

# THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

## ABSTRACT OF THE PROCEEDINGS.

The thirty-eighth annual meeting of the American Association of Colleges of Pharmacy was held at the Hotel Pennsylvania, New York City, August 16 and 17, 1937. One hundred and twenty-eight representatives from 44 member-colleges were in attendance and at least 20 representatives of non-member colleges were present at some of the sessions.

### ADDRESS OF THE PRESIDENT.

President Crockett delivered the following address:

"The conditions under which I assumed the presidency of the American Association of Colleges of Pharmacy were marred with sadness in that my elevation marked the passing of the recently elected president, the late Theodore J. Bradley. Dean Bradley was known to all of us as a man of fundamental honesty, a hard worker, a true friend and a gentleman. Fitting memorials depicting Bradley the teacher, and Bradley the man have been published in the *Journal of Pharmaceutical Education*, and the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

My induction into office came three months after the last annual meeting. Dean Bradley's failing health and final illness had kept him from discharging presidential duties. When the end came, the accumulated work devolved upon me with both suddenness and shock. It became necessary for me to familiarize myself quickly with the affairs of the Association and appoint the standing and special committees without delay. The officers and members from whom I sought advice responded unqualifiedly. I appreciate their able support.

Since a twelve months' term of office has been compressed into nine, it need hardly be said that they have been nine busy months. It should be stated, however, that for me they have been nine profitable months. I can truthfully say that as a result of my expenditure of effort, the Association means more to me now than it has at any time in the past.

An organization which lives in the present, busily planning for the future, is likely to overlook or at least minimize its achievements of the past. The accomplishments of this Association are of a relatively recent period and hence do not need detailed consideration. A casual review of the Annual Proceedings, however, shows that it has been only a short while since we were discussing: four years of practical experience, high school graduation as a prerequisite to the study of pharmacy, "cram" schools, the desirability of a three-year course and similar problems which antedate the birth of modern pharmaceutical education. A hasty review, such as this, is heartening in that it shows progress which is both substantial and sufficiently rapid.

Advances of more recent date are equally gratifying. The year 1937 marks the beginning of the *Journal of Pharmaceutical Education*. Doubt existed in the minds of some as to the advisability of undertaking this project. Nevertheless, this *Journal* has shown in the few issues published that it satisfies a need in our educational scheme—that it merits genuine support. The early numbers have set a high standard for quality. They reflect credit on the editor and contributors; they lend dignity to our pharmaceutical educational program.

Another recent and noteworthy advance is the actual functioning of the Council on Pharmaceutical Education. This body has been taking form gradually throughout the past several years. Early in 1937 its representatives visited several schools of pharmacy in the East for the purpose of standardizing the yardstick with which they will measure the colleges of this Association. The personnel of the Council is such as to give us confidence in their findings. In accordance with our wish, they are dedicated to making pharmaceutical education sound and adequate. The seriousness of their duties requires that they be thorough at all times—severe when necessary.

Soon they will begin inspecting schools for accreditation. The act of inspection frequently creates in us a feeling of resentment, a spirit of antagonism. We shall do well to remember when this group visits us that they are doing so at our direction. Their task is a difficult one. We can aid in its performance by supporting them, by making their visits the occasion for frank discussion and the practice of good sportsmanship. That they will make mistakes is a foregone conclusion. We should not allow honest errors, however, to divert us from the main objective

The project is worthy, the committee competent and the method of inspection the best they have been able to develop to date.

Progress in professional education should be sound, not necessarily rapid. Each major advance should be followed by consolidation of forces and fortification of the objectives won. A note of caution should be sounded at this time to the effect that in several sections of the country the demand for pharmacists is greater than the supply. This may be disputed on the ground that there are too many drug stores, or that drug stores stay open too many hours a day. Granted that both are true, the fact remains that proprietors who feel the economic pinch will demand a lowering of restrictions to the practice of pharmacy, in preference to accepting less palatable remedies. This condition merits serious thought by our Association.

