

# THE DEPARTMENT OF THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

C. B. JORDAN—CHAIRMAN OF EXECUTIVE COMMITTEE, A. A. C. P., EDITOR OF THIS  
DEPARTMENT.

## THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY— SUMMARY OF THE PROCEEDINGS OF THE 1931 MEETING.

The thirty-second annual meeting of the American Association of Colleges of Pharmacy was held at the Columbus Hotel, Miami, Florida, July 27 and 28, 1931. Sixty-nine representatives from 41 Colleges in 29 states, the District of Columbia and Porto Rico were in attendance.

Following roll-call, Dean Beard read a memorial on the death of Dean Edward V. Howell and Dean Bliss on the death of Professor E. A. Southworth.

(The address of President J. W. Sturmer is printed in the August JOURNAL, pages 817-822.)

President Sturmer recommended "that a committee be appointed to study our membership requirements and to prepare the way for such changes in our membership standards as may be deemed necessary for the best interests of the future of pharmacy."

The recommendation was referred to the Committee on Resolutions.

### REPORT OF THE SECRETARY-TREASURER.

The Secretary-Treasurer reported a total membership of fifty-seven colleges, one an associate member.

The second round of official visits to member colleges was begun; seventeen colleges were visited at a total expense of \$579.71, an average of \$34.10 per college.

The financial statement showed a balance in the treasury of \$10,282.58, \$8600.00 of which belongs in the fund for the "study of pharmacy."

### REPORT OF THE EXECUTIVE COMMITTEE.

Dean Jordan, Chairman of the Executive Committee, submitted the following summary of reports of preliminary training of entering students:

Total number of entering students	2779
Number of high-school graduates	2758
Number of special students	21
Number of students with previous college training	515

This report indicates fewer special students and a larger number having previous college training.

The following official visits were made:

Alabama Polytechnic Institute Department of Pharmacy, University of Georgia School of Pharmacy, Loyola University College of Pharmacy, University of Mississippi School of Pharmacy, University of Tennessee School of Pharmacy and University of Texas College of Pharmacy, visited by J. W. Sturmer.

George Washington School of Pharmacy, Howard University College of Pharmacy and Medical College of Virginia School of Pharmacy, visited by C. A. Dye.

Purdue University School of Pharmacy, Indianapolis College of Pharmacy, Valparaiso University Department of Pharmacy and University of Notre Dame Department of Pharmacy, visited by T. R. Leigh.

Detroit Institute of Technology College of Pharmacy and Chemistry, College of Pharmacy of the College of the City of Detroit and University of Michigan College of Pharmacy, visited by T. J. Bradley.

Ohio State University College of Pharmacy, visited by G. L. Curry.

*Each report of the visit as it came to the Executive Committee, has indicated that conditions are better than they were at the time the first visit was made.*

The Association at its 1930 meeting authorized the Executive Committee (or a sub-committee working under it) to check the college bulletins to determine whether they meet the

Association requirements. Professor L. W. Rising of the New Jersey College of Pharmacy and Professor A. F. Schlichting of the St. Louis College of Pharmacy did this work. The results indicate that not all colleges are complying in every particular but, since the regulation was passed at the 1930 annual meeting, a number of colleges have not had time to comply. So the Committee recommended that no college be reported, at this time, for failure to meet requirements, that the Executive Committee be instructed to notify each college that is not meeting requirements stating wherein they failed and that all colleges whose bulletins do not meet requirements be reported to the Association at the 1932 meeting.

The Committee recommended that the Association endorse the program of observance of the Two Hundredth Anniversary of the Birth of George Washington Bicentennial Commission.

Believing that "the best interests of pharmaceutical North America will be advanced by cordial relationships between the representatives of the college of pharmacy of the Dominion of Canada and the American Association of Colleges of Pharmacy" the Committee recommended

"First, that the secretary be instructed to invite representatives of the Dominion Colleges to attend our next annual meeting and inform them that the privileges of the floor will be granted to them:

"Second, that the chairmen of the Teachers' Conferences be instructed to invite representatives of the Dominion colleges to participate in the program of these Conferences."

A request having come from Professor Meuser of Saskatoon, Saskatchewan, for coöperation in research work on Chinese drugs, the Committee recommended that a copy of the letter be sent to deans of member-colleges, urging them to participate in any way that they can in the research work on these drugs.

