

# THE SECTIONS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION

The papers of the Sections were numbered at the request of the Local Committee to assist in an effort to flash titles of papers being read in different sections at the same time. See the official program. Designations were as follows: Scientific Section, Sc.; Education and Legislation, E.; Practical Pharmacy, Ph.; Hospital Pharmacy, Hosp.; Commercial Interests, Co.; Historical Pharmacy, Hi.

An abstract of the proceedings of the Sessions held in the Hotel Pennsylvania, New York City, follows, and the papers presented will be published in the JOURNAL throughout the year, accompanied by any discussion of them.

## THE SCIENTIFIC SECTION.

The first order of business, First Session of the Scientific Section, August 18th, 2:30 P.M., was the Chairman's Address by Glenn L. Jenkins.

"It is with pleasure that I, as Chairman of the Scientific Section, extend the greetings of the officers and welcome you to join in our deliberations. We extend the privilege of the floor to all visitors. We trust that the extensive and varied program arranged by our efficient secretary will prove instructive and interesting to all.

A cursory review of the progress of scientific research in pharmacy during the past decade reveals marked advances. Both qualitatively and quantitatively, the research being conducted in our colleges and industrial laboratories continuously becomes more comparable to that in other branches of science. The JOURNAL has shown decided improvement. The delay often encountered in publication of research papers may be expected to be improved by plans now under consideration by the Council. Papers are offered in better form and subjected to careful examination by a well-functioning Board of Review. Mr. Carey Croneis of the Walker Museum of Chicago writes (*Science*, 85, 562 (1937)). 'We are all professionals at finding fault with our colleague's writings but we are tyros at correcting our own.' While some may feel that this expression is apt in relation to the Board of Review on Papers, all must admit that the quality of papers before and after presentation has been improved by the Board's work. The question of priority and order of presentation and publication of papers should be settled by a committee report at this meeting.

The results of many of the best researches conducted in pharmaceutical laboratories are now published in non-pharmaceutical journals. No action that we can take will solve this problem. It will tend to solve itself when a scientific journal of pharmacy assuring prompt publication and wide distribution becomes available to our workers.

One perpetual problem remains with us, namely, the creation of greater interest and value in our sessions. Anyone who has attended all of the sessions of the scientific section for the last ten years cannot help having been impressed by the fact that attendance and interest run high at the First Session and then dwindle to a few of the faithful at our later sessions. A number of causes for this are apparent, *e. g.*, 1, failure of authors to make clear, concise and interesting presentations of their papers; 2, the absence of many of our members by the middle of the convention week; 3, conflicting meetings of other groups and committees; 4, the heterogeneous character of our program which includes all of the sciences related to pharmacy and cannot be expected to hold the undivided interest of a diversified group of scientific workers. I wish to offer suggestions which should serve to improve our program.

Repeated criticism of the presentation of papers given at our national meetings has long disturbed those who are responsible for the formulation and presentation of sectional programs. The complaints that authors do not arrange material in clear sequence, that they present their work in a dull and tedious manner are made to the divisional officers of all national scientific societies. Since the same conditions apply, I offer the suggestions with slight modification presented to authors by the Group of Divisional officers of the A. C. S. (*Ind. and Eng. Chem., News Ed.*, 15, 23 (1937)).

## SUGGESTIONS FOR MORE EFFECTIVE PRESENTATION OF PAPERS.

1. *Arrangement of Material.*—Manuscripts as prepared for publication are seldom suitable for oral presentation. The paper should convey clearly to the hearer: (a) the purpose of the work; (b) the experimental method; (c) the results obtained; and (d) conclusions. The nature of the material and the time available for presentation will determine the degree of emphasis to be placed on each sub-division. The author should make certain by trial against his watch that the essential points can be adequately presented in the time allotted to the paper.

2. *Statement of Purpose.*—The author should orient the audience clearly as to the nature and purpose of the work. A lengthy historical review is generally out of place.

3. *Technique.*—The experimental method should be described so as to indicate the principles involved. Details of apparatus or procedure unless there is some particularly novel development should be omitted. Such data may belong in the published paper but it will bore the audience.