With this word of warning to help us maintain our balance, we may look to the future and consider a few measures which have received scant attention. It is generally conceded that the higher the quality of those entering pharmacy, the greater the probability for their advancing satisfactorily and reflecting credit upon their profession eventually. For the purpose of improving quality, certain of our schools are limiting the student body. A few are admitting only those who made a specified grade average in high school. Such restrictions are helpful in many cases. In others they are unjust. Some students with excellent minds do not extend themselves in high school and hence graduate with a mere passing grade. Others, less promising both mentally and socially, apply themselves diligently thereby obtaining grades which make them appear exceptional.

In some states this problem is being attacked by both limiting the number of students and enlisting the aid of high school principals in selecting the freshman class. As an illustration of this type of coöperation, I quote from a letter written recently by a college president to the high school principals of his state:

'The enclosed bulletin gives a brief summary of what our college is doing in the training of students for one of the four health service professions to which this institution is dedicated. That we may not graduate more than are needed for this work in the territory which we naturally serve, the student body in pharmacy is limited to one hundred. We are asking high school principals to help us select the freshman class. Unless the boys and girls who come to us for this course are in the upper half of the classes in which they graduate, they are apt to have difficulty in carrying the work. If you will keep this fact in mind as your seniors come to you for advice about further school work, we believe you will be rendering a small group a definite service.'

Regardless of the precautions taken in selecting freshmen students, some of them always have trouble. In certain quarters the belief is held that freshmen in pharmacy are intellectually inferior to other college freshmen. If this is true we should know it. In some cases, boards of pharmacy seem to think that candidates for examination in their states are inferior to those of other states. The truth or falsity of these impressions might be determined by means of intelligence tests such as are in common use at many colleges and universities. It is conceded that the tests referred to give a good estimate of the degree of intelligence of the candidate and indicate his limitations quite definitely.

I recommend that the Committee on Pharmacy Predictive and Achievement Tests study the desirability and practicability of giving simultaneously, for one or more years, identical intelligence tests to the freshmen of all schools of the American Association of Colleges of Pharmacy, the results to be assembled and published in the *Journal of Pharmaceutical Education*, or as the committee may determine.

Before leaving the subject of entrance qualifications, I wish to call attention to the fact that for the past fourteen years we have required high school graduation or its equivalent, without specifying any particular subjects which the student must or should pursue. The wisdom of permitting unrestricted or indiscriminate choice of subjects is open to question. This Association should give thought in the near future to the advisability of being more specific in its high school requirements.

As we proceed onward from preliminary to pharmaceutical education, we find institutional pharmacy receiving insufficient attention. Hospitals, the Army and the Public Health Service need now a few specially trained pharmacists—men with personality, vision and initiative. The demand for this type of individual should increase. It will do so provided the colleges can furnish graduates of the desired qualifications. Few of our schools have hospital connections which

enable adequate training in this specialized work. It is regrettable that out of 22 candidates who took the Army examination for commissions as pharmacists, only two passed. Deficiencies of this magnitude may necessitate our providing annually hospital internships for a few selected graduates in pharmacy. As an alternative, graduate work with a major in hospital pharmacy has been suggested. Whatever the solution may be, the inadequacy of our training for this work is obvious. Furthermore, pharmaceutical education will be judged critically in the next few years by the type of person we send into this field. Serious thought should be given this subject by each school of pharmacy. In this connection, a review of the papers by Leroy D. Edwards and Louis C. Zopf in the April issue of the *Journal of Pharmaceutical Education* will be helpful.

The subject of finances is one which vitally concerns all colleges of this Association. Some member schools are handicapped in giving a vigorous four-year course. Others are unable to conduct research to which they are particularly adapted. It is my belief that thriving members of the drug trade would gladly support both education and research in schools of pharmacy if they but knew the needs and facilities of the institutions concerned. The establishment of grants, scholarships and fellowships by pharmaceutical interests in non-pharmaceutical institutions is well known and commendable. A pharmaceutical manufacturer who subsidizes research wishes results. Pride in his pharmaceutical attainments and the fostering of good-will, undoubtedly prompt him to favor pharmaceutical institutions. He has nothing to guide him, however, in selecting the one best suited to his needs. Under such conditions, exception should not be taken to his patronizing a well-established laboratory of non-pharmaceutical nature.

