pharmacist or by a place where such person is in charge. A fine of not less than \$50 applies. Non-display of certificates by owner and registered pharmacists subjects the violators to a fine of \$10 and costs.

Every pharmacy must have the latest editions of the U. S. Pharmacopæia and National Formulary and every owner of a pharmacy is held responsible under the law for the purity and quality of the drugs and preparations dispensed in the store whether prepared on the premises or purchased from jobbers or manufacturers.

The Federal Government requires that the drug store proprietor who is not a registered pharmacist in making application for a permit to handle non-beverage spirits must give the name of the registered pharmacist in charge. The drug store proprietor even though himself a registered pharmacist, if he operates more than one drug store, must name on the permit the registered pharmacist in charge of the store or stores not under his personal charge.

PENNSYLVANIA RULES STANDARD THREE YEAR PHARMACY COURSE BEGINNING IN 1925.

(Bulletin B 11 Drug Trade Bureau of Public Information.)

The State Board of Pharmacy of Pennsylvania has adopted the following rule for a minimum course in a college of pharmacy, qualifying applicants for admittance to its pharmacy licensure examinations on and after June 1st, 1928.—I. L. Walton, Secretary.

"Beginning with the fall of 1925, the minimum course of instruction given by a College of Pharmacy, recognized by the Pennsylvania Board of Pharmacy, shall be *three* years, covering 2250 hours of instruction. The course shall consist of not less than 40 per cent. in-

struction in lectures and recitations, and not less than 40 per cent. laboratory work."

INDIANA COLLEGES ADOPT THREE YEAR COURSES.

In accordance with the action of the American Conference of Pharmaceutical Faculties and complying with the expressed wish of the pharmacists of Indiana, the Purdue University School of Pharmacy, the Valparaiso University School of Pharmacy, the Indianapolis College of Pharmacy, and the University of Notre Dame Department of Pharmacy have adopted the three-year minimum course to begin in the fall of 1925. This means that the last class to enter a two-year course in these colleges will be the class that enters in the fall of 1924, and that the last class to graduate from a two-year course will be the class that graduates in the spring of 1926.

NEW YORK STATE NARCOTIC LAW PROPOSED.

An act amending the New York State public health law in relation to habit forming drugs, introduced in the Senate by Mr. Kennedy, has been referred to the Committee on Public Health. The act would provide for practically the same regulations and control which existed prior to the creation of the Narcotic Control Board.

The act allows manufacturers and dealers to sell freely to each other and a pharmacist to sell upon a proper prescription. Physicians, dentists and veterinarians are permitted to prescribe and administer narcotics. The act provides that a record of each transaction must be kept for two years after it takes place. A number of features regarding labels and the like which were held objectionable by the American Pharmaceutical Association in the first draft of the bill, were eliminated before its introduction in the Senate.

BOOK NOTICES AND REVIEWS.

The well-known firm of Theodor Steinkopff, Dresden—Blasewitz, publishers of pharmaceutical, chemical and technical works and also of the old *Pharmaceutische Zentralhalle* established by Dr. Hermann Hager in 1859, favored us with the following books for review:

Klinische Kolloidchemie, Von Dr. Ernst Joël. Octavo, 124 pp.

The book contains 9 lectures by a practicing physician at the Hospital Moabit in Berlin on colloidal chemistry in clinical medicine. Ever since Thomas Graham, F. R. S. and Master of the Mints, laid the foundation to colloidal chemistry with his lecture "Liquid Diffusion Applied to Analysis" before the Royal Society of London on June 13th, 1861, this new chemistry, the dawn between physics and chemistry, has made great strides, especially in the last few years.

The application of colloidal chemistry in medicine and pharmacy is of the greatest

importance and the book before us throws much light on this subject.

Kolloide in der Technik, Von Raphael Ed. Liesegang. Octavo, 157 pp.

