## 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.)

including the time at school. These two methods of admission continued, with slight modification, until 1906, when all applicants for registration were required to pass a satisfactory examination before the commissioners of pharmacy. The change in 1906 provided that "Graduates of reputable pharmaceutical schools and colleges whose entrance and graduation requirements are equivalent to those prescribed by the American Conference of Pharmaceutical Faculties, for the year 1905 (this last phrase later eliminated), and whose course of study consists of two years of not less than thirty-six weeks each, shall be eligible to take the examination without proof of experience as hereinbefore defined." All others taking the examination must show four years of experience.

This change of 1906 did not prove to be entirely satisfactory. The graduate was regarded as competent professionally but deficient commercially. The licentiate, prepared in the school of experience, was considered as competent commercially but deficient professionally. In recent years, at the meetings of our Iowa Pharmaceutical Association, considerable discussion has been indulged, informally, concerning this subject. This discussion reached the point of concrete action last February while our association was holding a mid-winter meeting in Des Moines, at which time a resolution was unanimously adopted favoring the so-called prerequisite law or idea. Accordingly, some of the officers of our association, with the counsel of an attorney, who had formerly been an assistant in the Attorney-General's office, prepared a bill which was introduced by myself in the Senate, March 15th, known as Senate File No. 548, and which passed the Senate April 4th and the House of Representatives on April 12th, and went into effect July 4th of this year of 1917.

The most important feature of this bill is the requirement that all who would aspire to take the examination for registration as a pharmacist must have the pre-requisite qualification of having "successfully completed the work of two college years in a reputable school or college of pharmacy," and have had two years of actual experience in a drug store. This "reputable school or college of pharmacy shall be such school or college of pharmacy whose entrance and graduation requirements are equivalent to those prescribed by the American Conference of Pharmaceutical Faculties for the year 1917."

What are the entrance and graduation requirements of such a school? Although it is presumable that the most of you are familiar with these particulars, it may be of interest to someone that these be here stated. Turning to page 203 of the Proceedings of the Seventeenth Annual Meeting of the American Conference of Pharmaceutical Faculties, we find (1) "The institution shall require of each candidate for graduation not less than 1200 hours of instruction, of which at least 500 hours shall consist of lectures and recitations. Such work to be given in a period of not less than fifty weeks, occupying not less than two full college years, and at least two months should elapse between these two years;" (2) "The requirements for admission of students to the school or college as candidates for any degree shall be: (a) A minimum age of seventeen years, except when the candidate is a graduate of an accredited high school or of an institution of equal grade, in which case no age limit shall be demanded; (b) Evidences of the satisfactory completion of education beyond the eighth grade equivalent to 15 counts

shall be required of each student. A count shall consist of one-hour instruction per week for a school year of 36 weeks," etc. This would mean the completion of the 9th grade in the public school as one of the requirements for entrance into the school of pharmacy.

The new law may be regarded as a compromise between the extremes found in the preceding law. Instead of four years of experience being required of the applicant who was not a graduate in pharmacy, only two will be required, and that will now be required of all, even of the graduate. Another provision, the aim of which is the easy adjustment of the new law to present conditions, is that any unregistered person who was clerking in a drug store at the time the law went into effect shall be allowed to complete his four years of apprenticeship and take the examination.