Although many schools are hard pressed in giving creditable undergraduate instruction, few contemplate ambitious programs of research. Such being the case, liberal support of pharmaceutical education by philanthropists is more to be desired than generous support of research. Successful pharmaceutical interests could make a noble contribution by including in their annual budgets the item "grants-in-aid to pharmaceutical institutions." Utilization of such funds for the improvement of undergraduate instruction would slowly but surely enable needy institutions to function in a most creditable manner. Knowledge of the service rendered should bring continuous and immeasurable satisfaction to the donors.

It would be a simple matter for institutions to submit to the Executive Committee of this Association, or to a specially appointed committee, a statement of certain of their specific needs. Such requests for support could then be made available to interested members of the drug trade. It is understood, of course, that each project be outlined fully—that it show the extent of the need, the benefits to be derived and an itemized statement of the cost.

It is practicable to ascertain, by questionnaire or otherwise, the types of research for which the different departments of our colleges are best suited and the extent to which they could carry on if adequately financed. This information could be published in the *Journal of Pharmaceutical Education* and reprints sent to the pharmaceutical industries.

I recommend that the Problems and Plans Committee be authorized to assemble the undergraduate needs and evaluate the research facilities of the colleges of this Association, and in addition, act as a liaison to pharmaceutical business interests for the promotion of a better understanding and for procuring educational and research support for our colleges of pharmacy. This recommendation purposes furthermore that the committee cooperate, when advisable, with committees of affiliated pharmaceutical organizations which are seeking the same objectives."

The address was received and referred to the Committee on Resolutions.

#### REPORT OF THE SECRETARY-TREASURER.

Secretary Cooper reported a membership of 55 colleges. Other details reported had to do with subscriptions to the *American Journal of Pharmaceutical Education*. The report was accepted and the committee appointed to audit the accounts found them to be correct.

#### REPORT OF THE EXECUTIVE COMMITTEE.

Dean Little, Chairman of the Executive Committee, submitted a summary of entering students in member colleges, all but one having sent a report. "Allowing eighty freshmen for the college not heard from, which," he said, "is probably correct to within two or three students, the entering students for the college year 1936-1937 numbered 2213." This is a decrease of a

little less than 6 per cent while the figures for 1935-1936 were an increase of 8 per cent over 1934-1935.

Names and addresses of students to whom degrees were awarded were submitted by all colleges. A summary of the information is as follows:

Graduates from the four-year course		1128
Advanced degrees		28
Pharmaceutical Chemist	2	
Master of Science in Pharmacy	4	
Master of Science	14	
Doctor of Philosophy	8	
Honorary degrees		10
Master of Science	1	
Master of Science in Pharmacy	4	
Doctor of Philosophy	2	
Doctor of Science	3	

The report directed attention to the establishment of the *American Journal of Pharmaceutical Education*; reported at some length special work which is being carried on at various member colleges; and discussed the work of the American Council on Pharmaceutical Education. The report was accepted.

#### REPORT OF THE COMMITTEE ON CURRICULUM AND TEACHING METHODS.

Dr. Burlage, *Chairman*, reported that the Committee had tried to determine to what extent the colleges are adhering to the minimum requirements of the Pharmaceutical Syllabus.

The report was accepted, the recommendations referred to the Committee on Resolutions and the Committee given a vote of thanks.

#### REPORT OF THE COMMITTEE ON ACTIVITIES OF STUDENTS AND ALUMNI.

Dean Ziefle, *Chairman*, reported an extensive survey of extra curricular activities in both member and non-member colleges. With few exceptions colleges are stressing these activities and making an effort to keep in contact with their alumni. Activities that seem to offer particular possibilities were discussed. The report was accepted.

#### REPORT OF THE DELEGATE TO THE AMERICAN COUNCIL ON EDUCATION.

Dr. R. A. Lyman presented a paper directing attention to some significant things in the work of the Council. The discontinuance of the Committee on the Study of Pharmacy seems to indicate that the Council feels that pharmacy is on the way to making a distinct contribution in its own field. A Conference on Professional Education was established with Dr. Raymond Walters, President of the University of Cincinnati as Chairman. At a meeting held in Washington May 6th, those problems which are common to the professions were discussed. It was attended by representatives of medicine, pharmacy, dentistry, engineering and education.