The 14 chapters of the book deal with: Glue and Gelatin, Adhesives, Protectives, Plastic Masses, Tanning, Soaps, Oils and Resins, Rubber, Paper, Textiles, Metals, Ceramics, Foods and Photography. Truly quite a variety of subjects. Nevertheless even the pharmacist can learn much by looking through this book. An author's index of seven pages in double columns and a subject index of three pages in double columns prove the variety of contents.

Physikalische Chemie, Von Dr. Alfred Benrath. Octavo, 107 pp.

This is Volume VIII of the Natural Science Series in which the wide-awake publisher collects all the new data since the beginning of the World War. The book before us is written by the well-known authority, Dr. Alfred Benrath, Professor of Chemistry at the University of Bonn. The 2 parts of the volume are: I. Physical Chemistry as Applied to C. P. Chemicals: Relation between the Properties of Elements and Compounds; Theory of Allotropism. II. Physical Chemistry as applied to Solutions: Remarks to van't Hoff's Theory; Solutions of Electrolytes; Theory of Electrolytic Dissociation; Solvat-Theory.

A very complete author's and subject index of nine pages concludes this excellent book, a very distinct contribution to physical chemistry and its newer developments.

Carl Thiersch. Sein Leben, Von Justus Thiersch. Mit 4 Bildnissen. Octavo 190 pp. Johann Ambrosius Barth, Leipzig.

In a paper "Pharmaceutical Events in 1822" read before Section on Historical Pharmacy, A. Ph. A., Cleveland meeting 1922 (Jour. A Ph. A., Feb. 1923, pp. 153-158) the writer briefly mentioned the birth of Carl Thiersch, professor of surgery at the University of Leipzig. It is, therefore, a double pleasure to review a book containing the biography of this authority written by his oldest son. The book is systematically arranged from birth to death—a true biography—and we want to mention a few chapters and extracts. Born April 20, 1822, in Munich, the son of Professor Friedrich Thiersch, he graduated from the gymnasium in 1836, entered the University of Munich and began the study of medicine in

1840. He made further studies at the Universities of Berlin, Vienna and Paris and obtained his "Doctor Med." in 1846 with a thesis, "On the Action of Medicines," at the University of Munich, where he became prosector of anatomy. From 1854-1867 he occupied the chair of surgery at the University of Erlangen and from that date until his death, April 18, 1895, the one at the University of Leipzig. With interest do we note that in 1854 Carl Thiersch married Johanna, the second daughter of Professor Justus von Liebig. In the appended bibliography we find that Thiersch introduced salicylic acid as an antiseptic in surgery in 1873. His name will forever live in pharmacy and medicine as Thiersch's Solution and Thiersch's Powder.

We must not forget to compliment the publishers as to the printing, illustrations and binding of the book which we can highly recommend to all interested in history and biography.

Justus Liebig und seine Zeit. Von Prof. Alfred Benrath. 12 mo. 120 pp. Velhagen und Klasing. Bielefeld und Leipzig.

A popular edition of the biography of the great chemist and his time by an author who is professor of chemistry at the University of Bonn. The 10 chapters of the book deal with: Liebig as Student, Professor in Giessen, Events in 1840, Agricultural Chemistry, Animal Chemistry, Events in 1848, Chemical Letters, Professor in Munich and Last Years of Liebig.

However, the author neglected to state that originally Liebig was apprenticed to Apotheker Pirsch in Heppenheim (Hessen) where he spent ten months. Owing to his love for experiments and almost blowing up the building he was discharged—not careful enough for a pharmacist, he became the greatest chemist of his time.

The little book is well worth reading and the bibliographic references are very useful for further information.

The foregoing reviews have been prepared and communicated by

Otto Raubenheimer, Ph.M.

Manual of Chemistry. By W. Simon, Ph.D., M.D., and Daniel Base, Ph.D. 12th Edition, 667 pages. Fifty-five illustrations, one spectrum plate, and six colored plates. Lea and Febiger, 1923.

Any book which, as this one does, attempts to cover in a single volume the fields of general chemistry, organic chemistry, and analytical