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.

Ergönzungsbuch zum Deutschen Arzneibuch (Supplement to the German Pharmacopœia). 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 Pharmacopœia. 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. Diepenhrock 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 described. Maximum single doses are given and also the dosage for a day. Each monograph has a Latin heading and also the German name of the drug and preparation. In most instances the name of the chemical is followed by its chemical formula, molecular weight and the percentage amount of the important constituent; the arrangement is alphabetical. The book also contains a number of tables, comprising doses, poisons, a schedule of items that should be protected against light or other influences, a list of synonyms, and a comprehensive index. While the book has been prepared for German pharmacists, it will be found useful in American pharmacies, especially in

those compounding foreign prescriptions. The book is well bound and printed and serves a useful purpose.

Anleitung zur mediznisch-chemischen untersuchungen fuer Apotheker (Introduction to clinico-chemical testing by pharmacists). By DR. PH. HORKEIMER. Verlag von Julius Springer, Berlin, 1930. 81 text pages, 16 illustrations. Price 6 marks.

The small book describes the clinico-chemical tests on which the pharmacist of the present day should be informed and qualified to apply. The author has given the methods which he has found useful in his practice, but advises that experience is required and also that with the development of this work other reference books will be needed. The text has been prepared in a way that will be understood and enable the pharmacist to apply the tests.

The greater part of the book deals with urinalysis in its various phases; first the method of collecting the sample of urine is explained and then the physical characteristicsthe color, transparency, specific gravity, reaction and optical rotation. The following pages describe tests for albumin, sugar, acetone bodies, bile, coloring matters, indican, ammonia, urea, uric acid, total nitrogen, chlorides, etc. Next, the urinary sediments receive consideration, and the illustrationsphotographic reproductions-show various urinary sediments. Other portions of the booklet deal with examination of the blood. stomach contents and bowel contents.

The Calendar of the Pharmaceutical Society of Great Britain, 1930–1931, published by the Society, 17 Bloomsbury Square, London, W. C. 1, England. Price 3s. 6d. The Calendar contains important data of the British Pharmaceutical Society—officers and committees of the Society, also the names of the Committee for Revision of the "British Pharmaceutical Codex."

The opening pages give a history of the British Pharmaceutical Society, its pharmacy school and other activities, also a list of the funds, scholarships and prizes. A chronological record of former presidents, vice-presidents and treasurers since the foundation of the Society is included, and the honorary members and corresponding members of the Society are named. The Calendar contains its constitution and by-laws, a list of the British schools and colleges of pharmacy; a general outline of the examinations, and questions of several scholarship examinations are reprinted, and also of those for prize competition, with an alphabetical list of prize winners. The remainder of the book is given over to British pharmacy laws, their enforcement, etc.

The Calendar is of prime importance for British pharmacists and has value for those of other countries, particularly, for board of pharmacy and faculty members.

Formulaire des Medicaments Nouveaux for 1930, 35th Edition, compiled by Dr. R. WEITZ, member of the Faculty of Pharmacy, Paris, and pharmacist at the Paris dispensary. The preface has been written by PROF. PAUL CARNOT of the Faculty of Medicine, Paris. Published by J. B. Bailliere and Sons, 19 rue Hautefeuille, Paris, France. Price 32 francs, in paper binding.

Prior editions of this Formulary have been reviewed in the JOURNAL. In the preparation of this book the officials of the French Codex have not been included. The preparations are described in monographs and more attention has been given to the therapeutics than in other publications of this kind. While of first importance to the French pharmacist, the Formulary is of value in all pharmacies where foreign prescriptions are filled. Both official and trade names are given of chemicals, description and their dosage. An index of 60 pages speaks for the number of items which have received consideration in this Formulary. The concluding pages of the book contain an alphabetical list of pharmaceutical specialities, together with the names of the manufacturers.

Fabrikations Methoden für Galenische Arzneimittel und Arzneiformen (Manufacturing methods for galenicals and other forms of medication) by JOSEF WEICHHERZ and JULIUS