number of references has been greatly increased and brought down to date.

Chapter I, comprising the introduction and general physical and chemical analytical methods, has been rewritten by William A. Davis, B.Sc., A.C.G.I., Cheshire, England. "Alcohols" is the title of Chapter II and its author is L. M. Burghart, B.A., M.A., Baltimore, Md.; Julian L. Baker, F.I.C., England has revised Chapter III, "Malt and Malt Liquors." Chapter IV, "Wines and Potable Spirits," has been rewritten by Lewis Eynon, B.Sc., F.I.C., London, England, while Emil Schlicting, Ph.D., New York, has revised Chapter V on "Yeast."

Henry Leffman, M.D., Ph.D., Philadelphia, is the author of Chapter VI, "Neutral Alcohol Derivatives" and the author of Chapter IV is also responsible for the Chapter on "Sugars," known as No. VII. "Starch and Its Isomerides" is the title of Chapter VIII, written by T. H. Pope, B.Sc., F.I.C., Cheshire, England. E. Sutermeister, S.B., Westbrook, Mc., is the author of Chapter IX, entitled "Paper and Pulp Testing." The last chapter, "Aliphatic Acids," has been rewritten by Hugo Schlatter, B.S., M.S., of Wilmington, Delaware.

A work of this kind, more or less cyclopoedic in character, is rather difficult to review. A few examples will show how well the revisors have succeeded in bringing the work down to date.

Under "Methyl Alcohol," one finds that not only have several tests and methods been deleted and more modern and satisfactory ones included, but the discussion and criticism of them by the author are of untold value. In common with all other chapters, the analyst finds here a very extensive and satisfactory list of references. The modification of the "Vorisek Chromic Acid Oxidation Method," found on page 95, appears to be very satisfactory.

The tests for the examination of ether take up more than twice the space devoted to this subject in the previous edition.

The Chapter on "Paper and Pulp Testing" is written in such a manner as to make it particularly valuable to the analyst only occasionally working along these lines.

The foregoing are indications of the thorough and careful revision one meets with in every chapter or section of the volume.

It appears strange that in such a carefully prepared and comprehensive chapter as that on "Sugar" no mention should be made in the

part devoted to urinalysis to the "Quantitative Benedict Modification" of Fehling's Solution, although the qualitative method is given. This is particularly strange as the former has come into great vogue among clinical chemists and pathologists. Furthermore, authors should never fail to direct attention to the fact that the two solutions are quite different, and that the "quantitative" solution cannot be used for "qualitative" work and vice versa.

With reference to quantitative work, the reviewer prefers the term "determination" to "estimation," which is used practically throughout the work.

This slight criticism certainly will not detract from the great value of this deservedly popular work without which the reference library of any research or commercial laboratory would be a poor one indeed.

JEANNOT HOSTMANN.

Le Livre du Preparateur en Pharmacie. By P. Goigoux. Cloth,  $7^{1}/_{2}$  in. by 5 in. Pp. XV + 650. Figures in text, 45. Vigot Frères, Editeurs, 23, Rue de l'Ecole-de-Médecine, Paris. The "aide" or "preparateur" in pharmacy in France serves an apprenticeship of six to eight years. The instruction which he receives is imparted to him verbally by his employer during the day's work. As a result, the scope and thoroughness of the instruction received vary greatly. To overcome these conditions and to provide the "aide" with something tangible to study in the hours when he is not at work, the author has prepared this volume. It is divided into five parts and an appendix. The first part deals with the elements of human anatomy and physiology, forms of medication, and pharmaceutical operations. Part two is devoted to chemistry, including inorganic and organic medicaments. Part three deals with medicinal agents of vegetable and animal origin. Part four is devoted to the galenical preparations, surgical dressings, organo-therapeutic preparations, serums and veterinary remedies. Part five deals with the laws and regulations covering the conduct of a pharmacy and dispensing. In the appendix, there is given a brief outline for the examination of urine and a short code of ethics for the "aide" prepared by M. Edouard Tercinet, Doctor of Law. While the descriptions and discussions are brief, the essential facts are given, and these are presented in language which it is believed should be understandable to the beginner in pharmacy.

A. G. DuMez.