At the next Conference the subjects to be discussed are:

1. How far should preliminary education be required of all professions?
2. How may the ethics of the professions be promoted?
3. How may universities be influenced in matters concerning professional education?

Dr. Alexander Ruthven, president of the University of Michigan, stressed the danger of schools and universities losing their freedom through the accepting of federal grants and easy money from other sources which tend toward political domination of our education system.

#### REPORT OF THE COMMITTEE ON RELATION OF BOARDS AND COLLEGES.

Dean Muldoon, *General Chairman*, pointed out some of the outstanding accomplishments of the district meetings. The report was accepted.

#### REPORT OF THE COMMITTEE ON LIBRARIES.

Dr. Lee, *Chairman*, submitted a report which was a continuation of that of a year ago. The Committee has worked for two years on a project to prepare a complete list of acceptable

abbreviations of all the journals of pharmacy and those closely related. After the list is edited it will be published. The report was accepted.

#### REPORT OF THE COMMITTEE ON PROBLEMS AND PLANS.

The report presented by Dr. Lyman, discussed the work of the Committee for the year and announced the completion of two studies undertaken, namely: "A Detailed Study of the Extent of the Teaching of Pharmacology in the Colleges of Pharmacy," by Dr. James Madison Dille of the College of Pharmacy of the University of Washington; and a study of "Foreign Educational Requirements for the Practice of Pharmacy," by Professor Ernest Stuhr of the Oregon State College.

Other studies are in progress dealing with the methods of selecting a finer type of student for the study of pharmacy and a study of the problems of deterioration of medicinal products and preparations.

#### REPORT OF COMMITTEE ON PHARMACY PREDICTIVE AND ACHIEVEMENT TESTS.

Dr. Klemme, *Chairman*, reported that a detailed plan for the study of pharmacy aptitude tests had been formulated and submitted to the Committee on Measurement and Guidance of the American Council on Education for criticism, which Committee referred it back and appointed Dr. W. W. Charters to act as an advisor in revision of the plan. The revised plan calls for an exhaustive study of measurements of achievements in pharmaceutical education. The report was adopted and the recommendations were referred to the Committee on Resolutions.

#### REPORT OF THE COMMITTEE ON PROFESSIONAL RELATIONS.

Professor Schicks, *Chairman*, made a number of suggestions for a long-time national plan for professional relations work and submitted several recommendations which were referred to the Committee on Resolutions. The report was accepted.

#### REPORT OF THE EDITOR OF THE AMERICAN JOURNAL OF PHARMACEUTICAL EDUCATION.

The editor, Dr. Lyman, reported upon the policies followed in the publication of the first volume, that for the year 1937, and mentioned some of the things yet to be decided. He commented upon the support the JOURNAL has received from faculties of the colleges and boards of pharmacy and from individuals representing retail pharmacy and made suggestions as to possible changes which might be of value in the future conduct of the JOURNAL. The report was accepted.

#### REPORTS OF OTHER COMMITTEES.

Several committees made reports containing no recommendations: the Committee on Education and Membership Standards, Dean DuMez, *Chairman*; Committee on Food and Drug Legislation, Dean Jordan, *Chairman*; and the Committee on Status of Women in Pharmacy, Dean O'Connell, *Chairman*.

*Other special reports* were made by Dr. Youngken for Biological Abstracts, Dr. Bacon for the National Committee on Pharmaceutical Research, and Dean O'Connell as Representative to the convention of the National Retail Druggists Association.

"Entrance Requirements," Dean Jordan presented a paper, in which he pointed out that the Association's requirement for high school graduation for entrance to college is so loosely drawn that the students entering our colleges may vary a great deal in their preparation. He further directed attention to the very great loss in numbers between matriculation and graduation. He discussed methods in use and other possible methods for remedying this condition. The paper was accompanied by a statistical study of classes entering Purdue University School of Pharmacy in 1931 and 1932.