4. *Statement of Results.*—Results should be presented graphically, preferably with diagrams. Lantern slides are more clearly seen than hand-drawn charts. These slides should be of standard size (3.25 x 4 inches) and should project clearly on the screen. Regardless of who has made the slides or charts, they should be tried from the point of view of the audience before presenting them at the meeting. Tables of data should not be read, for this wastes time and destroys interest, but the general trend of the data should be indicated.

5. *Conclusions.*—The conclusions should contain a summary of the evidence and a discussion of the importance of the results to the particular field of research involved.

6. *Presentation.*—Manuscripts should not be read verbatim. It is best to talk directly to the audience in a clear, loud voice without facing a blackboard or screen while speaking and to articulate distinctly.

Many exceptions to, and modifications of, the above suggestions will apply in particular instances. Nevertheless, general adherence to them will go far to eliminate the valid criticisms which have been aimed at the presentation of papers in our sectional programs.

The work of the Section could be expedited advantageously by the creation of a sub-section which would meet simultaneously with the main section early in the convention week. Segregation of a closely related group of papers such as those dealing with plant materials into one group would not be difficult. The vice-chairmen could conduct the sub-section during the first experimental year.

## RECOMMENDATIONS.

1. I recommend that the secretary of the Scientific Section in coöperation with the secretary of the ASSOCIATION be instructed to arrange, if possible, for a sub-section of the Scientific Section at the next annual meeting; details of the program and arrangements to be left to the officers of the Scientific Section.

2. That the suggestions for the more effective presentation of papers included in this address, edited by the incoming chairman and the secretary of the Scientific Section, be printed and reprints thereof be distributed with the annual call for papers for the Section.

3. That the standing committee to coöperate with the National Conference on Pharmaceutical Research be discontinued unless suitable duties can be found for this committee.

I wish to express my appreciation of the honor conferred upon me a year ago when I was elected chairman of the Scientific Section. In conclusion, I wish to thank the officers, members of committees and all who have contributed to make our program successful."

Following the address of the Chairman, Vice-Chairman B. V. Christensen stated that the address contained several recommendations and therefore it would be advisable to appoint a Committee on the Chairman's Address to consider these recommendations and to bring in a report to be acted upon at a later session. A motion to that effect was adopted, and A. H. Uhl, *Chairman*, F. F. Johnson and E. V. Lynn were appointed.

The Secretary's report was read by F. E. Bibbins:

"The secretary acknowledges coöperation which he has received from the chairman and other officers of the Section, as well as from the secretary and officers of the A. P. H. A.

The call for papers was published early this year, and later this was followed with a form letter sent to about two hundred and seventy-five members who have participated in programs of the Scientific Section at previous meetings. The response to these appeals was very satisfactory as you will note by the list of papers on the official program.

There were many papers offered which were returned to the authors because the secretary felt that the subject of the papers indicated that they should be presented before some other scientific group rather than to the A. PH. A.

This year the secretary attempted to close the program for the Scientific Section the 15th of July, and I wish to compliment the authors as the majority of them coöperated and submitted their titles and abstracts well in advance. There were a few, however, who were negligent in forwarding their abstracts and some of these came so late that it was impossible to include them in the mimeographed copies which were available for the sessions.

As usual we have had considerable correspondence during the year, and in preparing for this year's meeting we have attempted to promptly acknowledge receipt of titles, abstracts, papers, etc."

The report of Chairman Bibbins, of the Board of Review of Papers, was next in order:

"The committee this year has reviewed approximately one hundred and ten papers, eighty of which were presented at the Dallas meeting of the Scientific Section, and the others were submitted by authors direct to the Editor, during the year, for publication.

A large number of papers were returned to the authors for revision, principally for the elimination of unnecessary copy, and in the majority of cases the authors have cheerfully conformed to the requests of the committee in revising their papers before publication. Some, however, seem to feel that it was practically impossible to reduce their manuscripts. This particularly in the cases where the paper is the result of some work done in connection with preparing a thesis as part of their graduate work. These theses are usually very lengthy and it must be understood that most of them have to be very carefully abstracted before they can be given space in the JOURNAL OF THE A. PH. A.

The Committee has refused to approve for publication a number of papers because of previous publication of the data elsewhere or because the paper did not contain any experimental data to support the conclusions drawn by the author. These papers were returned to the author with suitable statements through Editor Eberle's office.

