

## ADDRESS OF THE PRESIDENT: SOME PROPOSED STANDARDS.

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THIRTY-THIRD ANNUAL MEETING, AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY.

For the first time in the history of the Association we have assembled on foreign soil. Happy are we to convene in this beautiful and historic city with the euphonious and significant name, Toronto, which is derived from the Huron word meaning "Place of meeting." Thus, in the language of the Indian this is our Toronto—our meeting place. Our coming together outside the confines of our own country is to me symbolical of the universality of the science of pharmacy. Wherever there is man there is the practice of pharmacy, be it represented by the crudity of the savage medicine man or by the skill and art of the modern specialist.

It has been said that when a German travels abroad, the theme of his conversation is the superiority of the Fatherland; a Frenchman talks about the grace and the glory of La Belle France; but an American talks about himself. In keeping with that tradition let us talk about ourselves, as an introduction at least, so that our Canadian friends here assembled with us may know our origin, our growth and our aspirations. Moreover, a brief review of the salient points of our history also should prove helpful to us and suggestive of our future.

It required nearly as many years to organize the American Association of Colleges of Pharmacy as have elapsed since it came into existence, in 1900, under the title of the American Conference of Pharmaceutical Faculties. Thirty years earlier a conference of delegates from various colleges of pharmacy met in Baltimore for the purpose of standardizing requirements for graduation and there formed an organization which seems to have met quite regularly for sixteen years. Of the seven recommendations made at the first conference for consideration at the second convention, the one requiring four years of practical experience before graduation indicates that the colleges were obsessed with the old apprenticeship idea of education and doubted their own ability to teach. The Department of Pharmacy of the University of Michigan was subsequently refused admission into the conference because it was unwilling to meet such a requirement. This and similar drastic legislation, or self-imposed regulations, evidently at first weakened and finally destroyed the conference, which apparently passed out of existence in 1886. There was but a feeble attempt and little or no concerted action during the following fourteen years to form an Association for the advancement of pharmaceutical education in the United States. However, as time passed, progressive



TOWNES R. LEIGH.

educators began to feel keenly the need of an organization devoted to the improvement in the training and practice of pharmacy.

This sentiment was converted into a decision by a motivating letter sent forth by the secretary of the Maryland College of Pharmacy, the same institution that had convoked the first conference thirty years earlier. In response to this appeal the representatives from twenty-one colleges, several of which do not now exist, assembled in Richmond on May 8, 1900, and convened daily for three days. A constitution was adopted declaring "The object of this conference shall be to promote the interests of pharmaceutical education." The purpose has remained unchanged to this day though the phraseology has been slightly changed, and now reads "The object of the Association shall be to promote pharmaceutical education and research."

The minimum admission requirement to the study of pharmacy was only a common school education for the first eight years after the organization of the American Conference of Pharmaceutical Faculties, as this body was known until 1925, when it became the American Association of Colleges of Pharmacy. One year of work in an accredited high school or its equivalent was demanded commencing with the session of 1908-1909, providing, however, that these requirements did not apply to matriculants, who were bona fide legal residents of certain designated states. It seems that in the early days the druggist and teacher and student of pharmacy in Philadelphia, Boston and New York had little or nothing in common with the educational ideals of the faculty and students of Pennsylvania, Harvard and Columbia, so different were the standards of education. A score of years ago a pupil upon the completion of the elementary school course could have earned a degree in pharmacy in less time than he could have prepared for entrance in a recognized college of arts and sciences. Our progress has been painfully slow. The satisfactory completion of four years of high school work or its equivalent as an entrance requirement did not become mandatory upon the colleges of the conference until September 1923; and it was not until July 1, 1932 that member-colleges became obligated to require for graduation not less than four years of college work. This is, therefore, the most memorable year in the history of our Association. We have just entered the kingdom of colleges. Henceforth, the Association demands that the student desiring graduation from any of its colleges not only possesses a preliminary training equivalent to that required for admission to a standard college of liberal arts, but that he also complete a four-year course of study as the minimum requirement for graduation. The goal long and ardently desired by some of our colleges has now been obtained by all. A few of the colleges of the Association had previously established this standard and even offered graduate courses leading to the degree of Doctor of Philosophy; but this is the first time that each of the fifty-seven colleges of the Association can be truly called a college in the general, accepted meaning of the term by the educational world.