The paper, which contained one recommendation, was accepted and the recommendation referred to the Committee on Resolutions.

#### REPORT OF THE COMMITTEE ON RESOLUTIONS.

Dean Jordan, *Chairman* of the Committee made the report, presenting the following resolutions:

"That the Association express to Dr. Crockett appreciation for the very thoughtful and constructive address and commend him for the excellent service rendered the Association during the year."

The resolution was adopted.

From the President's Address:

"1. That the Committee on Pharmacy Predictive and Achievement Tests study the desirability and practicability of giving simultaneously for one year or more, identical intelligence tests to the freshmen of all schools of the American Association of Colleges of Pharmacy, the results to be assembled and published in the *Journal of Pharmaceutical Education* or as the Committee may determine."

The Committee on Resolutions approved this recommendation and it was adopted.

"2. That the Problems and Plans Committee be authorized to assemble the undergraduate needs and evaluate the research facilities of the colleges of the Association, and in addition, act as a liaison to pharmaceutical business interests for the promotion of a better understanding and for procuring education and research support for our colleges of pharmacy. This recommendation purposes, furthermore that the Committee cooperate when advisable, with committees of affiliated organizations that are seeking the same objectives."

The Committee on Resolutions modified this recommendation by saying that the Problems and Plans Committee "be requested" to study the advisability of assembling the undergraduate needs, etc., instead of "authorized." The modified recommendation was adopted.

From the Committee on Activities of Students and Alumni:

"That the dean of each member college organize at least one new worthy undergraduate and alumni activity during the coming year."

The Committee on Resolutions changed this to read, "That the general principle of undergraduate and alumni activity be approved and that the Association recommends to member colleges that such activities be instituted and maintained."

The recommendation was adopted as restated.

From the Committee on Predictive and Achievement Tests:

"1. That, subject to the approval of the American Council on Education, and the securing a grant to finance the project, the study on measurements of achievement be carried out as outlined in the revised plan."

The Committee on Resolutions approved this recommendation and it was adopted.

"2. That the Association contribute to the support of the study by supplying a fund equal in amount to that voted for the support of a study on pharmaceutical education in 1929. This support would be used only to augment the grant from a foundation."

Because this was a matter of finance that needed careful consideration, the Committee on Resolutions recommended that this recommendation be referred to the Executive Committee of the Association and this procedure was adopted.

"3. That this Committee cooperate with the Syllabus Committee in setting up a basic curriculum for the professional subjects."

The Committee on Resolutions approved this recommendation and it was adopted.

From the Committee on Curriculum and Teaching Methods:

From its study of the extent to which colleges adhered to the minimum requirements of the Pharmaceutical Syllabus, the Committee made a number of observations and drew some conclusions and recommended:

"1. That all the outlined suggestions be referred to the Syllabus Committee for consideration."

The Committee on Resolutions approved this recommendation and it was adopted.

"2. The Committee on Curriculum and Teaching Methods then discussed at some length the overloading of courses so that possibility of extra curricular activities is excluded and recommended a study of this condition."

The Committee on Resolutions modified the recommendation to read, "That the study-loads of students in member colleges be studied by the Committee on Curriculum and Teaching Methods to determine whether a reasonable opportunity is provided for extra curricular activities." The recommendation was adopted in this modified form.

"3. That the work of the Committee on Predictive and Achievement Tests be given

proper encouragement and that the Committee be requested to include as a part of its commission, an early inauguration of aptitude tests for persons desiring to be admitted to courses in pharmacy."

The Committee on Resolutions approved this, and recommended that it be referred to the Committee on Predictive and Achievement Tests and it was so adopted.

"4. As important to good pedagogy the Committee wishes to emphasize the value of an adequate amount of recitations, discussions or conferences, with students and frequent written tests as supplementary to formal lectures. It is especially recommended that a liberal time allowance be permitted for conferences with students."

The Committee on Resolutions approved this recommendation and it was adopted.

"5. It is felt that the vision of pharmacy schools and their staffs can be substantially broadened by discouraging excessive 'inbreeding' and encouraging an adequate system of exchange professorships and leaves of absence, thereby permitting further study and investigation by the staff members."

