# SECTION ON EDUCATION AND LEGISLATION

# PRACTICAL DRUG STORE EXPERIENCE BEFORE ENTERING COLLEGE.\*

#### BY OTTO RAUBENHEIMER.

"All things must change
To something new,
To something strange!"

Longfellow--Keramos, L. 32.

Thirty years ago, when the writer entered a college of pharmacy, there was no prerequisite clause of one or more years of high school education. Nevertheless, the pharmacy students at that time were of a different type and of a better class than those of to-day. Many of my fellow students were graduates of high schools or similar institutions, and with pride do I look upon the members of the "Blizzard Class" and join their annual reunions. Thirty years ago in the good old times the student was not required to possess any "counts," but he was compelled to have two years of practical drug store experience before entering a college of pharmacy! The object of my paper is to point out the advantages of such professional training in a pharmacy before entering college, and I will divide them into four parts.

# I. LOVE FOR PHARMACY.

How frequently, how very frequently, does it happen that a young man is advised to take up pharmacy, enters a college and after the short time of a year or so, takes up another profession or business. A pharmacist's bed is not one of roses and if it is, then they have plenty of thorns! The apprentice should first of all become familiar with the "ups and downs" in the life of a pharmacist. Only those who truly love pharmacy will stick to it. The apprenticeship is a true test for fitness, and these "survivors of the fittest" are the proper material for pharmacy students and for future pharmacists!

# II. PRACTICAL TRAINING.

The apprentice who is employed in a drug store, in which pharmacy is practiced and prescriptions are compounded, is bound to obtain some practical knowledge. I know I did and thousands of others did the same. I do not refer particularly to the sweeping or mopping of the floor or the cleaning of mortars and graduates, although even such work and "knowing how to do it" is of benefit to the future pharmacist. In cleaning the shelf bottles the apprentice becomes familiar with the appearance of the drugs, chemicals and preparations, including their odor and even their taste, and besides this is learning the pharmaceutical nomenclature. He also becomes familiar with pharmaceutical apparatus and operations, a very important factor.

Right here I want to answer the criticism which will surely be made, namely: "In some stores the apprentice will receive no training and in others he will get a

<sup>\*</sup> Read before Section on Education and Legislation, Atlantic City meeting, 1916.

wrong training." If there are any such so-called pharmacies then they should not be classed as such. Besides that, the apprentice will soon discover these things and will look for another, real preceptor.

#### III. COLLEGE EDUCATION.

"A little knowledge is a dangerous thing!" However it is better than none, especially in pharmacy.

Imagine a pharmacy student who has never seen a mortar or pestle, who has never heard of the U. S. P. or N. F., who does not know how to hold a graduate, and who has no idea of the approximate weight of a kilogramme or a grain. It is extremely difficult to teach such a student, even in the well-equipped pharmaceutical laboratories of our colleges! The time is too short at least in a two-year course, as at present.

A student with practical drug store experience has a very great advantage over his fellow-student, who lacks this, in being able to understand the lectures and to benefit by the quizzes and laboratory work.

#### IV. STATE BOARD EXAMINATION.

Most colleges of pharmacy admit the student at the age of seventeen and consequently graduate him when but 19 years old. This graduate is *supposed* to spend two more years in a pharmacy, which together with his two years of college training will give him a total experience of four years. By this time he will also attain the age of twenty-one, required by the State Board before taking the examination.

Theoretically, very good! However, practically no good! The graduate who follows this example and who works in one of the commercial drug stores of our age, will surely forget pretty much all he learned in college and will not pass the State Board examination, if same is strict, as it should be. This is one reason why we have so many Ph.G.'s who are not licensed pharmacists.

I can not help to state here that the required 4 years' experience is frequently faked by false affidavits, and it is therefore the duty of every State Board to inquire into this serious matter.

Two years of practical drug store experience before entering college, together with the college course and sufficient time in a pharmacy to make a total of four years, would certainly be an ideal condition. For this reason the two years of experience before entering college is a check on the practical training.

I have given this matter serious consideration and have as a result added the following paragraph in the catalogue of the College of Pharmacy I am connected with:

#### PRACTICAL EXPERIENCE.

Inasmuch as the candidate when taking the Board of Pharmacy examinations in most all the States of the Union is required to have four years of professional training in a retail pharmacy in which prescriptions are compounded it is very desirable that the student, before entering the College, should possess some practical drug store experience.

Such practical experience will also serve as a foundation upon which the student can build a solid structure. From the observance of our professors and instructors those students who are apprentices in a pharmacy can very readily comprehend the lectures and the laboratory work.

# CONCLUSION.

Have we not wandered on the wrong road in our pharmaceutical education? Have we completely forgotten that excellent apprenticeship of old?

Do not let us educate "paper pharmacists," students who only look for a degree, but let all the colleges of pharmacy require practical experience as one of their entrance requirements!

# ABSTRACT OF DISCUSSION.

L. E. SAYRE: When I first went to Kansas, I insisted upon practical experience, and that the statements thereto should be certified. We found, even under these conditions, that the reports could not be relied upon. The final decision arrived at was that it made no difference whether the students obtained their experience before or after college attendance.

As an instructor, my preference is for practical store experience after college attendance; too many young men come to school, after store experience, imbued with an idea that much of what is taught is unnecessary, or that they already know, and as a result they do not develop into good students.

If we could select the stores and the preceptors then it would be a different matter, but as a rule the experience of the clerk is not conducive to the making of a good pharmacist.

A MEMBER: It seems to me that a clerk is bound to learn something of value for his studies, and that it should be an easier matter to teach the one with some experience than one without any.

JOSEPH WEINSTEIN: I quite agree with Prof. Sayre, but only in part; most of the young men in the stores of New York are necessitated to gain experience that will be of value to them in school.

H. C. CHRISTENSEN: Speaking from personal experience, I had advantages over my roomand classmate, who had a better preliminary education, because of my store experience. I thought the matter of experience had been given approval long ago.

JULIUS A. KOCH: Educational institutions are acknowledging that practical experience is the best education; schools in engineering send their students into the machine shops. Pharmacy adopted the idea long before other technical schools thought of the value of practical experience. Are we going to give up this plan now?

# IOWA'S PREREQUISITE LAW.\*

BY J. M. LINDLY.

In considering Iowa's Prerequisite Law on this occasion, it is not necessary to enter into a detailed history of pharmacy in Iowa, although a few brief references thereto may be desirable.

The Pharmacy Law of Iowa was enacted in 1880. It has undergone several modifications during the thirty-seven years that have followed, but the essential features have continued to the present time. The administration of the law was placed in charge of the "Commissioners of Pharmacy," three in number, one of their duties being the licensing of those who wish to enter the practice of pharmacy. The original law provided for the licensing of all who were in the drug business at the time of the passage of the law. Subsequent admission was to be by two methods, either by examination before the commissioners, without regard to experience; or, without examination, on the presentation of a diploma from "an incorporated college or school of pharmacy" that required four years of experience

<sup>\*</sup> Read before Section on Education and Legislation, A. Ph. A., Indianapolis meeting, 1917. (See also "Iowa Prerequisite Law," p. 928, October issue, 1917.)