Resolved, that at least one year of practical experience be required in addition to the fouryear college course in pharmacy.

Resolved, that this joint meeting express itself on the question whether the year of experience should or should not be acquired subsequent to graduation.

(As this resolution was approved, the subject was discussed and the following resolution was offered:)

Resolved, that the one year of required experience shall be obtained following graduation from a college of pharmacy.

Resolved, that a copy of the Proceedings of this meeting be furnished to the National Association of Boards of Pharmacy and the American Association of Colleges of Pharmacy with particular reference to the recommendations on which national endorsement appears to be advisable.

Resolved, that the program committee be requested to arrange for round table discussions on the subjects to be covered and that the policy of elaborating the program beyond the original purpose of these joint meetings be discontinued.

Resolved, that the thanks of this Joint Meeting be expressed to the following:

- 1. The officers and members of the Washington Drug Exchange and the District of Columbia Retail Druggists' Association for the hospitality extended to us during this meeting and especially for the banquet on Monday evening.
- 2. The program committee, the presiding officers, Glenn L. Jenkins and Lloyd N. Richardson and the very able and untiring Secretary, Hugh C. Muldoon, for their efforts in conducting the sessions and recording the transactions.
- 3. The participants in the program who by their prepared papers and discussions provided food for thought and factual data upon which progressive recommendations may be based.

## COMPLETION OF THE JUNIOR COLLEGE THE NEXT PREREQUISITE.\*

## BY FREDERICK J. WULLING.1

The five-year minimum undergraduate course is the next objective in pharmaceutical education. It should be the present requirement and would be such if all pharmaceutical practitioners and educators valued their profession as the members of other professions, with which pharmacy is on a parity or higher, value theirs. Viewed from the standpoints of practitional responsibility and public necessity, pharmacy, in its true aspects, is not secondary to medicine and certainly not to dentistry, law, education, theology, business, engineering, etc., all of which in their respective best schools are already on the minimum five-year or higher basis.

Where the six-year course is the minimum, as in medicine, two years are given to academic and four to technical subjects. The five-year course consists of either one year of academic and four of technical work or two years of academic and three of technical or professional study. The latter division is growing in preference as is evidenced by its adoption by some colleges (of other professions) who had formerly preferred the "one and four" plan. The "two and three" plan, meaning a five-year course consisting of two years of academic followed by three years of professional college work, is growing in favor. It would be the best plan for pharmacy to follow and I venture to predict, on the basis of my faith and confidence in the wisdom and integrity and also in the sagacity and in the discernment of what is best for pharmacy, of the present and particularly of the coming generation of

<sup>\*</sup> Section on Education and Legislation, A. Ph. A., Rapid City meeting, 1929.

<sup>&</sup>lt;sup>1</sup> University of Minnesota.

pharmacists, that the five-year course will become the accepted minimum very soon. Work and efforts toward that objective must be stimulated now and I invite all interested practitioners and educators to join heartily in the preliminaries. These have already begun in Minnesota where through elucidation of the advantages inherent in and subsequent to the completion of five years of study on the "two and three" plan, increasing numbers of students are voluntarily adopting the five-year course. During 1928–1929 eighteen such students were enrolled in the College of Pharmacy of the University of Minnesota.

The "two and three" and "two and four" plans of other professions have been made more attractive and more easily possible because of the junior colleges now increasing rapidly in numbers. The junior college, briefly, consists of the first two years of the traditional four-year academic college course. The third and fourth years of that course are now often referred to as the senior college course, upon the completion of which the student is awarded the bachelor's degree in arts or in science (B.A. or B.S.). Many junior colleges are to be found in the smaller cities or communities, in or near the home towns of the large number of students who are not residents of the large cities or of university or college towns. The convenience and less expense going with the opportunity of remaining at home or near home for two years after high school as against being away from home for that length of time is usually attractive to the students and especially to the parents, as is abundantly proved in Minnesota at least, where increasing numbers of students come to the University after completion of the junior college course in or near their home towns, to enter upon their chosen professional courses. This practice is working out very satisfactorily for those who follow it. It has the fullest approval and support of parents and local school authorities and communities because of its obvious advantages and conveniences.

The present minimum four-year course in pharmacy includes almost universally one year of academic college work above the high school course. In Minnesota, the majority of students in the College of Pharmacy completed the required academic subjects at or near their respective homes and this despite the fact that the College of Pharmacy offers the academic instruction either wholly in its first year, or combined with professional work in the first two years. Students who have completed one year at their local junior college are in many cases easily persuaded to remain another year to complete the junior college. Personally, I have had several successful opportunities with students and with parents toward that end. these facts point to the easy possibility of making in Minnesota in the near future the "two and three" plan the obligatory one. The College of Pharmacy of the University of Minneosta was the first or one of the first to offer an optional fouryear course and many students, comparatively, followed that course, even in the very early times of the minimum two-year course. It now offers an optional fiveyear course of undergraduate work, and if the rate of increase of enrollment in that course continues, the course will naturally soon become the regular or obligatory Other states can do what Minnesota has done and is doing in the matter of arriving at satisfactory pharmaceutical educational standards on a parity with educational standards of other and no more responsible professions.

