

PHARMACEUTICAL HISTORY IS BEING MADE.*

BY ROBERT J. RUTH.

At this time, when many disturbing influences prevail to ruffle our pharmaceutical tranquillity, extreme satisfaction can be gained from a contemplation of the status of professional pharmacy at the present day, which has been brought about through the achievements of the past decade.

Perhaps the remarkable accomplishments attained for pharmacy during the past decade are the fruits born as a result of the seed planted by those grand old men of American Pharmacy who preceded us. Procter, Parrish, Remington, Maisch, Rice, Squibb, Ebert, Diehl, Bastin and many others labored arduously in bygone days and, no doubt, in their far-reaching minds they knew that we would see the results of their works. I am not unmindful of the splendid men in pharmacy to-day—men of fine minds and ability—who carry on where their forebears ceased their efforts only when summoned from this earth and the work which they loved.

A short time ago I returned from a lecture trip of the entire United States. It was my pleasure to visit, without exception, every college of pharmacy in the country.

Colleges of pharmacy are, nearly every one of them, housed in splendid and imposing buildings, many of them new. Those colleges still in old and unsatisfactory quarters are cheered by the knowledge that they soon will have new buildings. This is in sharp contrast with the status of pharmacy college buildings of a decade ago. That pharmaceutical education has within the past ten years made the greatest strides of any like period in the history of pharmacy is irrefutable.

As the building situation has improved, so have the colleges of pharmacy from the standpoint of physical equipment. The faculty situation has not been neglected because of the progress made as manifested by new buildings and equipment. Teaching forces are much larger and the best qualified men to be found are teaching the various subjects which comprise the curricula of the colleges of pharmacy.

What of the status of the student of pharmacy? He enjoys a campus standing never before accorded a student of pharmacy in all large American universities. Pharmacy students are in evidence in the student activities of our universities and colleges. You will find them on the varsity football teams and prominent in other branches of athletics. They are leaders in political, literary, musical and fraternity circles. They will have a tremendous and far-reaching influence upon the future of pharmacy.

The past decade has seen the raising of college courses from two to three years. Deans and professors of colleges of pharmacy are enthusiastic and optimistic when discussing the minimum four-year course in pharmacy which will go into effect in 1932, as decided at the meeting of the American Association of Colleges of Pharmacy, held in Portland, Maine, last August. Four classes—the same total number of students—half as many graduates each year with twice as much training as under the old two-year course which was given up to a few years ago, seems to sum up the situation. Even now many students avail themselves of the

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four-year course which is given in most of the colleges and a goodly number are doing postgraduate work.

State Board members, pharmaceutical educators and retail druggists are of the opinion that state prerequisite laws should be consistent with the college requirements for a degree in pharmacy. An important bit of work ahead for pharmacists in each state is to bring about the needed legislation.

Entirely contrary to the reaction which many leaders in pharmacy expected, the retail druggists of the country as a whole, have shown enthusiasm over the four-year college course. At a convention of one of the state pharmaceutical associations which I attended this summer, a resolution was passed seeking the abolishment of the present store apprenticeship as a prerequisite for State Board examination. It was considered that the apprenticeship as required under the present law might or might not be valuable in equipping the embryo pharmacist for his future work. It was quite generally conceded that the experience could in no way be standardized and its value could be determined only upon the inclination of a student's preceptor and whether or not he would be interested in the progress of his apprentice.

As a substitute for the apprenticeship prescribed under the present law, the resolution carried a recommendation that upon graduation from college the applicant be permitted to take his theoretical examination, then serve an internship of one year in a pharmacy, after which he be permitted to take his practical examination and become a fully registered pharmacist. This means, that after 1932, in order to qualify as a registered pharmacist, the applicant would have to be a graduate from a recognized four-year high school, having completed certain prescribed subjects; a graduate from a four-year college of pharmacy; have passed the State Board's theoretical examination; have served an internship of one year in a pharmacy and have passed the practical examination given by the State Board.

The National Association of Boards of Pharmacy has steadily carried on its splendidly constructive work in the direction of uniformity for pharmaceutical practice in all states. It can only be predicted that the effectiveness of the N. A. B. P. will show greatly increased benefits from year to year.

The volume of business done in drug stores reaches an astounding figure. Drug stores devoting their energies mainly to merchandising are doing a larger volume than ever before. This is not news. Those stores catering exclusively to professional pharmacy are enjoying an unprecedented success. This is news.

Gradually the ultimate division of stores becomes more apparent. Many prominent leaders in pharmacy predict that the classification of drug stores into two groups, professional and commercial, will come about within a decade after the minimum four-year course in pharmacy is inaugurated at the colleges in 1932.

The number of merchandising drug stores is on the increase. This is also true of the strictly professional pharmacies. Each plays an important rôle in rendering drug store service. The public shows its appreciation of this service by spending more and more in drug stores. It demands the commercial drug stores where it can buy a package of cigarettes, a sandwich and a cup of tea, use the phone booth, pick up a gift for someone's birthday, buy its razor blades and shaving cream, an

electric toaster, postage stamps, poker chips, magazines, a Turkish towel or a pound of coffee. The merchandising drug store will eventually have many items which today would seem entirely out of place in its stock. Many druggists think that in time the merchandising store will voluntarily do away with its prescription department and registered pharmacists.