The Committee on Resolutions approved this in principle and recommended approval in principle. The recommendation was adopted.

"6. It is believed that one of the factors most conducive to good teaching is a harmonious relationship between the staff and the administration of the school and that such a relationship may be greatly enhanced by having regularly scheduled staff meetings at which the dean and the staff may consult and share with each other in mutual understanding the duties confronting the school."

The Committee on Resolutions approved this in principle and recommended approval in principle and it was so adopted.

7. The Committee on Resolutions approved the principles expressed in the five points of this recommendation, all of which were intended to assist in developing and maintaining proper standards for the improvement of pharmaceutical instruction and recommended that they be referred to the American Council on Pharmaceutical Education. The recommendation of the Committee on Resolutions was adopted.

From the Committee on Professional Relations:

"1. That a long-time Professional Relations Committee be appointed to organize a national plan for professional relations work; further, that the American Association of Colleges of Pharmacy and the AMERICAN PHARMACEUTICAL ASSOCIATION combine their efforts in this work and that each organization appoint an equal number of representatives to form a professional relations committee operating under one head."

The Committee on Resolutions modified the recommendation, with the agreement of the Chairman of the Committee on Professional Relations, to read as follows: "That a long-time Professional Relations Committee be appointed to organize a national plan for professional relations work. The Committee further recommends that the American Association of Colleges of Pharmacy and the AMERICAN PHARMACEUTICAL ASSOCIATION cooperate in their efforts in this work." The modified recommendation was adopted.

"2. That we request the American Dental Association to permit a speaker from this Association to present a paper at their convention at St. Louis next year and that plans be made and presented to the American Dental Association for a joint meeting in 1939."

The Committee on Resolutions considered this recommendation hardly within its province and, after conference with the Chairman of the Committee presenting the recommendation and with his approval, the following substitute recommendation was submitted: "That the Committee on Professional Relations be authorized to offer its good offices to the AMERICAN PHARMACEUTICAL ASSOCIATION to assist in bringing about joint cooperative professional relations with national medical and dental associations." The substitute recommendation was adopted.

From Dean Jordan's Paper on "Entrance Requirements:"

"I believe the subject is of sufficient importance that our Committee on Curriculum and Teaching Methods should be instructed to study the question and bring in a report at its next annual meeting, or that a special committee be appointed to give it careful study for a year."

The Committee on Resolutions modified it to read, "That the subject of entrance requirements be referred to our standing Committee on Curriculum and Teaching Methods for study and report at a later meeting." The substitute recommendation was adopted.

The final resolution expressed appreciation for all that the local secretary and all his helpers had done to make the convention a success and make each visitor's stay in the city a pleasant one. This resolution was adopted.

The report of the Committee on Resolutions as a whole was adopted.

#### CHANCELLOR SANFORD SPEAKS.

Chancellor Sanford of the University System of Georgia was present at the First Session and addressed the convention briefly. He conveyed the greetings of the University of Georgia, the oldest state university in America, having been chartered in 1785, and spoke briefly of the development of state universities.

#### PROPOSED REVISION OF CONSTITUTION AND BY-LAWS.

President Crockett appointed a committee to study the Constitution and By-Laws of the Association in order to propose revisions to bring them into conformity with the Standards for Accreditation of Colleges of the American Council on Pharmaceutical Education, these proposed revisions to be mailed to member colleges in accordance with Article VII, Section 14 of the By-Laws. Members of this Committee are the Association's two representatives on the American Council on Pharmaceutical Education, Deans DuMez and Jordan, and Secretary Cooper, Dean DuMez to act as *Chairman*.

#### CONTRIBUTION TO THE AMERICAN COUNCIL ON PHARMACEUTICAL EDUCATION.

The Association authorized the payment of \$200.00 toward the work of the American Council on Pharmaceutical Education.

#### ANNUAL DINNER.

At the suggestion of the National Association of Boards of Pharmacy, the two Associations held a joint dinner. Dr. Crockett acted as toastmaster. President Moulton of the National Association of Boards of Pharmacy introduced Dean Little who presented the guest speaker, Dr. Arthur W. Thomas, Professor of Chemistry at Columbia University.

