Chapter, Nebraska, Beta, and Iowa, Gamma. Membership is limited to students in Conference schools. Besides upholding high scholastic standards, Kappa Epsilon promotes a bond of fellow-ship between students in different colleges.

At the convention held in Minneapolis in April 1922, the petition of Montana was accepted, making that the Delta Chapter. Petitions of several other schools were received at the recent meeting.

The next Grand Council will be held with the Gamma Chapter in Iowa City, about the first of May 1924.

PHYLLIS ROBERTS, Historian of Beta Chapter.

THE ESTABLISHMENT AND DEVELOPMENT OF PHARMACEUTICAL INSTRUCTION IN THE MUNICIPAL SCHOOL SYSTEM BY THE BOARD OF EDUCATION OF THE CITY OF DETROIT.

BY J. C. MOORE.*

Cass Technical High School is not orthodox so far as its various curricula are concerned. It has never attempted to be radical. It has tried and is trying to meet situations as it finds them, and if found to be irregular to change these irregularities after taking a survey and consulting those interested. The interested are the students, those who are to use the product—the employers, and organizations who are maintaining the ideals and the standards of the profession and vocation before the world.

The School wishes its students to be prepared as nearly as possible for the next step in meeting life. If they wish to go to the university they must not be handicapped by deficiencies in prerequisites. If they wish to discontinue their schooling, their abilities should be developed to the highest possible state of functioning in the fine art of making a living and in living.

In certain cities, the industries are highly specialized. Detroit has the automotive, chemical, and pharmaceutical industries as the basis of its commercial life. As a consequence, the Science Group has sponsored curricula in pharmacy, metallurgy, and industrial chemistry. The metallurgy and industrial chemistry curricula are six years in length, including the high school work. The pharmacy instruction includes a four-year pre-pharmic high school curriculum and a threeyear college curriculum.

The Science Group has attempted to keep in close contact with the Associated Technical Societies of Detroit, consisting of thirteen Detroit branches of the national engineering and technical societies of the United States, with the Detroit Retail Druggists' Association, and with the Local Branch of the American Pharmaceutical Association. If it had not been for their frank criticism, regarding curricula and scope of work, and their loyal support in obtaining sufficient funds for building and equipment, our effort would have been futile.

The following brief concerns pharmacy particularly.

In the fall of 1912 a number of young men entered a night school chemistry class at the Cass Technical High School. Many of these students were interested in pharmacy, expecting to take the state board examination when experience and preparation warranted it. The School became interested in their problem so that the following year a special class in chemistry was opened for persons working

^{*} Head of Science Group.

in retail and manufacturing pharmacies of Detroit. The class met three days a week from one to five P.M.

All of these men were adults varying in age from eighteen to thirty years. Some of them were well prepared—others showed a marked lack of preparation in fundamentals. It was an interesting group, as all were prospective pharmacists who would some day be guardians of the lives of the people. Some were enthusiastic about the work, others were not, but all seemed to have one goal—that is, the State Board Examination and registration.

Among other requirements, the Pharmacy Board of Michigan required all applicants to have completed the tenth grade or its equivalent in order to be eligible for the examination. It was fairly easy to determine when a student had credit for tenth grade standing if he had been in actual attendance at school. The question, however, that continued to reoccur was, "What was the equivalent to tenth grade?" In order to answer this and many other problems presenting themselves at this time, a survey of the employment situation in Detroit as pertaining to pharmacy was undertaken. In this Mr. Hackney, then secretary of the Detroit Retail Druggists' Association, gave valuable assistance. Also a number of retail pharmacists willingly gave of their time and experience. It was found that two classes of non-registered men made up the personnel in the retail store. It was evident one class of these men were deficient under both standards of measurement. They had neither completed the tenth grade in high school nor had they the equivalent in training and experience. So far as being able to produce results in chemistry was concerned, they were not equivalent to tenth grade high school boys. A student so evidently deficient generally had a history as follows:

- a. Good appearance.
- b. First impression good.
- c. Had served in many positions.
- d. Had started as errand boy when young because he did not want to attend school.
- e. In some cases he would develop into a valuable adjunct to the store, but failed to further his ability in English, mathematics, and history or to discipline his faculties by the continuous pursuit of study along any one course.
- f. Ethics, as a rule, was an unknown quantity.

Occasionally the non-registered man had become so proficient in his technic and salesmanship he would make a valuable relief man if registered. He had taken advantage of his opportunities, as night school, correspondence courses, lectures, and social activities. Often such a person, although lacking schooling, was superior to a high school graduate in education and power to accomplish. This type was decidedly in the minority, and usually he had a superior man as an employer who had been his sponsor and inspiration.

The conclusion drawn from study was as follows. Taking the boy from eighth grade and giving him two years of high school work immediately followed by two years of pharmacy would give a better-trained person than the average candidate for the state board for the following reasons:

- a. A candidate was under the direction of the same organization for four years.
- b. The weaknesses and shortcomings of the student were checked by a faculty that had an opportunity for a long-continued acquaintanceship.
- c. Four years of discipline in study and conduct resulted in a higher standard of scholarship and ethics.

- d. The continuance under the same arrangement during specialization often saved much time lost by the average student due to the necessity of becoming acquainted with a new situation.
- e. Practical experience taken after leaving the four-year school was of greater advantage to the student and employer.
- f. The standing of pharmacy and the grade of men going into it could be strengthened by such a school at that time.

As a result, a four-year pharmacy high school curriculum was constructed. In the development of this work, curricula from the seventy-five leading pharmacy schools and colleges of the country were carefully studied; the syllabus from the American Conference of Pharmaceutical Faculties was used as a check against it. The curriculum was submitted to the leading retail pharmacists of Detroit, some of whom were of broad experience and of national repute. It more than met all requirements, both state and national.