The report was accepted and the recommendations referred to the Committee on Resolutions.

#### REPORT OF THE COMMITTEE ON HIGHER EDUCATIONAL STANDARDS.

Dean Dye directed attention to the generally recognized need for higher standards and a broader training for pharmacists. Colleges of pharmacy must teach more than a mass of disconnected facts. Such facts cannot be understood or intelligently used with only a specialized training. Prospective students are not deterred by high standards or lengthened curricula.

The official visits of member colleges are commendable; they stimulate schools to greater efforts; they give the visitors new points of view.

The report was accepted.

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

Dean Leigh, Chairman of the Committee, reported an increasing interest in matters pertaining to curriculum and methods of instruction, as judged by the number of questions the Committee had been asked to study.

A paper, entitled "Remarks on the Four-Year Course" (Proceedings, 1930, pages 44-50), written by Dean J. W. Sturmer, had been referred to the Committee. Study of it led them to recommend, "that it is the opinion of this Association that a professional course in pharmacy is not planned as a preparation for a specific job; it is intended rather to provide a broad education which will prepare the student that he may have the resourcefulness to fit himself into any given job within the field of pharmacy and adjust himself better to the vicissitudes of life."

Desirability of more uniform entrance requirements was considered and, the chairman of the Executive Committee having reported that there is complaint about institutions accepting men who have been dropped from other member colleges, the Committee recommended, "that in the future the official examiner be instructed to make a study of the entrance requirements of the college visited and also discover how entrance applications of students who have been dropped from member-colleges are handled."

A study of the desirability of greater uniformity in college credits led to the following recommendation:

"That the standard credit hour of this Association be defined as one hour of lecture or recitation (or approximately three hours of laboratory work) per week throughout a semester.

"That one clock hour of lecture, recitation or laboratory work shall be of equal value in the determining of the teaching load of the instructor.

"That the official transcript of the student's record as furnished by the college shall include

credit hours (or terms easily convertible to credit hours), grades, length of course and all disciplinary action such as warnings, probation, suspension and expulsion."

Finally, the Committee studied the question of advisability of publication of texts especially designed for students of pharmacy in basic subjects, as chemistry, physics and botany. The Committee believes that the use of such texts tends to narrow the point of view. "On the other hand, every effort ought to be made to encourage the writing of better texts in the special pharmaceutical fields."

The report was approved and the recommendations adopted.

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

Dr. O'Connell, in reporting for this Committee, urged faculties to foster the idea of the establishment of student branches of the AMERICAN PHARMACEUTICAL ASSOCIATION and where they are already established, to add their efforts in making them thorough-going organizations.

The report was accepted.

#### REPORT OF THE COMMITTEE ON INVESTIGATION OF PHARMACY SCHOOLS BY THE CARNEGIE FOUNDATION.

Dr. DuMez, in presenting this report, stated that there had been no opportunity for the Committee to function. Since the field of activity of the Committee is within the province of the Joint Committee on the Study of Pharmacy, it was recommended that the Committee be discontinued.

The report was accepted and the recommendation adopted.

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

Dean Spease, General Chairman, reported that meetings were held in Districts 1, 2, 3, 4 and 6. Some details about programs were given. Other districts held no meetings, though District No. 9 had a College of Pharmacy Day at the State Association meeting. He urged that these district meetings be continued. The report was accepted.

#### REPORT OF THE SYLLABUS COMMITTEE.

Dean Beard reported that a mimeographed volume outlining thirty courses of study had been mailed to one hundred and fifty college and board officials. The Committee wished constructive criticism of these tentative outlines but the response had been meager. His report included a list of the teachers who had prepared the Syllabus outlines; also a financial statement.

It is expected that the volume will be published well in advance of the effective date of the minimum four-year course.

The report was received with the thanks of the Association.

#### REPORT OF THE COMMITTEE TO COÖPERATE IN AN ADVISORY CAPACITY IN THE REVISION OF THE SYLLABUS.

Dean Koch reported that there had been cooperation by members of the Committee, individually, but there had been no opportunity for action as a body. Inasmuch as the Syllabus Committee had submitted its outline to member-colleges, it was requested that this Committee be discontinued.

The report was accepted and the recommendation to discontinue the Committee adopted.