The old question whether the colleges or the professions which they represent should determine what the educational standards should be has never embarrassed us in Minnesota, for all concerned have decided the duty belongs to the College because it was established by the state to give courses comparable with those of other state professional colleges and in line with the high standards observed by the State University of which it is an integral and accepted part. That this was and is the right course to pursue is abundantly evidenced by the fact that the State Association and the State Board of Pharmacy have always approved and supported the College in its periodical advancement of standards. Indeed, several times the Association and the Board took the initiative toward higher standards and lately the recently established Minnesota Pharmaceutical Educational Conference actively approved and supported the action of the University Regents when they advanced, upon the recommendation of the faculty, the old optional four-year course to the status of the obligatory minimum course.

I have been asked why I advocate lengthening the undergraduate course rather than advising graduate work in place of the fifth year. My reasons are those which have actuated educators in other professional fields who have the wisdom to know or who learned by experience with the "one and four" plan, that a much better general or academic training than has been the requirement heretofore, is necessary as a foundation upon which to build a solid superstructure of adequate professional education and training. This fact is well recognized by respectable numbers of universities who require the B.A. or the B.S. for entrance upon their technical courses. In my judgment, too, graduate work should be restricted to those who have shown exceptional scholarship, capacity and aptitude in the undergraduate course and who possess unquestioned ability to carry on independent work under the minimum of direction.

In giving notice of the advent of this new forward step, I realize, of course, that not all colleges can follow it; that some will think it foolish or unwise or impractical or unnecessary or even impertinent. My reply is that despite strenuous objections at the time, the three-year minimum course became the standard course elsewhere soon after it was established at Minnesota and that now it has been supplanted by the minimum four-year course. It is very significant and should be emphasized strongly that much less effort and time were required to establish the four-year course than the three-year course. This fact can be explained I believe by: (1) the better and broader mentality brought into the calling by the threeyear graduates; (2) by the growing conviction on part of practitioners that the increasing competition in all walks and activities of life can be best met by a more adequate general and specialized training; and (3) by the necessity of meeting in self defense the situation created by the rapid advancement of standards of other professions. The establishment of the five-year course will not be a difficult matter. Pharmacy is by its own lack of right decision and determination still behind other professions which are far below it in responsibility. Professional pharmacy will soon assert itself and will claim its right place earned through adequate accelerating educational standards. A better professional pharmaceutical consciousness is rapidly developing and this will usher in the long-delayed pharmaceutical assertiveness imperatively needed for pharmacy to line itself up respectably with other learned professions.

An interesting and significant fact now developing is the demand toward that end by students. It seems to be no longer the case that nearly all students want

to go forward in the direction of least resistance. More of them are looking ahead far into the future of their lives and careers and are insuring their successes by a better general as well as a more specialized education and training. It may be that in the near future students of maturity of mind will insist that pharmacy offer them a field of activity on a par with those of other but no more responsible professions. It is certain that in the past pharmacy has lost the advantage that would have accrued to it if its matriculants had been of the type and mental maturity that entered medicine and some of the other learned callings. A limited number of students always has gone to the institutions and professions requiring the maximum of preparation and many such have not given pharmacy any thought whatever. These pharmacy lost forever and with them all that they represented and would have projected into the future of pharmacy in matters relating to higher standards generally. Pharmacy needs this class of students badly. This type should be encouraged and invited into the ranks. Pharmaceutical educational administrators could do much in this respect if they would seek the coöperation of their regional junior colleges. From efforts already made in that direction the belief is justified that cooperation would be willingly given toward inducing junior college students to complete the two years instead of one year of their nearest or home college.

## ABOLISHING THE ASSISTANT GRADE.

BY A. L. I. WINNE.

For some several years past attention has been directed toward the ultimate elimination of the class of assistant pharmacists which has been tacked on the body pharmaceutic of a great many of the states. This question has been discussed from year to year in the deliberations of the National Association of Boards of Pharmacy, and in the House of Delegates of the American Pharmaceutical Association, and both bodies have gone on record as favoring the abolishing of this grade of registration.

The grade of assistant, recognized by formal registration by the state, is a thing peculiar to pharmacy. It is not encountered in medicine, dentistry, law. While these professions have their assistant workers they do not accord them legal status as has been the case in the field of pharmacy. While, in the past, there may have existed justification for this type of registration, looked upon as a stepping stone to higher registration, and as a part and parcel of the apprenticeship system, since the passing of that system and the arrival of the prerequisite laws in a majority of the states, this type of registration is regarded as a detriment to pharmacy rather than as a useful expedient.

In most of the states granting assistant certificates the recipient of such a license enjoys rights under law largely comparable with the rights given to registered pharmacists, and the continued issuing of such certificates will constitute a constant menace to the prerequisite system. With high school education and a few years of drug store experience, so called, an applicant eighteen years of age or more, may secure a license in a great many states and compete with the registered pharmacist who is required to have completed his high school work, graduate in pharmacy, in a three-year course, and pass a state examination. There seems to