are omitted. For the first time 94 new drugs, not previously recognized officially in the U. S., are described.

In general, assay and test procedures reflect the widespread use of modern analytical techniques and instrumentation. For the first time, gas–liquid chromatography, flame spectrophotometry, thin layer chromatography, polarography, and Δ-pH titrimetry are used. The general tests section includes a number of new general procedures for several classes of drugs.

Some revisions of interest include a time reduction in time disintegration tests for tablets, a content uniformity test for tablets, and new standards for fill tolerances on creams, ointments, and powders. A section on pharmaceutical preparations gives general discussions of various dosage forms. Synonyms in monographs have disappeared and some names have changed because of the 1962 amendments to the Federal Food, Drug, and Cosmetic Law, but an alphabetical listing of former synonyms is given. Federal regulations on narcotic drugs are given in the general information section.

Because of new information, this new "National Formulary" is about 100 pages larger than the last edition. The widened margins enhance readability, and altogether it is more attractive than the XIth edition. Chemical names for drugs have been replaced with the systematic chemical name used by *Chemical Abstracts*, which will be a joy to most organic chemists. The "National Formulary XII" should prove to be a useful guide to pharmacists and chemists who are concerned with drug standards and control.

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**The Quantitative Analysis of Drugs.** By D. C. GARRATT. 3rd Ed. Charles C Thomas, Publisher, Springfield, Ill. 1964. xiii + 925 pp. $27.50.

This book may be divided into five sections. The first and major portion contains general monographs for the quantitative determination of the substance and its salts and preparations of which it is a principle constituent. Also included in this section are the antibiotics and natural as well as synthetic steroids. The following three sections are devoted to the quantitative determination of synthetic organic compounds (not included in the general monographs), essential and fatty oils, fats, and waxes.

Those methods which are likely to prove most serviceable are selected, and in many instances as many as three to four methods or techniques are described for the determination of one substance. The book cites numerous references and the scope, limitations, and the relative merits of various methods.

The last section consisting of over 100 pages contains several appendixes among which are included the determination of water and alcohol content, nonaqueous titrations, and a brief survey of the various applicable instrumental methods of analysis. Worth mentioning is an appendix describing the statistical treatment of analytical results and the interpretation of analytical data.

Teachers and students of pharmacy as well as chemists interested in the quality control and analysis of drugs will find this book useful.

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