It may be asked why the first attempt to secure the enactment of the prerequisite law in Iowa was successful? This success may be ascribed to several facts and considerations. (1) Its advocates had a good talking point inasmuch as the Iowa statutes already required a much higher prerequisite educational standard for admission to examination for practicing medicine, law, dentistry, and even of veterinary medicine, than had been previously required of the pharmacists. Even this new pharmacy law does not come up to the standard set for some of these other professions. The proposed change sought in the pharmacy law was only an attempt to conform to the general spirit and letter of the Iowa statutes. It was only in keeping with the spirit of the times. (2) The Iowa Pharmaceutical Association is a strong organization. There are about 1700 drug stores in the state and there are about 1700 members in the association. The association is greatly aided in securing and in retaining members and in keeping alive a wholesome and active enthusiasm by two strong auxiliary organizations, one being the Iowa Pharmaceutical Travelers' Association, organized in 1908, and the other is the Iowa Druggists' Mutual Insurance Association, also organized in 1908. In the association itself is a legislative committee composed of one member from each county in the state. Besides this committee, there is the executive committee of three members, and there is the advisory board of eleven members, being one from each congressional district. All three of these committees may work in conjunction on legislative matters. By having a member of the legislative committeefrom each county, the committee has an extensive personal acquaintance with the members of the legislature. The influence of personal acquaintance is thus carried to the extreme. In connection with organization, it may be mentioned that during the last ten years there have been at times as high as sixty-five local N. A. R. D. associations or units, being city, town or county organizations. These, of course, were centers of influence. (3) A Bulletin, issued monthly by the Association, placed important information directly in the hands of the druggists of the state. If action was sought, direction was thus given to the rank and file. (4) During the past winter, fortunately, there were four members of the legislature who were registered pharmacists, three in the Senate and one in the House of Representatives, who gave their personal attention to such legislation as pertained to the affairs of the pharmacist. The chairman of the committee on pharmacy in each. house was one of these pharmacist members.

#### ABSTRACT OF DISCUSSION.

W. C. Anderson: This is a very important paper because it teaches a very valuable lesson in the methods of securing prerequisite laws. In the first place, Iowa presents a very thorough pharmaceutical organization. I believe the paper states that practically every druggist in Iowa is a member of the State Pharmaceutical Association. There is the first foundation for successful work. The rest of the states are interested in knowing how Iowa does it, and I believe the fact that it has been accomplished in Iowa is an incentive to the workers in other states who place that as one of their ideals—every pharmacist in the state as a member of the state association.

The next important lesson that this paper teaches is that if we want to secure results in prerequisite legislation we must meet the conditions as they appear to-day, and not attempt to look into the future, some 10, 20 or 30 years, and legislate for what we would like to see pharmaceutical education at that time. The mistake that too many states are making to-day in trying to secure prerequisite laws is that they are striving for four years of high school for entrance, as part of their prerequisite requirements. They are paying no attention to the hundreds of boys in the state who have entered into the drug store life with the prospect of becoming licensed pharmacists, but cast them aside and say, "You have to come under these conditions the moment the law goes into effect." They are saying, "All your apprenticeship is lost practically, so far as the educational part of it is concerned, and you must go to a high school, and graduate from there before you can enter the practice of pharmacy."

Therefore, if we will take a lesson from this and make provisions for those who have entered pharmacy, the same as this bill does, and then make our entrance requirements to meet the present conditions of the drug business, rather than what we would like to see, perhaps we will be more successful in securing prerequisite legislation. This is a very valuable paper, and the druggists throughout the country, in states where there are no prerequisite laws, will appreciate having this information of how Iowa has been able to do it!

- C. B. JORDAN: It strikes me there is one weak point in the law. That is, the standard is that of the Conference for 1917. Before that can be changed, even though the Conference changes its standards, that of the Iowa law remains the same until amended.
- R. B. BIRD: It is a mighty fine thing if we keep up to date, let the future take care of itself. When it comes to enacting laws the greatest compliment, it seems to me, we can pay the Iowa people is that they are up to date.
- C. B. JORDAN: You misunderstood my contention. Indiana will be glad to get anything. But this law specifically imposes the standard for 1917. That can not be changed without an amendment. My idea is to let the Board fix the standard, or simply adopt the standard of the Conference, without designation of the year, then the advancing standards would become effective.
- C. M. Woodruff: The present-day tendency, you know, is to exaggerate the importance of vocational training at the expense of the importance of a liberal education. It seems to me the time will come, and perhaps has come, when you will have to have a prerequisite to the entrance to a college of pharmacy. You know in our high schools we have now selective courses. We have also selective courses in our colleges, and it is possible that a person can come through a high school, can even be a graduate of a college, without having a proper preliminary education qualifying him to enter a college of pharmacy. What shall an applicant for admission to a college of pharmacy be required to know before he is supposed to be qualified to enter upon the study of pharmacy?