We, therefore, now stand in the dawn of a new era in pharmaceutical education and our plans for the future should be formulated accordingly. However, we are not yet world leaders. We have barely reached the standard that has long been in effect in some of the leading European countries where an education substantially equivalent to a four-year college course has been required of prospective pharmacists. We do stand on a higher elevation than ever before in our history. We do

occupy for the first time a position of full fellowship with other standard institutions of learning. Have we not now a by-law declaring that member-colleges shall hereafter require of beginning students for graduation a course of instruction covering four full years of at least thirty-two weeks each; and another prescribing that our baccalaureate degree conferred upon the completion of the course shall be of such merit as to entitle the holder to admittance in full standing to the graduate school of any recognized university? Our first degree, henceforth the B.S. in Pharmacy, is now on a par with the A.B. or B.S. degree of any college in the country so far as our stipulated requirements are concerned. The American branch of the ancient and honorable profession of pharmacy, with a history of forty centuries behind it, has finally entered the kingdom of colleges. Galen we are here at last, on the educational mountainside to rejoin Law, Medicine and Theology, our old intellectual compeers, who had outstripped us!

It is customary for the mountain climber when he has scaled a height which he had to struggle to attain, first to make firm his footing and lift his eyes to catch a new and broader vision, before continuing upward. Let us, therefore, first obtain a firm footing on the prescribed four-year course before we proceed to ascend; which on being interpreted into plain language means that we should first translate our new requirements from paper to almost perfect performance before discussing seriously the question of the inauguration of a two- or three-year pre-pharmacy course; or of recommending that state boards demand that candidates for registration hold at least the Master's Degree before being admitted to examination. The past is behind us; the future before us; and we must not crucify to-day's problem between those two thieves of time, yesterday and to-morrow.

All honor to any college in the Association which experiments with a pre-pharmacy course, and all honor to any state board requiring the Master's Degree as a prerequisite to the licensing examination. The one may make a great educational discovery; and the other a valuable contribution to the profession. Experiments in education as in chemistry should always be made on a small scale and proved practicable before being accepted for a large scale operation. The four-year course has been the standard undergraduate course in American universities for several decades. Its improvement has not involved an extension of time, but a change in kind and quality. Our new four-year course will probably be our standard for several years to come. Its content and quality are now our chief concern. The immediate problem of the Association is not experimentation but the perfection of those essentials in education which we have obligated ourselves to carry into pharmaceutical instruction and which have been demonstrated by the experience of certain of our member-colleges to be superior to the old minimum requirements which we are all laying aside as inadequate. In passing from the three-year course to the four-year course we have increased the student's work thirty-three and one-third per cent. This means the obligation of the college has increased in an equal ratio. A larger faculty will be needed; and of equal importance is that the faculty must be better trained. The proportion of men with three or more years of graduate training should now be as great in the faculty of the college of pharmacy as in the department of chemistry or physics in the best colleges of the country. The dean will have to exercise more care than ever before in the selection of new instructors and in their promotion.