#### OFFICERS FOR 1937-1938.

*President:* Hugh C. Muldoon, Pittsburgh, Pennsylvania; *Vice-President:* Elmer L. Hammond, Oxford, Mississippi; *Secretary-Treasurer:* Zada M. Cooper, Iowa City, Iowa; *Chairman of the Executive Committee:* Ernest Little, Newark, New Jersey; *Members of Executive Committee:* Charles B. Jordan, LaFayette, Indiana; Rufus A. Lyman, Lincoln, Nebraska; *Member of the Syllabus Committee:* Joseph B. Burt, Lincoln, Nebraska.

Joint Session of the AMERICAN PHARMACEUTICAL ASSOCIATION, the American Association of Colleges of Pharmacy and the National Association of Boards of Pharmacy. See page 1034.

#### CONFERENCE OF TEACHERS OF PHARMACY.

Dr. Lee presided and the following papers were presented and discussed:

"And How Much Time to Prescriptions," F. A. Gilfillan.

"The Pharmacist Is More Than the Doctor's Cook," Howard Stephenson.

"The Model Pharmacy as a Teaching Tool," Neal B. Bowman and John A. Lynch.

"The Teaching of Non-Official Remedies," P. A. Foote.

"A Study of Some Problems in Pharmaceutical Arithmetic Given to Students," Carroll B. Gustafson.

Dr. Carter Alexander gave a talk on "Techniques in Library Research."

Officers elected for the ensuing year are *Chairman*, Dr. Rising; *Vice-Chairman*, Dean Jarrett and *Secretary*, Dean Hammond.

#### CONFERENCE OF TEACHERS OF CHEMISTRY.

In the absence of the chairman, Professor Britt, Dean Rogers was chosen to serve as presiding officer.

The following papers were read and discussed:



"An Application of Objective Examinations in Elementary Organic Chemistry," Carl J. Klemme.

"Are Delayed-Course Examinations Adaptable to Pharmaceutical Education?" Charles H. Rogers.

"Types of Examination and Methods of Examining," James D. Russell.

"Methods of Examining in Chemistry Pertaining to Pharmacy," Edward M. Altman.

A paper, "Pharmaceutical Chemistry as Presented at the St. Louis College of Pharmacy," was read by title.

Officers elected for the ensuing year are *Chairman*, Dr. Powers; *Vice-Chairman*, Dr. Osol; *Secretary*, Professor Bergy.

#### CONFERENCE OF TEACHERS OF PHARMACOGNOSY AND PHARMACOLOGY.

In the absence of the officers of the Conference, Dr. Youngken was elected temporary *Chairman* and Dr. Dunn temporary *Secretary*.

The following papers were presented and discussed:

"The Instruction of Advanced Students in Covering Scientific Literature," James M. Dille.

"Laboratory Work in Pharmacology for the Pharmacy Student," A. Richard Bliss, Jr.

"Pharmacology for Pharmacists," James C. Munch.

"Predictive and Objective Examinations in Pharmacognosy and Pharmacology," B. V. Christensen.

"The Relationship of Botany and Pharmacognosy to Other Courses in Pharmacy," William J. Bonisteel.

"Experimental Pharmacology as a Teaching Tool," Arno Viehoever.

"The Correlation of Working and Study Hours with Grades in Pharmacognosy," L. K. Darbaker.

"The Scope of Pharmacognosy Courses in Relation to Their Credit Value," C. C. Albers.

"Some Problems Arising in Teaching the Microscopy of the Powdered Endocrines," Marin S. Dunn.

"Photographic Equipment and Its Use in the Field of Pharmacognosy," Richard W. St. Clair.

Two papers prepared by Dr. Bienfang were read by title: "Biographical Notes on Teachers of Pharmacognosy; Anton Urgoc-Richard Wasicky and Carlos Stellfeld" and "The Pharmacognosy Institute at Zagreb University."

Dr. Youngken presented a report of the work of the Committee on Pharmacognosy of the National Research Council.

Officers elected for the ensuing year are *Chairman*, Forest J. Goodrich and *Secretary*, Marin S. Dunn.

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