THE CHAIRMAN: In reply to that, Mr. Woodruff, I want to say that the members of the Conference of Pharmaceutical Faculties have been working 19 years now to determine what should be the proper entrance requirements to a college of pharmacy.

- C. M. WOODRUFF: They ought to know by this time.
- W. C. ANDERSON: Just one word with reference to Professor Jordan's remarks as to the advisability of states framing their prerequisite laws along lines so that they always would come up to the requirements of the Conference. I believe the Iowa people have acted wisely in specifying the year of those regulations by the Conference. It is a very dangerous thing for any state to enact a prerequisite law providing that the requirements shall be such as are provided by the Conference, without any other specification. You can not know what these requirements will be, or whether they will be advisable to adopt.

J. M. Lindly: In reference to the standard fixed for 1917 by the Conference, one reason was that the legislators might know something definite of the proposed standard. When an effort was made to defeat the bill, I went to the Governor myself and took this report along with me and showed him what this standard was.

Just one word more, and that was suggested by Dr. Anderson, and that is we do not wish to ask our legislators for something too radical. We have to meet the present conditions. Our situation in Iowa may be different from what it is in any other state. Our old laws were, perhaps, a little different, and we have to make the change in such a way that it will not seriously inconvenience the people or the druggists. There was an objection to the bill and that was it did an injustice to the poor boy. That is the reason for one clause of the law, allowing these boys, who had started in to clerk and put in their four years' apprenticeship, and those who were thus engaged at the time the law went into effect, to go on and complete the four years, and then take the examination. We do the best we can, all the time trying and striving upward. If we can't get all we want, we get what we can.

THE CHAIRMAN: The bill, as it was originally written, did not say the standards as set forth by the Conference of 1917, but it simply said the standards of the Conference of the Pharmaceutical Faculties. The reason the "1917" was put in was because we felt that we would not be able to pass the bill unless we put in a definite statement, as Senator Lindly has already pointed out. It is a weak point in the law.

W. F. Rudd: We have always to consider the reactionary forces in any community in which we live. We have them in Virginia, and those reactionary forces, while in the minority, somehow or other they manage to stand in the way of good legislation and block it before it gets real headway. It seems to me it is eminently right, that instead of providing a future standard, to have one adapted to present conditions and specific, as in the Iowa law, is best.

## IOWA PHARMACEUTICAL ASSOCIATION.

The newsy monthly of the Iowa Pharmaceutical Association contains the following appeal to pharmacists, encouraging them in furthering the passage of the Edmonds Bill (H. R. 5531):

#### PHARMACISTS ATTENTION.

All over the country there is a feeling that pharmacists are entitled to greater consideration in the government service than has been accorded them in the past. It is impossible under present rules and regulations for a pharmacist to rise to commissioned rank in the Army on the basis of his pharmaceutical training and service. Conditions in the Navy are somewhat better, but the full rank of lieutenant or higher grades are not accorded those who rise from the ranks in the hospital corps.

No better opportunity than the present emergency has ever presented itself for the organization of a Pharmaceutical Corps officered by pharmacists and offering to the enlisted personnel, opportunities for advancement to commissioned rank.

The Government needs a Pharmaceutical Corps right now.

The people are entitled to proper pharmaceutical service in military as in civil life and will demand it.

The problem of securing the passage of the Edmonds Bill is now squarely up to the pharmacists of the country, and every druggist should write personal letters to his Congressional representatives urging the establishment of a Pharmaceutical Corps. Pharmaceutical organizations should hold special meetings if need be to draw up resolutions endorsing the measure. Active and energetic support of the Edmonds Bill is a duty that every pharmacist owes to his profession and to our armies in the field.