The teacher is of prime importance. What characterizes a superior teacher? Who can name all his attributes? Champlin reports the results of a questionnaire study of student opinion concerning the qualities of faculty men whom the students considered excellent professors. Here are some of the attributes which they ranked as of the greatest importance: "(a) being a good fellow in and out of class; (b) an authority in the knowledge of his subject; (c) a congenial companion; (d) an expert in the work of teaching others; (e) exceptional ability in self-expression; (f) just, impartial and sympathetic; (g) reasonable always; (h) eager to assist individual students; (i) appreciation of the student viewpoint; (j) understanding of human nature; (k) possessing a good name; (l) making a good appearance in public; (m) interest in personal problems of students; (n) known to be respectable in private life; (o) tolerant toward the opinions of colleagues and students; and (p) capable of intellectual growth." These opinions of students are worthy of adoption, but most deans realize that the genius possessing such splendid attributes will be difficult to discover. Holding these characteristics in mind the dean will probably want to know if the candidate for the position won a key in the honor society of his field, such as Sigma Xi, or gained his first degree with departmental honors. "Where he did his graduate work? What his professors have to say about him? Did he hold a fellowship? Did he take his doctorate *summa cum laude*? Under whose direction was the work leading to his thesis? Has his thesis or other contributions become noteworthy? What honors has he received? Does he excel in *one* or two of the following functions: (a) conduction of recitations; (b) laboratory supervision; (c) lecturing; (d) conduction of quizzes; (e) demonstration of experiments; (f) conduction of seminars; (g) administration, if head of a department; (h) research; (i) use of the library." After the dean has eliminated all but two or three candidates nothing will be of greater aid to him in making a decision than an interview with each.

Closely related to the appointment of faculty members is their promotion to higher rank when worthy. The dean and his advisors should formulate a definite policy for this important function. The following considerations in addition to the teacher's educational training may prove helpful: (a) outstanding success as a teacher; (b) constructive scholarship as shown by research; (c) organization of better educational policies; (d) the publication of constructive and meritorious literature; (e) interest in the general welfare of the students and attention to his obligations to the college; (f) the giving of technical advice or service in his field; (g) the length of time a teacher has served the college should have little or no weight; but the quality of his service should be the determining factor; (h) other meritorious qualifications. The nominations of the members of the teaching staff and the recommendations of their promotion are, of course, but a part of the many duties which the dean is called upon to perform but we cannot outline and discuss them all here. However, before dismissing the subject a few generalities from President Thwing will be appropriate. He believes the dean should seek to embody at least four elements or atmospheres: (a) he is to represent an intellectual altruism—an intellectual sympathy; (b) he must possess moral patience; (c) he must seek to be free from all blameworthiness; (d) he is to exercise the force of administrative constructiveness; he is to bear fruit; he must possess foresight.

Not only will the dean's duties be enlarged by our new program but every phase

of college activity will be influenced. It has occurred to me the adoption of certain standards as a rule and guide would prove helpful to us in the development of our member-colleges to that point where the degree B.S. in Pharmacy would be acclaimed without a superior in its class by the educational world. Before presenting these standards I should like to remark that I am fully aware that too severe standardization leads to stagnation but I also know that where there is no guide we lose our way and where there is no vision the people perish. I know further what is often accepted as a truism proves to be false in the crux of experimentation. For example, we once took it for granted that better instruction could be given a small class than a large one. However, in an article in the *Journal of Higher Education*, Professor Hudelson informs us: "In four experiments out of every five the large classes have excelled the small in achievement. In only one out of every twenty experiments has there been a distinct advantage to students in small classes. At every level of intelligence and at every level of scholarship, both men and women in large classes tend to outstrip their mates of the small sections in examinations and marks." Thus we see that the predominance of experimental evidence disproves the expressed conviction of most educators that small classes are a necessary mark of educational efficiency. We see, too, that standards must be established upon facts and not on personal opinion and when so founded they lead to achievement.

Every successful organization formulates and enunciates a set of principles for its guidance. The theocracy of the Hebrews was founded upon the Ten Commandments. The modern church has its creed; the government its constitution and laws; the fraternity its rules and ritual; society its customs no less rigid; the home its peculiar regulations; and even the political party has its platform. From time to time the Association has adopted recommendations from presidential addresses and reports from the Committee on Higher Educational Standards, the Committee on Curriculum and Teaching Methods, and from many special committees embodying important factors in pharmaceutical education; but a large number of them could not expediently be incorporated into the By-Laws.

President D. B. R. Johnson in 1927 recommended that "a committee of five be appointed to begin the classifications of the schools." During the same meeting the Association received the report of the Committee on Standards and Classification of Colleges, recommending that "steps be taken to classify the colleges at the earliest possible time" and expressing the opinion that a committee from our own groups should be appointed to visit and study the conditions existing in member-colleges. "In this way," said the Committee, "we can then arrive at some just and definite standardization of the schools." The Association at that time felt the financial burden would be too great for us to assume.

