

BOOK NOTICES AND REVIEWS.

The First Century of the Philadelphia College of Pharmacy. 1821-1921. Joseph W. England, Editor. Pp. 728. With numerous illustrations. Published by the Philadelphia College of Pharmacy and Science, 1922.

It is not often that an opportunity is afforded for reviewing the history of an American educational institution whose activities have been continued uninterruptedly for a period of a century. In the case of an institution which has been devoted more specifically to instruction in the science and art of pharmacy the circumstance becomes unique, for the Philadelphia College of Pharmacy was the first among the kindred schools and colleges of our land to establish a course of systematic pharmaceutical education. Its record of achievement, as portrayed in the volume which has now been issued, is one which reflects the highest credit upon all who have been instrumental in its development. From the time of the inception of the college in 1821 through all the intervening years it has been sustained by a long list of able men who have devoted their talents and energies, either as teachers or administrators, to its advancement and to the promotion of those principles of professional practice which were embodied in the declaration of its founders. The benefits to be derived from the courses of instruction provided by the college were evidently foreseen at an early date, for its motto, as represented on the title page of the present work, is *Nosse haec omnia salus est*.

In complying with the request to prepare a review of the book under notice, the writer has been conscious of the difficulty which attends the satisfactory fulfilment of such a task. The selection made for this purpose was doubtless suggested by the fact that fifty years ago the writer of these lines had the honor to be inscribed as a student at the Philadelphia College of Pharmacy and that he thus had the privilege of a personal acquaintance with many of those who at that time and during the intervening years were intimately associated with it. An attempt to present an outline of the contents of this historical volume is therefore a pleasant duty, and it is one which is approached with a sense of admiration akin to reverence for the teachers who in early years imparted so much of inspiration, while many of the portraits which embellish the work visualize a group of personal

friends with whom most happy memories are associated.

A brief synopsis of the contents of the volume under notice may serve to indicate its character and scope. The subject matter has been divided into thirteen chapters, which have the following titles:

Chapter I—Philadelphia and Pharmacy in 1821.

Chapter II—Founding of the College.

Chapter III—In a Home of Its Own—Zane Street Building (1832-1868).

Chapter IV—Ethical Standards and National Associations.

Chapter V—From Zane Street to North Tenth Street.

Chapter VI—Progress and Achievements of the Past Fifty Years.

Chapter VII—Alumni Association of the College; Its Origin and Work.

Chapter VIII—Merging of the Department of Pharmacy and Chemistry of the Medico-Chirurgical College with the Philadelphia College of Pharmacy.

Chapter IX—American Journal of Pharmacy.

Chapter X—Centennial Year.

Chapter XI—Officers, Trustees, Executives and Faculty of the Philadelphia College of Pharmacy.

Chapter XII—Biographical List of Graduates of the Philadelphia College of Pharmacy, and of the Department of Pharmacy and Chemistry of the Medico-Chirurgical College.

Chapter XIII—Alphabetical List of Graduates of the Philadelphia College of Pharmacy, and of the Department of Pharmacy and Chemistry of the Medico-Chirurgical College.

It would be impossible to give any adequate description in further detail of the large amount of valuable and interesting information which has been included in this work, for the history of the Philadelphia College of Pharmacy represents to a large extent the development of pharmacy on the American continent. With this development may be considered the production of the United States Pharmacopœia, the United States Dispensatory, and the organization of the American Pharmaceutical Association. Such an historical record of the activities of the college cannot fail to be of absorbing interest to all its former students and to those who at various periods have been associated with it, while its value to succeeding generations should be correspondingly enhanced.

It is assuredly the wish of all who are conversant with the history of this honored institution, and especially of those who have received instruction within its walls, that it shall continue to maintain the best traditions of the past while seeking to extend its sphere of influence for the diffusion of useful knowledge. In accordance with this desire the hope may be entertained for a constantly increasing measure of prosperity and success.

The completion of such a laborious task as the compilation of this historical record has involved is an occasion when congratulations may justly be extended to all those concerned in its production, and particularly to its editor. It is gratifying to note its typographical excellence and the clearness with which the numerous illustrations have been produced, while the very complete index will greatly facilitate reference to its contents.

F. B. POWER.

The Theory of Emulsions and Emulsification.
By William Clayton, D.Sc., F.I.C.; foreword by Professor F. G. Donnan, C.B.E., M.D., Ph.D., D.Sc., F.R.S. P. Blakiston's Son & Co., Philadelphia, 1923.

For anyone who is interested in the subject of emulsions in a general way, this volume is a most compact and comprehensive work because not only does it contain all the information which has been gathered on the subject but the various phases of the subject have been separated from the mass of related matter which one usually finds in textbooks on Colloid Chemistry.

To those who contemplate doing research work on the subject of emulsions, this little book is invaluable as every bit of research which has been done toward the development of an adequate and complete theory of emulsions is discussed therein and complete references are given in every case to the original work published.

The text of the book gives in a very clear and concise fashion the various theories of emulsions and emulsification which have been advanced and which for one reason or another have been found unsound or insufficient, and finally leads up to the modern absorption film theory which seems to be broad enough to embrace and explain the results which have been obtained in working with all classes of emulsifiers, in both the oil-in-water-type and water-in-oil-type of emulsions.

The author then devotes a chapter on the laboratory methods of physical measurement

of emulsions and then discusses the few known factors which influence the process of emulsification.

The final chapter deals with de-emulsification which has had very important technical application in the breaking up of oil-field and condenser water emulsions.

In the back of the book is given a complete bibliography of the papers which have been written on emulsions to date and these are arranged in chronological sequence so that, whether interested in the physical and mathematical aspects or the physiological, pharmaceutical and other practical phases, one can find all the published work in his own special field in the order in which it was developed.

One cannot help but feel in reading this book that only the surface has been scratched of this important branch of Colloid Chemistry; that tremendous theoretical interest and practical possibilities lie in the study of emulsions, since the ordinary things about us such as milk, butter, soaps, medicinal emulsions and innumerable others are all items in the field of emulsions, each of which is a special and intricate study in itself. The possibilities in research work in the field of pharmaceutical emulsions are especially bright, as to-day the whole subject is founded on an empiric basis. To the pharmaceutical chemist as well as to specialists in other technical fields, and to students, this book is strongly recommended for the concise manner in which the subject is presented.

LEO ROON.

Catalysis with Special Reference to the New Theories of Chemical Action. A General Discussion. Reprinted from the Transactions of the Faraday Society, Vol. XVII, Part 3, May 1922. The Faraday Society, London.

At the meeting of the Faraday Society held on September 18, 1921, in the Hall of the Institution of Electrical Engineers, Victoria Embankment, London, a general discussion took place on "Catalysis with Special Reference to Newer Theories of Chemical Action." The symposium was divided into two parts. The afternoon session was devoted to "The Radiation Theory of Chemical Action" and consisted of the following papers: "Radiation and Chemistry," by Prof. Jean Perrin of the Sorbonne, Paris; "The Radiation Hypothesis of Chemical Reactivity and Some of Its Applications," by Dr. W. C. McC. Lewis, Brunner professor of physical chemistry in the University of Liverpool; "The Theory of Chemical Reaction and Reactivity," by Prof.