#### REPORT OF THE COMMITTEE ON STUDENT BRANCHES OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

Dr. Christensen reported that, after the AMERICAN PHARMACEUTICAL ASSOCIATION had adopted the necessary amendments to the By-Laws, Secretary Kelly had informed the deans of the action, recommending that it be given careful consideration.

Two branches had been organized during the year.

The question of the possibility of a student branch affecting membership in a local branch had arisen and the Committee recommended that the possibility of students joining the local branch and becoming associate members of the A. PH. A. be referred to the Council of the A. PH. A. for decision. The report was received and the recommendation adopted.

REPORT OF THE COMMITTEE ON THE ESTABLISHMENT OF A PHARMACY CORPS IN THE UNITED STATES ARMY.

Dean Bliss reported that the Committee had continued its efforts, he believed, with more progress toward its objective than during any previous year.

He reminded the Association of the essential points concerning any measures which propose improvement in pharmaceutical service.

The Committee made the following recommendations:

"1. That the American Association of Colleges of Pharmacy renew its endorsement of measures looking toward the proper recognition of pharmacy in the U. S. Army and toward improvements in the pharmaceutical service of that branch of our national defense forces.

"2. That a committee to assist in securing the necessary legislation be continued.

"3. That this organization go on record as endorsing an officially recognized pharmacy group as an integral part of the Medical Department of the U. S. Army.

"4. That the work of organizing county committees on the Pharmacy Corps among the pharmacists of the country be redoubled, and the personal campaigns in congressional districts be continued and expanded.

"5. That the member-schools of the Association renew their efforts in behalf of the Pharmacy Corps.

"6. That the personal conferences between the Committee on the Pharmacy Corps and the Surgeon General's office be herewith approved and their continuance encouraged.

"7. That measures be continued which will insure the presence of active workers in behalf of the Pharmacy Corps at the national and state conventions of all veteran military organizations and their auxiliaries, and at Washington, D. C., during congressional sessions at which the Pharmacy Corps may be taken up.

The report was accepted and the recommendations adopted.

REPORT OF THE COMMITTEE ON COUNCIL ON PHARMACEUTICAL EDUCATION.

This Committee made no report inasmuch as the Joint Committee on the Study of Pharmacy had authorized a sub-committee to study the matter of the establishment of such a council and to present a definite plan at the next annual meeting.

REPORT OF THE COMMITTEE TO INTEREST PHILANTHROPISTS IN DRUG RESEARCH.

Dr. Langenhan, Chairman, submitted correspondence with members of his Committee with some suggestions that had been made and asked that the purpose of the Committee be clearly defined. The report was received and the Committee continued.

REPORT OF THE COMMITTEE ON REVISION OF THE CONSTITUTION AND BY-LAWS.

Dean Jordan, Chairman of this Committee, reported a considerable number of changes, none of which changed the content. The meaning of some sections was clarified and the whole had been submitted to an authority on English in order that the best possible word and construction might be used. The report was accepted and the changes adopted.

REPORT OF REPRESENTATIVES TO AMERICAN COUNCIL ON EDUCATION.

Dr. Lyman, as voting delegate, reported on both the 1930 and 1931 meetings.

The two major topics presented at the 1930 meeting were "Federal Relations to Education" and "Plans for Educational Research." The outstanding paper of the meeting was "Education and Health, a Community Problem," by Dr. Ray Lyman Wilbur, Secretary of the Interior.

At this meeting, Dr. Lyman was elected first vice-chairman of the Council for 1930-1931, and sent as a representative of the Council to the dedication of the new pharmacy building at Purdue University.

At the 1931 meeting, Chancellor Capen reported for the Committee on Problems and Plans in Education and Dr. Mann for the National Advisory Committee on Education. Discussion of "Whose Money and How Much for American Education" occupied an entire session.

Dr. Lyman made two suggestions:

"1. That the members of the Association follow the work of the American Council on Education. This can be done by perusing the *Educational Record*, which is the official publication of the Council.

"2. That great care be made in the selection of the delegate to this meeting. He should be someone who is interested in the general problem of education and who has the ability, knowledge and scholarship to discuss problems of national scope with authority and who can make pharmacy a factor in the work and the discussion of the Council."

At the suggestion and request of the Executive Committee he recommended "that the representatives of the Association to the American Council on Education constitute a standing committee." The report was accepted and the recommendation approved.