Many of us remember the discussion of the question "Are the Standards of the A. A. C. P. Adequate for State Board Recognition?" lead by Dr. Robert P. Fischelis in which he said: "With the exception of a few general requirements, no standards have been specifically set down for the admission of schools to membership in the Association. Some states have enacted legislation which provides for approval of the education of graduates of colleges of pharmacy holding membership in the A. A. C. P. I could not conscientiously recommend the enactment of such legislation in our State." Dr. Fischelis, after making many helpful ob-

servations, concluded his remarks by saying: "Now a final word in answer to the question conveyed in the title of this discussion. I would answer it in the negative but I would immediately qualify that answer by stating that in all probability in the majority of the schools holding membership in the Association, their own standards are more than adequate." He thinks our standards should be formulated and published in full.

We can partly gage the importance of standardization when we recall that President J. W. Sturmer last year submitted but a single, definite recommendation, namely, "That a committee be appointed to study our membership requirements and to prepare a way for such changes in our standards as may be deemed necessary for the best interests of the future of pharmacy." This recommendation was approved and adopted. The committee has been appointed.

Our greatest need as we enter into the kingdom of colleges is the establishment and the declaration of the standards of the Association; so that we ourselves may have a clear understanding of our own educational policy and system of principles; and so that the representative appointed by the Executive Committee to visit a member-college may have a comprehensive view of his duties. I have, therefore, prepared some proposed standards and wish to submit them with the following recommendations:

- I. That they be referred to the Committee on Higher Educational Standards, on Membership Standards or Council on Pharmaceutical Education, or a special committee as may be deemed best by the Committee on Resolutions, for consideration and report.
- II. That a special session of the 1933 meeting of the Association be set aside to receive the report and to discuss it.
- III. That when we shall have agreed upon the standards for this Association that they be published annually immediately following the By-Laws in the Proceedings.

The approval of the first recommendation will provide for a central body to which each of us may address his suggestions of modification or concurrence. The second recommendation is made because the adoption of standards for this Association is too important to be disposed of in haste, and because the present meeting will, of necessity, be one session less than usual. The acceptance of this recommendation will give us a year in which to study the standards and to decide judiciously upon the merits of each. The third recommendation is made in order that the standards may at all times be readily available not only to us but to state board members and other interested bodies.

Some of these suggested regulations have been taken unchanged from the pages of the Proceedings; others have been expressed in terms becoming the concepts of modern education. A number of them as they now stand is the result of amendments, additions and suggestions by the several deans and professors of our member-colleges who were kind enough to comment upon the original list. I am also indebted for certain others to college presidents and deans of schools of education. Especially am I obligated to President Cowling of Carleton College and the Association of Colleges and Secondary Schools of the Southern States and to a less degree to other educational associations, general and professional.

## THE PROPOSED STANDARDS.

I. Requirements for Admission. The requirements for entrance to a college of this Association are set forth in the By-Laws.

II. Requirements for Graduation. The requirements for graduation are succinctly expressed in the By-Laws, to which should be added moral character and subscription to the code of ethics of the A. PH. A.

III. Requirements for Catalog Contents. Definite statements, covering such information that shall appear in the current catalog or bulletin, are given in the By-Laws.

## IV. Curriculum Requirements.

1. The curriculum extends over a period of four years of approximately thirty-six weeks (never less than thirty-two) each, with a minimum of five full school days per week in accordance with recognized academic procedure.

2. The curriculum required for the baccalaureate degree consists of a minimum equivalent of 124 semester hours; not more than eighteen of these hours should be scheduled in the obligatory curriculum in a single semester.

3. The curriculum includes physical training, basic, cultural and professional subjects in keeping with the adopted reports of the Committee on Curriculum and Teaching Methods and the latest edition of the Syllabus.

4. Each hour of recitation requires on the part of the average student two hours of preparation. Three hours of strictly laboratory work, or two of laboratory with one hour of correlated reference or written work, are equivalent in value to the time required by the student to prepare and accomplish one hour of recitation.

