chemistry, as well as their application in agriculture and the industries, reflect the work of a master, but the other portions of the text present too great a variety in brief, to correspond with the title of the work.

SIMON MENDELSOHN.

Schlickum's Ausbildung des Jungen Pharmazeuten. 13 Auflage unter Redaction von Prof. Dr. W. Böttger. Mit. 601 Abbildungen, 3 farbigen Tafeln. Lex. 959 pp. M. 33. Johann Ambrosius Barth, Leipzig.

When Oskar Schlickum (1838–1889), Apotheker in Winningen a. M. in 1877 published the first edition of his "Ausbildung des Apothekerlehrlings," the book at once was a success. This being the 13th edition, speaks for a well-deserved popularity. Beginning with the 11th edition the work was broadened so as not only to be a textbook for the apprentice, its original aim, but also for the young pharmacist. The work is so well classified and written that every student in German speaking countries reads and studies or reviews from "Schlickum."

The division of the book is as follows:

I. Physics pp. 1–164, written by Hof-Apotheker Dr. W. Arnold in Munich and L. Schiller, Assistant at the Physical Institute, University of Leipzig.

II. Chemistry pp. 165–503, prepared by Apothekenbesitzer Dr. C. Jehn in Geseke, Apotheker Dr. W. Böttger, Professor University of Leipzig, Oberstabsapotheker Dr. Telle in Leipzig and Dr. H. Trunkel, in Leipzig.

III. Botany pp. 504–646.

IV. Pharmacognosy pp. 647–754. Both chapters are prepared by Apothekenbesitzer L. R. Schlickum in Winnigen, a descendant of the original author.

V. Pharmacy and Jurisprudence pp. 755–851, prepared by Apothekenbesitzer A. Roderfeld in Ludwigsdorf, Dr. H. Telle and Dr. H. Trunkel, Leipzig.

VI. Tables for the Review of Chemistry and Pharmacognosy.

a. Inorganic Chemical—Pharmaceutical Preparations pp. 852–879, by Dr. H. Telle.

b. Organic Chemical Preparations pp. 880–905, prepared by Apotheker H. Bauer, Professor at the Technical High School, Stuttgart.

c. Vegetable Drugs pp. 906–926.

d. Animal Drugs pp. 927–928. Both chapters by Apotheker L. R. Schlickum. Chapter VI is an entirely separate part of the book, so it can be carried and studied by the young pharmacist without interference with the big volume, a novel feature in pharmaceutical bookmaking.

An index in three columns occupies 31 pages, a splendid testimonial on the contents of the book. The two colored plates represent poisonous medicinal plants and are real works of art.

This book, in its 13th edition, is a distinct contribution to pharmacy. It is one of the few books where the student will find everything necessary to the study of pharmacy in one single volume.

OTTO RAUBENHEIMER, PH.M.

INAUGURAL DISSERTATIONS.

Contributions to the Research of the Active Constituents of Cape Aloes. By Hans Kiefer, Apothecary at Basel. One of the purposes of the dissertation is the acquisition of the Doctor's degree. Thanks are extended to members of the Faculty of Pharmacy—Prof. Dr. H. Zörnig and Dr. P. Casparis. Among the references cited is the foregoing dissertation, the method of C. H. Briggs for the estimation of aloin in aloes, p. 774 of September JOUR. A. PH. A., 1923, and reinvestigation of the proximate composition of *Rhamnus frangula*, by John A. Gunton and Dr. George D. Beal, September JOUR. A. PH. A., 1923, pp. 669–682.

Pharmaco-chemical and Physiologic Investigation of the Bark of Frangula is the subject of Apothecary Rudolf Maeder of St. Gallen. Thanks are given the same members of the Faculty. The dissertation makes a book of more pages than the others and more references are given in which those mentioned in the preceding dissertation are included. The candidate for the degree names "glucofrangulin" = frangulin plus glucose = $C_{27}H_{30}O_{14}H_2O$ as the principal active constituent.

The last one of the dissertations is by Apothecary Karl Schulte at Ohle in Westphalia. Special thanks are given Prof. Dr. H. Zörnig. The subject of research relates to the *Anatomy of the Seeds of Monocotyledons.* The dissertation concludes with a key for determining the seeds in powder form; twenty illustrations follow—the more important seeds of the drug plants illustrated are colchicum and veratrum.