Two men deserve the greater credit for the work on the revised curriculum. One is Mr. Frederick Thomas Bradt, a graduate of Kalamazoo College, the University of Michigan School of Pharmacy, and Chicago University Graduate Department. Mr. Bradt worked in the Control Department of Nelson, Baker & Company under Dr. A. B. Lyons. The other man who has given much to the making of the present school is Mr. Ernest Ransom Crandall, graduate of Michigan University. Mr. Crandall has had much experience in the wholesale and retail field. At one time he was connected with the Kansas City Pharmacy School.

In time the curriculum was ready and successfully put into operation. It continued in full effect until the fall of 1922, and under it many high grade young men and women were graduated. In conjunction with this high school curriculum a continuation course was given, open to adult students having graduated from high school or who had actually completed the tenth grade and had had practical experience. The results which have been attained from this school of pharmacy are many and diversified. They might be summarized as follows:

- a. General interest and criticism were aroused in pharmacy education, due to the fact that this school was connected with a high school and that a student could proceed immediately without transfer from his tenth grade into the pharmacy department and there carry on and complete his special education in pharmacy. If for nothing else, I believe the discussion which this school created would have justified the experiment as a factor in the general movement in the development of pharmacy education.
- b. A more general and keener recognition of the fact that Michigan and many other states had a low prerequisite for registration. It might be said that while the people connected with this particular school lay no claim to having influenced legislation in the State of Michigan, however, a new law with a higher standard will become fully effective in this State January 1, 1923.
- c. The product of the School, that is, those who graduated from the course, not the discard, have proved equal to the average graduate from average pharmacy school and far superior to the average applicant for registration. To point to definite cases, the first graduate of the Four-Year High School Pharmacy Course, of six years ago, has become a worthy alumnus and has served on the board of directors of the Detroit Retail Druggists' Association and headed an important local committee in the National Convention of the National Retail Druggists' Association recently held in Detroit. Also, in the January examination of 1922, in competition with close to one hundred fifty other applicants, the first, second, and third places, and in the November examination of the same year first and second places, came to the graduates of this

school. This is mentioned merely to substantiate the point given. Of course, as in all good schools, we had some disappointments on the examination.

- d. The Detroit School System has raised the standard for those who wish to study pharmacy under its direction, and has organized the Detroit City College of Pharmacy, which has as a prerequisite graduation from a four-year accredited high school.
- e. A faculty has been built up composed of university men and women giving their entire time to the courses as given in the pharmacy curriculum. Michigan, Chicago, Wisconsin, Ohio State, Nebraska, and Columbia Universities are represented in the faculty. Those giving the pharmacy courses are registered and a number have had experience in the larger manufacturing pharmacies.
- f. The Detroit School System has invested \$150,000 in pharmaceutical laboratories as a part of an investment of \$1,700,000 in scientific laboratories, including chemical, physical, biological, bacteriological, and metallurgical laboratories.

It is recognized that the Detroit City College of Pharmacy still has much to experience and accomplish, but it is the belief of those interested that the organization, sometimes known as the Cass Technical Pharmacy School, but now known as the Detroit City College of Pharmacy, has contributed much to pharmacy. At the present, you will find in the Detroit School System a College of Pharmacy with high ideals, a faculty with a firm determination to see that these ideals are attained, and a superior physical equipment. You will find it as one among four city colleges being the nucleus of a municipal university of the future.

THE APPROACHING ASHEVILLE MEETING.

BY J. G. BEARD, LOCAL SECRETARY, A. PH. A.

As has been advertised from time to time the next annual meeting of the American Pharmaceutical Association will be held in Asheville, North Carolina, on September 3-7, 1923. Few places in the United States are better known than this resort city in the heart of the Blue Ridge Mountains, a region affectionately called by its admirers the Sapphire Country, and the Land of the Sky. The Appalachian chain, swinging south from Pennsylvania, sends off an eastern branch, the Blue Ridge, which gradually increases in altitude as it passes through Virginia, and attains its maximum heights in Western North Carolina in such peaks as Mount Mitchell, the "Top of Eastern America;" Pisgah; Grandfather; etc. Nestling among these tree-clad spires lies the city towards which the steps of American Pharmacy will turn next September on the occasion of the seventy-first annual meeting of the parent pharmaceutical association—the A. Ph. A.

Asheville is conveniently reached by railway or motor from any section of the country. Through Pullmans from St. Louis, Cincinnati, New York, Washington, Norfolk, Atlanta, and other points go direct to Asheville. State Highway No. 10 enters from the North and East; Highway No. 20 (Dixie) from Knoxville and the West; and Highway No. 29 comes into the city from Atlanta and the South. Complete information will be furnished in an early number of this JOURNAL concerning both railway and highway routes and distances from various points to Asheville.

Delegates to the A. Ph. A. meeting may exercise their own preferences in selecting hotel quarters. Between Grove Park Inn, advertised far and wide as the finest resort hotel in the world, and the Langren, a commercial hotel, every type of hostelry may be found in Asheville. The ones which will likely be selected are, in addition to the two just named, the Battery Park, Manor, Margo Terrace, Swannanao-Berkley, and Kenilworth Inn. The last named has just been selected as official headquarters and there, of course, the various meetings will be held. While some of the hotels mentioned operate on the European plan, a majority adhere to the American plan, as is often the case in resort centers. Kenilworth Inn, pictured here, is ideally located for convention purposes. Away from the noise of the business district, situated on a commanding hill that is wind-swept on the hottest days, and with every room an outside one that frames an ever-changing landscape panorama, the hotel offers a unique appeal to its guests.