## V. Educational Qualifications of the Faculty.

1. The training of the head of a department should be that represented by at least three years of correlated graduate work in a standard institution, in the field in which he is to teach; or should represent a corresponding amount of technical or professional training. Successful teaching and administrative experience also should be required.

2. Professors, associate professors and assistant professors should have a training which includes at least two (preferably three) years of study in their respective fields of teaching in a standard graduate school; or an equivalent amount of professional training.

3. Instructors should possess at least the training represented by the Master's Degree in their respective fields; and should they be inexperienced at the time of appointment their instruction for the first year should be systematically supervised; instructors of unusual talents may be excepted.

4. At least 60% of the professorial staff down to and including assistant professors should hold a doctor's degree representing as much as a seven-year course of study and research. Not less than 60% of the faculty teaching pharmaceutical subjects should be registered and experienced pharmacists.

## VI. Academic Regulations for Teachers.

1. Teachers may be expected to teach a maximum of sixteen clock hours per week. One clock hour of laboratory supervision is counted on the same basis as a clock hour of regular class-room instruction.

2. About 40% of the total number of actual teachers should be full professors and the remainder distributed about evenly among the other ranks. It is assumed that no one will be employed in the work of teaching whose rank or qualification, or salary is below that of an instructor, fully recognized as a member of the faculty. "Assistants" with special aptitude and training will be allowed to help with the simpler work of the department.

3. Teachers should be asked to carry only a minimum amount of administrative work. The purpose of this provision is to enable each teacher to devote himself without handicap to the work of his department. It is, therefore, desirable for a college to make adequate provision for administration expenses separate from direct expense for teaching. In cases where administrative officers, such as deans or registrars, also offer instruction, a corresponding portion of their salaries should be charged to salaries for teaching, and when regular administrative duties are assigned to teachers, a corresponding portion of their salaries should be charged to administration salaries.

4. Teachers should be encouraged to maintain genuine interest in productive scholarship in order that their teaching may be kept fresh and vigorous. The expense of a limited amount of such work, which can be carried on in connection with the regular work of a department, may be charged properly to "Departmental Expenses." In cases where important pieces of separate research work or related enterprises are carried on, the expense of such undertakings should not be included in the current educational budget but should be provided for separately. Publication of meritorious, original work from time to time and participation in professional meetings as well as a high type of teaching indicate a superior faculty; but the chief duty of a teacher is to teach students.

VII. Salaries. The average salary paid to members of the faculty of a given rank is of importance in determining the standing of a college. The salary of a full professor should not be less than \$3000 for the academic year. The salaries for other ranks of the instructional staff should be gaged accordingly.

VIII. Number of Students in Class and Laboratory Sections. Though recent experiments have indicated that large classes generally excel small classes in achievements when both are taught by lecture or demonstration, the size of such classes should be held within the limits of clear vision and distinct hearing. However, a quiz class consisting of more than thirty students or a laboratory section of more than 25 should be interpreted as endangering educational efficiency.

IX. Financial Support. The financial status of the college should be judged in relation to its educational program. For a college of approximately 100 students, offering only the four-year course, the annual income



should be not less than \$35,000 and if not tax supported should have an endowment of not less than \$350.00.

X. Laboratories. The number, size and condition of the laboratories should be of approved standards and in keeping with the educational program of the college. The laboratory equipment should be kept replenished or increased by means of an annual appropriation adequate for all the experiments required, according to recognized standards, not only for the scientific and professional courses catalogued in the obligatory curriculum, but for all announced in the annual bulletin.

XI. Library. The library should be in charge of a professionally trained librarian, and should be open not less than ten hours every school day. At least, 6000 volumes should be easily available to the students, as well as the leading periodicals bearing upon the field covered by the curriculum and also those of general interest. The kind of books in the library is of more importance in determining its rating than merely their number. The catalog should be of the approved type. Freshmen should receive instruction in the use of the library. The building should be well lighted, ventilated and protected against fire and have suitable quarters for the staff. The reading room should accommodate not less than 16% of the student body. For a college with a minimum number of departments and about 100 students the average annual expenditure for the library should be at least \$1500 exclusive of salaries and the maintenance of the building.