#### REPORT OF THE REPRESENTATIVE TO THE DRUG TRADE BUREAU OF PUBLIC INFORMATION.

Professor Cook reported that fifty bulletins had been issued by Director Fischelis. A continuance of the Bureau's activities was directed and it was suggested that an effort be made to secure financial support from state pharmaceutical associations. He recommended that the Association of Colleges continue its support. The report was accepted and the recommendation concurred in.

#### REPORT OF THE REPRESENTATIVE TO THE NATIONAL ASSOCIATION OF RETAIL DRUGGISTS.

Dean LaWall reported having attended several sessions of the N. A. R. D. meeting. Of particular interest to the Association of Colleges, was a resolution endorsing the endowment of pharmaceutical education by manufacturers who have made their fortunes from pharmaceutical manufacturing; the protest to newspapers against the improper use of the unqualified word "drug" when "narcotic drug" is meant; resolutions having to do with U. S. P. and N. F. propaganda; and the endorsement of the Pharmacy Corps bill. The report was received.

#### REPORT OF REPRESENTATIVES TO THE DRUGGISTS RESEARCH BUREAU.

Mr. Paul C. Olsen presented the report, which included a list of the publications and other activities of the year.

The report was received and an expression of appreciation extended to the Bureau for the valuable information it is furnishing.

#### REPORT OF REPRESENTATIVES TO THE NATIONAL DRUG-TRADE CONFERENCE.

Dr. Riggs, who had attended instead of Dean Little, in his report enumerated the topics discussed at the Conference. The report was accepted.

#### REPORT OF REPRESENTATIVE ON NATIONAL DRUG STORE SURVEY.

Dean Caspari explained the work of this survey of twelve drug stores in St. Louis. The report was accepted.

#### REPORT ON BIOLOGICAL ABSTRACTS.

Dr. Youngken explained the work of this journal, how it has solved an economic problem for the average worker and its need for financial support. The report was received.

#### REPORT OF THE COMMITTEE ON CENTENNIAL CELEBRATION.

The secretary read a brief report written by Dr. Riggs who had attended a meeting of the Committee in Washington, D. C. A permanent organization was formed and approval given to the idea of having the exhibit represent the progress of pharmacy during the last one hundred years.

Professor Gathercoal explained the work of the Committee and the progress of the Centennial Exposition, or "Century of Progress" as it is officially designated. Its basic principle is the relationship between science and industry, in other words, the part science has played in the development of industry.

It is hoped that an international pharmaceutical congress may be held in connection with the exposition.

Dean Day spoke of the financial demands and the question of a contribution of \$100.00 from the Association was referred to the Executive Committee with power to act and, in the event that funds of the Association do not warrant spending this sum, the Committee was authorized to ask for contributions from member-colleges.

## REPORT OF THE HISTORIAN.

Dean Kremers, in submitting his report, stated that it was a preliminary draft and asked that it be returned to him for revision after corrections or additions had been suggested. Believing that opportunity for more careful reading should be given, the secretary was authorized to have copies prepared and sent to member-colleges for suggestions.

## REPORT OF THE COMMITTEE ON RESOLUTIONS.

The Committee on Resolutions submitted the following report:

"We felicitate the president of the Association on his scholarly address and his admirable résumé of the early activities of the Association.

"We heartily approve the sentiments which he expressed toward 'raising the quality' of pharmaceutical education by limiting the number of schools, by discouraging the establishment of new schools or whenever possible encouraging the merger of existing schools.

"Therefore, we recommend that a copy of the president's address and of this report be mailed by the secretary, as soon as convenient to the deans of the member-colleges and to the executive officer of each college, that is the president of the institution or of the board of trustees.

"We approve the recommendation of the President 'that a committee be appointed to study the membership requirements of the Association and to prepare the way for such changes in its membership standards as may be deemed necessary for the best interests of the future of pharmacy.'

"We heartily approve the following recommendations made by the Executive Committee:

"1. That the resolution submitted by the United States Commission for the celebration of the two hundredth anniversary of the birth of George Washington receive our hearty approval.

"2. That the recommendation of the Committee relating to the reporting of member-schools who failed to meet certain specific requirements as to length of time courses are pursued and who failed to give names of the instructors, etc. (in bulletins) be carried out by notifying the schools of the omission of this required information; that if schools fail to correct this omission they be reported to the Association at the next annual meeting.