The ethical pharmacy has a distinct appeal which the public has eventually come to realize, otherwise these pharmacies would not be increasing in number and operating with profit. In proportion to population, the State of Washington leads in the number of splendid, strictly ethical pharmacies. In Seattle and Spokane they are numerous and prosperous. They render a valuable public service. Not only do they fill physicians' prescriptions, but they do laboratory diagnosis as well and sell drugs, medicines, sick room supplies, medicinal household products, physicians' supplies, elastic hosiery, abdominal supports, diabetic foods, biological products—in fact, a great many profitable things in keeping with their type of ethical establishment.

During the past decade organized pharmacy in America has made the most rapid strides in its history. Never before were the AMERICAN PHARMACEUTICAL ASSOCIATION, the National Association of Retail Druggists and the various state and local Associations in as prosperous a condition as to-day. From the standpoint of membership, finances and accomplishments the Associations can well be proud.

The American Pharmacy Headquarters building of the AMERICAN PHARMACEUTICAL ASSOCIATION soon to be erected upon the magnificent site already purchased in Washington, is a fitting monument to the achievements which American pharmacy has attained during the past ten years. In further evidence of the progress of pharmacy in this country I might well point to the flourishing Philadelphia Association of Retail Druggists which owns its imposing headquarters building.

New revisions of the United States Pharmacopœia, the National Formulary and the United States Dispensatory—creditable works—have appeared during the past decade. The A. PH. A. RECIPE BOOK—the first of its kind—has recently been published to fill a long felt want and to further prove the usefulness of this great parent Association. Standard textbooks have been revised and new ones of merit have been written as further evidence that the progress of pharmaceutical literature has kept pace. "Four Thousand Years of Pharmacy," a comprehensive chronicle of pharmacy from its inception to the present day, is a monument to the research on the history, romance, traditions and literature of the profession of pharmacy, accomplished during the past decade. Dr. LaWall has added much to the achievements of this period.

Pharmacists, as never before, have interested themselves in and taken active part in the civic affairs of their communities, states and nation. Pharmaceutical legislation has not been neglected and the more constructive method of public information pertaining to our legislative problems has been adopted.

Publicity pertaining to Pharmacy has, for the first time in the history of American pharmacy, been given serious consideration during the past ten years. Well-organized bodies are carrying on the most important work of disseminating to the public, facts pertaining to the importance of pharmacy and pharmaceutical service.

Pharmacy Week, first suggested at the annual meeting of this ASSOCIATION in 1924, was inaugurated in 1925. It is one of the most valuable accomplishments in the history of American pharmacy. Pharmacy Week has become a powerful influence. The benefits which have been felt as a result of the observance of Pharmacy Week have been manifold. Not only is all organized pharmacy in the United States firmly behind the Pharmacy Week movement but it has spread to Canada, Great Britain, South Africa, Australia, New Zealand and Tasmania. East to the Antipodes—west to the Antipodes—until the message of pharmacy echoes around the entire world, this Pharmacy Week movement is observed in all of the English-speaking countries. Pharmacists in Spain, Germany, France, the West Indies and Central and South America are becoming interested in this great Movement for public understanding of the pharmacist and the rôle which he plays in the interest of public health conservation.

As one single feature of the observance of Pharmacy Week, one newspaper syndicate ran full-page spreads in twenty-eight metropolitan newspapers throughout the nation. These twenty-eight papers have twenty-two million readers who will become pharmacy conscious. When before in the history of American pharmacy has any undertaking, movement or event so forcefully championed the cause of pharmacy?

Such agencies as the Committee on Education and Research of the National Wholesale Druggists' Association, Drug Trade Conference and Drug Trade Bureau of Public Information have contributed much to prove the progress in pharmacy of the past decade.

Surely we can say that pharmaceutical history is being made and in looking ahead in contemplation of the future of our profession, can we not consider it with enthusiastic optimism?

A SURVEY AND CRITICISM OF PRESCRIPTION SYNTHETICS.

BY J. L. KLOTZ.*

The use of the modern synthetics in prescription dates back to the discovery of the therapeutic action of antipyrine by Knorr in 1884. This discovery and those following were, however, presaged by Wöhler's famous synthesis of urea in 1828. At the present time there are several hundred more or less common synthetics in prescription usage, only a small percentage of which are official in the U. S. P. X, although the separate ingredients of many of them are official.

The remarkable success achieved by many of these synthetic drugs is due to several factors, *viz.*: (1) forceful advertising on the part of the manufacturers, (2) constant composition as opposed to deterioration in preparations of crude drugs, (3) certain combinations of therapeutic action can be combined in any one synthetic which would require several different combinations of crude drug preparations to produce the same effect, (4) definiteness of desired action without undesirable by-effects.

Of the above factors contributing to the success of this type of compound the only one of questionable merit is that of "Forceful advertising by the manufac-

* University of South Carolina, School of Pharmacy.