XII. Extra Curricular Activities. An important test of a standard college is that it, or the institution of which it is a part, exercise proper administration of fraternities, entertainments, athletics and all other extra curricular activities. The fostering of a student branch of the A. Ph. A. or a student pharmaceutical society indicates that the spirit of the profession extends beyond the class room.

XIII. Material Equipment in General. All the buildings of the college should be suitably located and constructed, and sufficient in number and ample in size for the best type of instruction. The ventilation, lighting, heating and sanitation should be of a type approved by experts in those fields.

XIV. The Spirit in General. The educational policy of the administration, including the thoroughness of its scholarship, the purpose of the curriculum, the scientific spirit, the soundness and inspiration of the instruction, the kind of publicity, the qualifications for graduation, the conservatism in awarding honorary degrees, the tone of the institution including the students as well as the faculty shall have an important bearing in determining the standing of a college.

XV. Relation to the Educational World. All subjects offered for the baccalaureate degree shall be of collegiate grade and the college shall be able to prepare its students to enter standard graduate schools as candidates for advanced degrees.

XVI. Classification of Colleges. Beginning July 1, 1935 the member-colleges of the Association shall be classified as follows:

1. Colleges making a rating of x per cent or more of this list of standards in toto, and not less than y per cent of twelve standards selected by the college shall be classified as Grade A.
2. Colleges making a rating of not less than z per cent and up to x per cent in toto, and not less than u per cent of twelve standards selected by the college shall be classified as Grade B.
3. All other colleges shall be classified as Grade C.

It is, of course, the privilege of the Association to establish the value of x, y, z and u.

The Constitution of the United States, which Gladstone termed "the most wonderful work ever struck off at a given time by the brain and purpose of man," would not have been such without many alterations and compromises on the part of those who framed it. Neither can our standards be helpful and stimulating to pharmaceutical education unless they are adjusted to our need and purpose. Bryan has said that the best thing about the Constitution is that it can be amended. It may be that the best thing about the suggested standards is that they can be modified before becoming the standards of the Association. Should the Association consider it advisable that these standards be accepted as an ideal to be reached instead of regulations to be altered to meet our best interest, it will be satisfactory to me, provided we publish them as they are, or in a modified form in the Proceedings as the goal to be attained by all. It has been said that the giraffe acquired its long neck by reaching up for its pabulum; just so the Association may lengthen its educational neck by reaching up for its standards.

#### THE DOCTOR'S DEGREE.

There is another question touching the standards of the Association to which I wish now to direct your attention. In the Proceedings of the Association, 1931, Article VII, By-Law 6, Paragraphs 3 and 4, we find the following statements:

"The degree of Master of Science in Pharmacy (M.S. in Phar.) may be given upon the completion of not less than one year of graduate work. Graduate work shall be interpreted to mean work done after the completion of the requirements for the baccalaureate degree."

"The degree of Doctor of Pharmacy (Phar.D.) may be given upon the completion of not less than three years of graduate work."

Therefore, it is a violation of this By-Law, as printed, for a member-college to offer the degree of Doctor of Pharmacy for six years of work since the degree of Bachelor of Science in Pharmacy, our baccalaureate degree, requires the completion of not less than a four-year course and the doctor's degree three additional years. Yet in order to confirm my interpretation of this By-Law I requested the Chairman of the Executive Committee to render me his decision. His reply is as follows:

"Your interpretation of the Constitution and By-Laws *as they stand to-day* concerning the Doctor of Pharmacy degree is, I think, correct. May I point out, however, that when the clause, 'the degree of Doctor of Pharmacy (Phar.D.) may be given upon the completion of not less than three years of graduate work,' was adopted, it was with the understanding that graduate work meant work after the completion of the degree of Graduate in Pharmacy as outlined in the first paragraph of Number 6 of Article VII of the By-Laws. Later we adopted the statement,

'Graduate work shall be interpreted to mean work done after the completion of the requirements for the baccalaureate degree,' and failed to make any change regarding our statement of requirements for the degree of Doctor of Pharmacy.

