed methods are presented in considerable detail. Some of his suggestions as to fields of research, looking toward further development of analytical methods, seem very promising.

The subjects treated in separate chapters are Sugar Analysis, Oils and Fats, Essential Oils, the Proteins, Tannins, Cereals, Milk and Milk Products, Paper, Petroleum, Coal and Gas Analysis. The analytical methods used for these substances are summarized and brought up-to-date.

The Editor is correct when he states that the volume cannot replace but merely supplement more comprehensive standard works such as "Allen's Organic Analysis" and other more restricted volumes. He is very modest, however, when he states, "The work is primarily intended for those who have a general knowledge of chemistry but require information as to the best methods of dealing with analytical problems on the various fields discussed." It is a book which can be used to advantage by even the most experienced analyst. - ERNEST LITTLE.

Ergänzungsbuch zum Deutschen Arzneibuch (Supplement to the German Pharmacopoeia). Compiled and published by the German Apothecaries Society. 5th Edition. The book is to be obtained from Verlag des Deutschen Apotheker Vereins and the price is 10 marks.

The statement is made on the title page that the drugs and preparations in this book are not official in the German Pharmacopoeia. A description in brief of this work might be given as a composite of the "National Formulary," the "New and Non-official Remedies," and the "Pharmaceutical Recipe Book."

Among co-workers on the book the following are named: Dr. J. Herzog, Prof. Dr. H. Zörnig, Dr. K. Schulze, Dr. F. Diepenhock and the late Dr. L. Lewin.

About 1000 articles are considered in the book of more than 500 pages. In connection with drugs for which standards are included there are also suggestions relative to their preservation, and the characteristics of the preparations; color, taste, etc., are briefly