completeness nor does it pose as a textbook for beginners; the main purpose being to outline the methods by which typical difficulties have been overcome and to leave the adaptation of the suggestions to the resourcefulness of the reader. The book is divided into twenty-two chapters. A few of the more important headings are mentioned here to give an idea of the scope and character of the work. There appear chapters on starting materials and extraction, distillation, distillation under reduced pressure and in vacuo, dialysis, sealed tubes, filtering, and pressing out precipitates, crystallization, molecular weight determinations, melting-point determinations, drying of solids and dehydration of liquids; drying of gases and removal of a single gas from gaseous mixtures, and a final chapter on the detection of the elements usually found in organic substances. It is hardly necessary to say that this volume is about the most thorough and complete one of its kind now appearing in English. The authoritative character of the material is guaranteed by the reputation of the author.

The translation is one of the best German to English translations that the writer has had occasion to read. It is a pleasure to see how well the peculiarities of the German have been smoothed out and put into perfect English. The writer has searched in vain for any serious errors, either typographical or otherwise. Upon superficial examination one might gain the impression that the material is old and outof-date but this is not altogether the case since a large number of references to up-to-date material have been added by the editors. The references to original literature given throughout the book seem to be very complete.

It is unnecessary to go into detail regarding the subject matter of the book. It is a book that should be in the hands of every worker in the line of synthetic organic chemistry and should be in the reference library of every institution in any way interested in practical methods of organic analysis.

A. H. CLARK.

Annual Survey of American Chemistry, Vol. 3 (1927). Prepared under the auspices of the Division of Chemistry and Chemical Technology. National Research Council; Edited by Clarence J. West. The chemical Catalog Co., N. Y., 1928, pp., 395, \$3.00.

The intentions of the sponsors of this enterprise are excellently conceived, but the actual value of the subsequent result is rather un-

certain. This is evident, considering the necessarily superficial treatment of subjects in a publication of this type and scope. Its intrinsic value lies only in the presentation of material derived from widely diversified sources. The availability of the data in this publication is, however, curtailed to a great extent, since the book sustains the inestimable disadvantage of lacking an index. The contents of the volume consist of the selective compilations of 52 contributors representative of the following technical affiliations; College Professors 15, Research Institutions 4, Federal and State Bureaus 13, Private Corporations 16, Individuals in Private Practice, 4. Of the 46 chapters comprising this work, the "Survey of American Pharmaceutical Chemistry" is the briefest in the book, occupying only three pages of data based on 24 bibliographic references. Comparison with space devoted to other topics, e. g., Thermodynamics, Kinetics, etc., Rare Earths, Petroleum, etc., can only suggest negligence in conducting the survey of Pharmaceutical Chemistry or else a space restriction imposed on a more adequate report of the progress made in this important branch of American industry.

A survey of Electro-Chemistry which has been omitted, would be a valuable and appropriate addition.

The Authors' Index, consisting of 11 pages, lists 5440 references which ordinarily can serve of no use in locating specific data. Summarily, the book in view of its exorbitant price, the superficial treatment of the subjects generally, and the inclusion of a preponderating amount of purely theoretical data can but serve as a valuable acquisition as a research reference or an abstract historical record of American Chemistry. The needs of the pharmaceutical chemist can still be best served by the YEAR BOOK OF THE A. PH. A.—SIMON MENDELSOHN, 3560 Wilson Ave., Cincinnati, Ohio.

Tablets.—(I) The Evolution of the Tablet Machine. (II) A Bibliography on Tablets. By P. A. FOOTE—a thesis submitted for the degree of Master of Science, University of Wisconsin.—Published in *Bulletin* of the University of Wisconsin, serial number 1566, General Series No. 1340.

Mr. Foote presented part of the subject in an illustrated lecture at the St. Louis meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION. The Bulletin has 164 pages. The first 66 pages, describe "The Tablet as a Mode of Adminis-

tration," "The Evolution of the Tablet Machine," illustrated, in which the constructions of the machines are discussed; including also processes of manufacture, formula construction, excipients, methods and data relating to granulation, sieving, drying and compression.

The Bibliography of Tablets covers 78 pages and is arranged according to years in which the articles appeared. Brief statements relating to the article are made and important data are given. There are five pages in the author's index containing more than 200 names, not including anonymous articles which number considerably over 100 references. The subject index has fifteen pages of nearly 50 lines to the page.

The presentation shows careful search and reading and the bulletin should find a place in every library of pharmacy schools and manufacturing establishments. We understand copies of the bulletin may be had from the University of Wisconsin for 50 cents.

Die Parfumerieindustrie—The Perfume Industry. A reference book for perfumers, chemists, pharmacists and soap makers with a review of related literature and patents by Alfred Wagner. 596 + XII pages, 93 illustrations, paper binding. Price 29 R.M. Publisher, Wilhelm Knapp, Halle (Saale).

The author says in the foreword that the object which led to the preparation of the book was to bring the literature and patents pertaining to the industry up-to-date, the older literature and patents being contained in Mann's excellent book. This object has been attained.

All phases of the industry are covered. A partial knowledge of the scope of the work is revealed by a few of the chapter titles given below, which are selected from various parts of the book. The Laboratory of the Perfumer; The Water; Odor Chemistry; Natural Scents (subdivided according to source into plant and animal); Artificial Scents; Colors and Coloring Materials; Volatile Oils; History of Perfumery; Pomades; Toothpastes; Agents for Sunburn; Smelling Salts; Bath Salts; Sachets; Skin Creams; Cold Creams; Lip Pomades; Powders; Incense; Nail Polishes; Insect Repellants; Soap Making, etc.

Excellent features include: *first*, a critical note of the quality of materials from different sources, that best suited for use being frequently noted; *second*, numerous references to the original literature; *third*, a very complete index.

In addition to the general discussion of the materials and products used in and into which perfumes enter, critical data are given to determine the quality of the materials. Hundreds of modern recipes are given for various toilet and pharmaceutical preparations. This alone should make the book valuable to all who are engaged in the manufacture of such products. The author recognizes that a book recipe does not always yield a product suitable to all needs. However, given a basic recipe, the manufacturer may by slight modification obtain a distinctive line of products. A sufficient variety of recipes are given for each type of preparation to permit selection. When the material used in any given recipe is marketed and used under a trade name, the source from which it may be obtained is indicated by abbreviation and reference to the manufacturer thereof.

Over 265 pages of the book are devoted to recipes, which have been collected from various sources with directions for their preparation. Taking the agents used to cleanse the mouth and teeth as a typical illustration of this portion of the work, the following number of recipes are found: Neutralizing Agents—tooth powders 2, mouth washes 4. Astringent Agents mouth washes 2. Antiseptic Agents—tooth powders 2, mouth washes 8. Cleansing Agents—tooth powders 17, tooth pastes 14, tooth soaps 3, mouth washes 40.

A comprehensive survey of the literature and patents covers 21 pages. An excellent index of patents, authors and subject matter is included. The book is notably free from errors. It is well printed on good paper and merits better than paper binding. It is a valuable addition to library reference works treating of perfume raw materials, perfumes and products into which perfumes enter. It should find a useful place in the libraries of perfumers, soap makers, pharmaceutical manufacturers and of those individuals engaged in such work.

GLENN L. JENKINS.

CHANGING PROMOTION OF NAVAL DENTISTS APPROVED.

The House Committee on Naval Affairs on January 15th voted a favorable report on a bill (H. R. 480) extending the existing law regarding the promotion of dental surgeons to all officers in the Dental Corps of the Navy.