The chairman wishes to acknowledge the splendid coöperation from the other members of the Committee in reviewing the many papers assigned to them and also wishes to recognize the promptness in which these papers were reviewed and returned to the Editor. I doubt if many members of the Scientific Section realize the amount of work and detail which is necessary to carefully review these papers before approving them for publication.

I wish also to acknowledge the splendid coöperation we have received from Editor Eberle in this work."

The Report of the Committee on Priority of Publication and Presentation of Papers, E. G. Eberle, *Chairman*, B. V. Christensen and E. V. Lynn, was presented by Dr. Eberle:

"It is the sense of the committee that order of publication may be governed by the following considerations:

1. Papers presented before the A. PH. A. or its sections are to be given preference, other considerations being equal.
2. Papers should be classified as to field of Pharmacy, such as Pharmacy, Chemistry, Pharmacognosy and Pharmacology, and if possible each classification be represented in issues of the JOURNAL.
3. Scientific merit, practical importance and current utility.
4. Form, composition, length and cuts.
5. Limitations of Budget.
6. Papers not presented before the A. PH. A. or its sections should be considered on the basis of merit, practical utility, form and composition, and must merit priority solely on the basis of scientific importance.

The editor of the JOURNAL may call for advice and assistance in determining priority from the Board of Publications, Board of Review or any competent authority who is willing to coöperate."

The report was received and the recommendation adopted.

The Report of the Committee on Monographs was read by Chairman E. E. Swanson.

"The Monograph on Aconite is now completed and is in the hands of the publishers. This Monograph will be published in book form with six chapters. We hope that this book will be available for the next AMERICAN PHARMACEUTICAL ASSOCIATION CONVENTION.

The present Committee on Monographs will not function until the publication of this Aconite Monograph."

There being no objection, it was ordered to take the usual course.

The Report of the Committee to Coöperate with the National Conference on Pharmaceutical Research was presented by Chairman Arthur Osol, who said, in part, "although an honest effort was made to find some one to do the work this year the committee had been unable to do so and there was no report to make." It was suggested that the committee be discontinued; such suggestion was also made in Chairman Jenkins' address. The report was received and the recommendation was referred to the Committee on Chairman's Address.

Chairman Jenkins appointed the Committee on Nominations as follows: L. W. Rowe, *Chairman*, Marvin R. Thompson and Russell Cain.

The next order of business was the presentation of papers. The chairman requested that all papers as presented be handed to the secretary and stated that abstracts of all papers on the program will be available at the close of the session. He also stated that where necessary to accommodate authors, papers would be called for, out of their order, by request.

"The Extraction and Estimation of Alkaloids in Toxicological Analysis," by C. O. Wilson and L. W. Rising. Presented by title.

"The Chemistry of Passiflora Incarnata," by Edwin J. Fellows and Clayton S. Smith. Presented by Mr. Fellows.

"Assay of Spirit of Camphor," by Samuel W. Goldstein and William F. Reindollar. Authors not present. Presented at Second Session.

"The Detection of CO in Medicinal O," by Frederick K. Bell and John C. Krantz, Jr. Presented by Mr. Bell.

"A Further Study of the Assay of N<sub>2</sub>O," by Frederick K. Bell, C. Jelleff Carr and John C. Krantz, Jr. Presented by Mr. Bell.

"A Study of Assay Methods for Methylene Blue," by F. A. Maurina and Neulon Deahl. Presented by Mr. Deahl.

"Stability of Ipecac Preparations," by Samuel W. Goldstein. Author not present.

"Solubility and Hydrogen-Ion Concentration of Quinine Salts," by Frederick F. Johnson. Presented by Mr. Johnson.

"Stable Supersaturated Calcium Gluconate Solutions," by Glenn L. Jenkins. Presented by Mr. Jenkins.

"A Rapid and Accurate Method for the Assay of Silver Proteinate," by Margaret C. Swisher. Presented by Miss Swisher.

"The Preparation of Some 2,2,2-Trialkyl Ethanol," by Robb V. Rice, Glenn L. Jenkins and Fitzgerald Dunning. Presented by Mr. Rice.

"Notes on the Stabilities of Atropine and Hyoscyamine in Solution," by H. H. Fricke and K. L. Kaufman. Presented by Professor Bang for the authors.

"Para-Aminobenzenesulfonamide. Notes on the Colorimetric Assay," by Asa N. Stevens and Edward J. Hughes. Presented by Mr. Stevens.