"It is not unusual that such things happen when By-Laws are amended by piecemeal. I distinctly remember when Dr. Rusby brought in his report on degrees and we accepted his requirement for the Phar.D. Degree, believing it was much better than the requirement we had at that time. In fact, there was no requirement concerning this degree and any educational institution that wished, even though it was a member of our Association, could offer the degree for any amount of work that it saw fit to demand. Naturally, I remembered the conditions under which the Phar.D. Degree was more or less standardized and, therefore, said that it could be granted after a period of six years."

It is, therefore, evident that this portion of the By-Laws has been printed incorrectly and that our standards are not so high as the wording indicates. A review of the Proceedings shows that this part of the By-Laws was first printed wrong in 1925 and has appeared uncorrected in the six succeeding editions. The inaccurate statement which has stood for so many years should be declared correct, for by so doing pharmacy would be placed on a par with chemistry, physics and other subjects requiring seven years for the doctorate.

Moreover, the title, Doctor of Pharmacy, has suffered greatly by free and easy use. This degree has been conferred by correspondence schools, has been awarded after a two-year course by bona fide colleges in years not long past, and has been and is now conferred as an honorary degree. What is its distinction, what is its significance to-day? At times it is synonymous with profound scholarship; it is the doctorate of some of our leaders. At other times it is held by men who have had only a short course of study. For a long time in America the LL.D. Degree has been recognized as an honorary degree and the J.D. as an earned degree; the D.D. Degree as honorary and the Th.D. as an earned degree. Is the Phar.D. Degree going the way of its old associates, the LL.D. and the D.D. Degrees, now conferred only *honoris causa*, or will it, like the M.D., not only survive but grow in significance as an earned degree? I cannot tell; but this I do know, that the degree of Doctor of Philosophy has an educational standing second to none. Pursuant to the preceding discussion I therefore submit the following recommendation:

IV. That Article VII, By-Law 6, Paragraph 4, now incorrectly printed "The degree of Doctor of Pharmacy (Phar.D.) may be given upon the completion of not less than three years of graduate work" be amended to read "The degree of Doctor of Philosophy (Ph.D.) or Doctor of Pharmacy (Phar.D.) may be given upon the completion of not less than three years of graduate work, making a total course of seven years of undergraduate and graduate work."

#### PRACTICAL EXPERIENCE.

Another question relating to standardization and to which this Association has given much consideration and discussion as revealed by a study of the Proceedings is the one relating to practical experience as a prerequisite to the licensing examination. You will recall that in the first part of this address I referred to an

early, now long-defunct conference which preceded our present organization by thirty years and which refused admission to the Department of Pharmacy of the University of Michigan because it did not require four years of practical experience for graduation.

Dr. J. P. Remington in his presidential address of 1902 declared: "The greatest question confronting the pioneers was the necessity of proving the value of college education for apprentices." Later in his remarks he said: "Now the knowledge acquired by drug store experience has not even the semblance of order or system, is acquired hit or miss just as people come into the store and inquire for what they want. Six years' apprenticeship in the old-fashioned shop was formerly the only way to study pharmacy," and he goes on to say: "A student who carefully follows the instruction will certainly acquire more sound knowledge of the essential facts which lie as the foundation of pharmacy, in three years at college than one who has spent his time exclusively in the store for twenty years, gathering knowledge on the installment plan." It would be interesting to know what Remington would have to say about practical experience compared to modern pharmaceutical education!

