

The arrangement of the book is excellent and the selection of matter carefully made. Blank leaves for notes are inserted between the pages. The classification of the metals into groups for the purpose of analysis is first shown. Then the reactions of the metals are given. Following the single reactions of each group is given the method of analysis for the group. In most cases an alternative scheme is also printed. A notable exception is in the case of the barium group where the writer gives only the separation of strontium from barium, depending on the different solubilities of their nitrates in absolute alcohol. The reactions of the acids follow those of the metals. The order is alphabetical and not according to groups. The scheme for the detection of iodides, chlorides, and bromides, where more than one is present, by separate tests for each, does not commend itself to the reviewer, and might well be substituted by Professor Hart's easier and simpler method. The section on the treatment of solids is clearer and more concise than that given in most small books. Throughout the book the aim of the writer seems to have been to make the student think. This is borne out by the notes which follow the analytical schemes and by the table of solubilities and list of questions which close the book.

RICHARD K. MEADE.

ALKALOIDAL ESTIMATION; A BIBLIOGRAPHICAL INDEX OF CHEMICAL RESEARCH PREPARED FROM ORIGINAL LITERATURE FOR THE COMMITTEE OF REVISION. BY PAUL I. MURRILL, under the direction of ALBERT B. PRESCOTT. Ann Arbor, 1898. "Published by the Committee of Revision" of the Pharmacopoeia of the United States of America, 1890-1900. Not for sale.

This is a pamphlet of 58 pages "in boards," and embraces the easily found work upon its title subject from 1861 to 1898. It consists entirely of clerical labor very well done and its arrangement is convenient for reference.

The contents are first a list of the more important of the series of publications examined, and then an alphabetical list of other periodicals to which references are given. Then the body of the work is in three parts.

Part I is the chronological index where, in giving the references, original papers are first given. Then republications and abstracts; and the abbreviations used are, as far as practicable, those of Bolton's "Bibliography of Chemistry."

Part II is an alphabetical index of authors referred to with dates and reference numbers to the dates in Part I.

Part III is a subject index where a similar arrangement of dates and numbers are used, the subject coming first in alphabetical order, and the name of the author last.

On pages 10, 11, and 12, are given the full text of the assay processes of the British Pharmacopoeia of 1885 for cinchona, nux vomica, and opium, and on pages 38, 39, and 40, are given the full text of the assay processes of the same Pharmacopoeia of 1898 for belladonna, cinchona, ipecac, nux vomica and opium tincture.

On pages 33 and 34, are given a translation of the assay processes of the German Pharmacopoeia of 1895 for cinchona and opium, and on pages 22, 23, 24, 25, and 26, are given the assay processes of the U. S. Pharmacopoeia of 1890 for cinchona, nux vomica, and opium.

The recent British Pharmacopoeia gives also an assay process for opium which is not quoted here apparently because it is so nearly identical with the process for making the tincture of opium by assay. But it would have been better to have quoted the process for opium rather than that for the tincture, since it is very convenient to have all the complete pharmacopoeial processes quoted here together for ready reference in accordance with the general plan of the pamphlet.

The chief utility of this work outside of the Committee of Revision, is in the time and labor that may be saved by it to any one who is about to undertake any research or investigation of any of the natural alkaloids, and although its field is not large it is rather to be regretted that the "pamphlet is not for sale." It is however altogether probable that any one needing a copy may get it from the committee.

E. R. SQUIBB.

TRAITÉ D'ANALYSE DES SUBSTANCES MINÉRALES. PAR A. CARNOT.
Tome premier.—Méthodes Générales d'Analyse Qualitative et Quantitative. Paris: V^e Ch. Dunod, Editeur. 1898. 992 pp.

This treatise on mineral analysis by M. Carnot is to consist of three volumes of about 1000 pages each. The first volume which has just been issued comprises 992 pages of which 459 are devoted to qualitative methods.