"The Solubility Behavior of Lyophile Gelatins," by L. F. Tice. Presented by Mr. Tice.

"Solargentum Solutions—Stability on Aging," by F. N. Van Deripe, R. S. Konnerth and R. E. Schoetzow. Presented by Mr. Konnerth.

By request. "A Study of the Factors Influencing the Stability of Liquor Magnesii Citratis, U. S. P. XI," by George E. Crossen and Charles H. Rogers, was presented. (Lantern.) Presented by Mr. Rogers.

"A Study of the Chemistry of Cascara Sagrada," by Melvin W. Green, C. G. King and George D. Beal. (Lantern.) Presented by Mr. Green.

"The Hydrolysis of Menthyl Acetate and Acetylyzed Peppermint Oil. II," by Lawrence H. Baldinger. Presented by title.

"Phenolic Derivatives of *p*-Amino Benzoic Acid," by Abraham Taub. Presented by Mr. Taub.

"Triethanolamine Salts of Fatty Acids," by George W. Fiero. Presented by Mr. L. D. Lockie for the author.

"Alcohol Content of Extractive Preparations," by E. G. King, Louis Goldberg, R. K. Snyder and E. N. Gathercoal. Presented by Mr. Gathercoal.

"The Quantitative Determination of Volatile Oils in Vegetable Drugs," by Louis Goldberg, R. K. Snyder, E. H. Wirth and E. N. Gathercoal. Presented by Mr. Wirth.

"The Assay of Neocinchophen Tablets," by Urban Oakdale, R. K. Snyder and E. N. Gathercoal. Presented by title.

By request. "The Effect of Certain Barbituric Acid Derivatives as Anesthetics in the Assay of Digitalis by the Cat Unit Method," by Wm. E. Fry and Edward E. Swanson. (Lantern.) Presented by Mr. Swanson.

By request. "A Comparative Study of Two Short Acting Barbituric Acid Derivatives," by Edward E. Swanson and William E. Fry. Presented by Mr. Swanson.

"A Study of Isopropyl and Menthylene Chloride as Solvents in Alkaloidal Assaying," by M. L. Jacobs and Glenn L. Jenkins. Presented by title.

The First Session was then adjourned.

---

The Second Session of the Scientific Section was held on Friday forenoon, August 20th, Chairman Jenkins presiding.

The presentation of papers was resumed.

"A Phytochemical Investigation of Trillium Erectum," by Donald C. Grove, Glenn L. Jenkins and Marvin R. Thompson. Presented by Mr. Grove.

"A Phytochemical Study of Ipomoea Pes-Caprae (L) Sweet," by Gustav E. Cwalina and Glenn L. Jenkins. Presented by title.

By request. "Studies of Lecithin Soaps," by Saul Caspe and L. G. Hadjopoulos. (Lantern.) Presented by Mr. Caspe.

"Assay of Spirit of Camphor," by Samuel W. Goldstein and William F. Reindollar. Presented by Mr. Reindollar. (From the First Session.)

"The Application of Statistical Methods to Pharmaceutical Research," by James C. Munch. Presented by Mr. Munch who explained that the illustrations will make the paper more intelligible.

"Cannabis Sativa IV, Methods of Detection," by J. C. Munch and H. W. Mantz. (Lantern.) Presented by Mr. Munch who stated that by oversight the name of Mr. Pratt, a co-author, was omitted in typing the paper.

"The Influence of  $pH$  in the Bioassay of Aconite Preparations," by Frank A. Bellman and Marvin R. Thompson. Presented by title.

"The Present Status of Aconite Research," by Wm. J. Bonisteel. (Lantern.) Presented by Mr. Bonisteel.

"Penetration of Drugs and Poisons through Normal and Pathological Skin and Mucous Membranes," by David I. Macht. Presented by title.

"The U. S. P. XI Standard for Tincture of Digitalis," by L. W. Rowe and H. W. Pfeifle. (Lantern.) Presented by Mr. Rowe who said that the work presented parallels very closely that published in the JOURNAL OF THE A. PH. A., April 1937, by Edmunds, Meyer and Shaw; however, there are certain phases which were not touched upon in that article.