Dean Clair A. Dye has reported to this Association the data representing the experience of 150 students who had worked in a store from four months to ten years. Contrary to his idea at the time he sent out the questionnaire he concluded from the general statements that many did get some practical experience that was worth while and told us: "If we can direct and supervise it—then I am in favor if it." Dr. Mansfield declares: "Much of this opposition (to the elimination of practical experience) is doubtless based upon the fact that it is economically desirable to have unskilled, inexperienced, cheap help to do the menial tasks about the store." Later he refers to it as "time requirement" and believes we ought to "do away with practical experience entirely or standardize such experience." Mr. Walton says: "That boards exist to assure the public that the persons who compound and dispense medicines are competent and qualified to do so. They do not exist to assure any person that he will be a success in a business way." He sees no more reason why the grocer should not be examined as to his ability to conduct his business in a commercial way than the pharmacist. Dean Rudd reports that during the discussion of the pharmacy bill on the floor of the Senate in his state one of the leaders of the Senate said: "We will kill that bill if you leave the experience clause in there. If you fellows that spend the state's money can't teach the students sent to you and train them for pharmacists, we will kill the bill." W. D. Jones, an outstanding pharmacist, and a retailer of years of experience writes: "The school that assumes that the graduate will complete his knowledge in the art of pharmacy after he enters his practice, is, in my opinion, assuming a false premise. The fact is the graduate will receive very little real training in the art of pharmacy in the great majority of the drug stores that he may enter."

Professor N. T. Chamberlain presents another phase of the subject by saying: "However, agreed as we seem to be upon the usefulness and worth-while training of practical experience as a prerequisite to registration, it appears that we are not agreed upon WHEN, WHERE and HOW, this experience shall be gained. Is it to be gained before entering college, during the college course or after gradua-

tion? Is it to be gained in any type of so-called drug store, ranging from packaged nostrum and novelty type to the exclusively professional type? Is it to be gained under a standardized system in charge of inspectors appointed by the state board of pharmacy? Is it to be directed by a pharmacy college? Or is it to be regulated by a professional society organized for the purpose of furthering the interests and ideals of professional pharmacy?"

Some states require no practical experience, others one, two and three years, respectively. What is right? None, that I know of, requires supervision. Should not the Association make a pronouncement on this important subject so closely related to pharmaceutical education? We cannot change legislative enactments; but a declaration by this body will have a great influence on those who make laws and regulations.

V. I recommend that the Committee on Council on Pharmaceutical Education be requested to make a thorough study of this question, and report its findings and recommendation to the Association.

In conclusion let me first suggest and request that the committee reporting upon the President's address consider it in connection with the recommendations of the Association's committees whose members have put effort and study upon the specific tasks assigned them during the year.

Then, finally, I wish to thank you for the honor you have bestowed upon me and say that during the year now closing I have learned more about the Association than in all the other years combined. Page by page I have read the Proceedings. As my eye traveled down the highway of written lines I have learned the innermost thoughts of our great teachers standing along this Appian Way of Pharmacy. This year they have been my teachers and made me glad that I, too, am a teacher.

#### PROPOSED HOLLAND LEGISLATION.

The Dutch Government has laid before the Second Chamber a bill to revise the pharmacy law of 1865, which, despite various subsequent amendments and additions, has now become out of date and unsatisfactory for the control of the business, particularly as the position of the pharmacist has changed in recent years, chiefly owing to the industrialization of manufacturing, under which he has become more and more a supplier of articles made in chemical works than being himself a producer of them.

The so-called C list, which was introduced in the past to place a limit on the competition offered by druggists, is no longer to be maintained. In place of the C list the second clause of the bill proposes definitely to regulate what particular articles may be sold by non-pharmacists. In this respect the preamble points out that both pharmacists and druggists will best be able to develop their respective businesses if they each remain on their own ground, while at the same time it is not con-

sidered advisable to place on the independent trade more bonds than are strictly necessary.

The bill, which deems it undesirable for the druggist branch to be legally regulated, rejects the demand which has frequently been made by pharmacists that pharmacies should only be carried on for personal account. Such a regulation, it is submitted, is considered undesirable, as it would prevent companies or partnerships from engaging in the pharmacy business; and only in very special cases will a departure be made from the rule that a pharmacist must have the responsibility for only one pharmacy.

Having regard to the constantly growing trade in packed products, the bill provides that the State administrative department concerned with supervision by a general measure can veto the introduction into the open market of any packed specifics or medicines which may be considered to be injurious to health; and the public advertising of definite packed products as being adapted to cure, alleviate or prevent illness can also be prohibited.