"3. That, at the next annual meeting, in Toronto, the Association extend to the representatives of the colleges of pharmacy in the Dominion of Canada an invitation to participate in the deliberations of the Association and that they be granted the privileges of the floor and that they be invited to participate in the programs of the teachers' conferences.'

"We express our very deep appreciation to Dean Wulling for his very able presentation and discussion of higher educational standards for pharmacists. We accept the plan in principle as a suggestion for future consideration. We feel, however, that inasmuch as we are entering upon the minimum four-year requirement, it is unwise to bring up these new requirements for discussion at this time."

Respectfully submitted,

CHARLES H. STOCKING	W. J. HUSA
CHAS. E. CASPARI	C. A. DYE, <i>Chairman.</i>
GEO. C. SCHICKS	

The report was adopted as read.

## ELECTION TO ACTIVE MEMBERSHIP.

Duquesne University College of Pharmacy, an associate member for several years, has been elected to active membership, the vote being completed by mail since the convention.

## PAPERS.

A paper by Dean Wulling, entitled "Still Higher Educational Standards," was read by Secretary Cooper. Dean Wulling's paper set forth the following:

"1. That the next logical step in pharmaceutical educational development be the requirement of the completion of two years of academic study beyond the high school, the two years to be completed either (1) preferably before entrance upon technical pharmaceutical study of a minimum of three years (five years in all) or (2) concurrently with the first of the three years of pharmaceutical study, devoting the last two years of the five exclusively to purely pharma-

ceutical work, all with the purpose of placing pharmaceutical educational requirements upon a parity with the prerequisite requirements of dentistry, law, medicine, education, business, engineering and other professions, and

"2. That this Association (A. A. C. P.) accept the suggestion of the 'two and three' plan in principle at this time in the hope that it can be made operative later on, and

"3. That all members of this Association who may be in position to put the plan into operation now or soon, be encouraged to do so."

"Languages in the Four-Year Course" was the subject of a paper presented by Dr. W. J. Husa. Dr. Husa suggested a plan which would require Latin if it had not been taken in preparatory school; if it had, then the student might elect French, German or Spanish. A study made at the University of Florida showed that 63% had one or more entrance units in Latin, 15% had one or more units in French or Spanish, 22% had no language other than English. The method suggested would eliminate short courses in Latin and provide a more adequate course in language, that would be of cultural value as well as practical.

#### JOINT SESSION.

At the joint session with the National Association of Boards of Pharmacy, Editor Eberle presented the report of the Fairchild Scholarship Committee. The Scholarship was awarded to Louis Magid, graduate of the University of Florida.

Dr. L. L. Walton, Chairman of the Committee on the Study of Pharmacy, reported progress.

A paper, entitled "The Standardization of Pharmacies for Experience Requirements under State Pharmacy Law," was presented by Professor George C. Schicks. Professor Schicks set forth in a very definite way the objections against such laws and the practical impossibility of making such laws workable or enforceable.

#### OFFICERS FOR 1931-1932.

*President*, Dean Townes R. Leigh, Gainesville, Florida.

*Vice-President*, Professor Edward D. Davy, Cleveland, Ohio.

*Secretary-Treasurer*, Professor Zada M. Cooper, Iowa City, Iowa.

*Chairman of Executive Committee*, Dean Charles B. Jordan, Lafayette, Indiana.

*Members of Executive Committee to serve two years*, Dean Julius W. Sturmer, Philadelphia, Pennsylvania; Dean Rufus A. Lyman, Lincoln, Nebraska.

*(Members of Executive Committee whose terms expire at end of present year*, Dean Andrew G. DuMez, Baltimore, Maryland; Dean J. G. Beard, Chapel Hill, North Carolina.)

*Member of Syllabus Committee*, Dean J. G. Beard, Chapel Hill, North Carolina.

#### ANNUAL DINNER.

The annual dinner was held at the McAllister Hotel. President Sturmer acted as toastmaster and Dr. H. O. Enwall of the University of Florida was the speaker, his subject being some phases of education in America. American education, he said, has three major purposes: the first is education for practical efficiency; the second is education for citizenship; the third is education for social service. We need a deepening of meaning in our efficiency program, in our notion of what education for American citizenship means, in social and religious aspects of life.

#### CONFERENCE OF TEACHERS OF PHARMACY.

Chairman Fuhrmann presided and the following papers were presented:

"Pharmaceutical Arithmetic: Content of the Course," by J. L. Klotz; "Problems Confronting the Teacher of Dispensing Pharmacy," by Louis W. Rising; "A Course in Drug Assay to Meet Commerical Requirements," by Russell L. Taylor; "Pharmaceutical Arithmetic as a Separate Course," by Ralph L. Calvert; "Pharmaceutical Arithmetic Methods Used in Laboratory Teaching," Antone O. Mickelsen; "Equity and Accuracy—Essential Elements in Prescription Pricing," by Leonard A. Seltzer.

In addition to the papers there was discussion of the topic, "Arithmetical Ability as Shown by Placement Tests," by Dean Raabe and others; also "Percentage Solutions," by Professor Crockett and others.

Officers elected for the ensuing year are Dean Elmer L. Hammond, *Chairman*; Professor Charles H. Stocking, *Vice-Chairman*; and Professor L. W. Rising, *Secretary*.

CONFERENCE OF TEACHERS OF PHARMACEUTICAL ECONOMICS.

Chairman O'Connell made a brief introductory address, setting forth the need for a careful study of the problem of the teaching of fundamental economic principles governing pharmacy and what such a study should include.

Mr. Paul C. Olsen presented, "Business Subjects Planned for Inclusion in the New Syllabus."

Dean Jordan read a paper prepared by J. L. Weinland, entitled "Purdue University Pharmacy Extension Department."

Officers chosen for the next year were: Dean Howard C. Newton, *Chairman*, and Mr. W. Bruce Philip, *Secretary*.

CONFERENCE OF TEACHERS ON MATERIA MEDICA.

Chairman Bliss made no address but raised the question of the possibility and advisability of changing the name of the Conference from *Materia Medica* to *Pharmacology*.

The following papers were presented.

"What is Pharmacognosy?" by H. W. Youngken; "The Term 'Pharmacology,' Its Meaning and the Scope and Content of a Course in Pharmacology for Pharmacy Students," by A. Richard Bliss, Jr.; "Materia Medica—How Defined," by B. V. Christensen.

A motion was passed that the name of the Conference be changed to Conference on Pharmacognosy and Pharmacology.

Officers elected for the ensuing year were Dr. F. J. Bacon, *President*, and Dr. B. V. Christensen, *Secretary*.

CONFERENCE OF TEACHERS OF CHEMISTRY.

Dr. Loyd E. Harris, Chairman of the Conference, presided and the following papers were presented and discussed:

"The Scope of Pharmaceutical Chemistry," by Glenn L. Jenkins; "Prerequisites to Pharmaceutical Chemistry," by Townes R. Leigh; "Methods of Presenting Pharmaceutical Chemistry," by Edward D. Davy.

Officers elected for the ensuing year were Professor John C. Bauer, *Chairman*, and Dr. P. A. Foote, *Secretary*.

ZADA M. COOPER, *Secretary*.

Approved:

CHARLES B. JORDAN, *Chairman Executive Committee*.

ABSTRACTS OF PAPERS READ BEFORE SCIENTIFIC SECTION A. PH. A.

**Influence of Period of Vegetation and Development of Plant on the Alkaloidal Content of *Hyoscyamus Niger* L.**, by Zdenek F. Klan, Prague, Czechoslovakia.

A thorough study of the alkaloidal content of the different parts of this important drug plant during the various stages of its growth and development. Extensive tables are given showing the quantitative alkaloidal content with a qualitative differentiation as to whether it is chiefly atropine, hyoscyamine, scopolamine, tropine or scopoline.

Among many valuable conclusions it was found that (1) with the growth of the germinating plant the quantity of alkaloids in its or-

gans decreases and that (2) in the order of their alkaloidal content the parts of the plant are as follows: root (both of annual and biennial plants), flowering tops, fruits, leaves and stems.

**A Note on the Assay of Tincture of Ferric Chloride**, by Margarethe Oakland and John C. Krantz, Jr.

In this paper the authors have shown the assay of tincture of ferric chloride to be cumbersome and unfitted for Pharmacopœia purposes. A more simplified method of assaying has been developed which has been proposed for the eleventh revision of the Pharmacopœia.