"II. The Potency of Periplocymarin, Bufotalin and Desacetyl-Oleandrin (Desacetyl Folinerin)," by K. K. Chen, R. C. Anderson and E. B. Robbins. (Lantern.) Presented by Dr. Chen, who explained that during the last nine years he and his associates have been studying the entire group of cardiac drugs having a digitalis-like action. This paper, No. 2 in the series, and the four papers which are listed immediately after, and which will be presented by title, report a part of this work.

"I. The Potency of Erythrophleum Alkaloids," by K. K. Chen, C. C. Hargreaves and W. T. Winchester. (Lantern.) Presented by K. K. Chen.

"III. The Significance of Sugar Components in the Molecule of Cardiac Glucosides," by K. K. Chen, E. B. Robbins and H. Worth. (Lantern.) Presented by K. K. Chen.

"IV. Comparative Sensitivity of the Toad and the Frog to Cymarin and Coumingine," by K. K. Chen, C. C. Hargreaves and W. T. Winchester. (Lantern.) Presented by K. K. Chen.

"V. The Action of Cardiac Drugs upon the Chromatophores of Toads," by C. C. Hargreaves, W. T. Winchester and K. K. Chen. (Lantern.) Presented by K. K. Chen.

"A Pharmacological Study of Ustilago," by William H. Hunt and Marvin R. Thompson. Presented by Mr. Hunt.

"The Dose-Response Relationship in the U. S. P. XI Parathyroid Assay," by Lloyd C. Miller. (Lantern.) Presented by the author.

"Toxicity in the Leaves of *Rhododendron Californicum*, Hook: I," by F. A. Gilfillan and Chieko Otsuki. Presented by title.

"Evaluation of Cathartics," by Arno Viehoever. (Lantern.) Presented by the author.

"Properties of *Triehophyton Gypseum*," by Fanchon Hart. Presented by the author.

"A Pharmacognostic Study of *Crysanthemum Balsamita L.*, var *tanacetoides* Boiss, Together with a Study of Its Volatile Oil," by Ralph F. Voigt, Charles H. Rogers and Earl B. Fischer. Presented by title.

"Observations on Three Louisiana Capsicums," by Heber W. Youngken. (Lantern.) Presented by the author.

"Chemical and Clinical Aspects of Sodium Perborate Therapy," by L. L. Manthey and S. Lee. Presented by Mr. Manthey.

"A Study of *Datura Stramonium*," by Frank H. Eby, Frederick School and David J. Phillips. Presented by title in the absence of the authors.

"Liquor Antisepticus," by K. S. Howell, Louis Goldberg, R. K. Snyder and E. N. Gathercoal. Presented by Mr. Snyder.

"Antiseptic Value and Pharmacology of an Improved Calomel Ointment," by E. E. Vicher, R. K. Snyder and E. N. Gathercoal. Presented by Mr. Vicher.

"Report on Effect on Growth and Dermal Irritation as Produced by Certain Wetting Agents," by Gordon A. Bergy. Presented by the author.

"Notes on the Volatile Oil of *Illicium Parviflorum* Michx," by P. A. Foote. Presented by the author.

The Session was then adjourned.

---

The Third Session of the Scientific Section was held on Friday afternoon, August 20th. Chairman Jenkins announced that papers from the previous sessions would be presented before the reports called for in the program.

"Forage Poisoning in Oregon due to *Gilla Aggregata*. I. Preliminary Studies," by L. W. Rising and L. C. Britt. Presented by title in the absence of the authors.

"Phytochemical Study. Seed of the *Magnolia Grandiflora*," by St. Elmo Brady. Presented by title.

"Scientific Color Naming of Drugs," by Deane B. Judd and Kenneth L. Kelly. Presented by title since the work had been on exhibit.

"The Isolation of Polygalitol from *Polygala Senega*," by C. Jelleff Carr and John C. Krantz, Jr. Presented by Mr. Carr.

"A Study of the Leaves of *Ipomœa Pes-Capræ*," by B. V. Christensen and J. A. Reese. Presented by title.

"Phytochemical and Pharmacological Study of *Solanum Villosum*," by Earl Peter Guth. Presented by title.

"Growth-Promoting Substances in Plants," by Wm. J. Bonisteel. Presented by the author.

"Volatile Oil in Sandalwood," by J. F. Clevenger. Presented by title.

Chairman M. R. Thompson of the Committee on Ebert Prize then read the following report:

"The members of the committee have individually and collectively reviewed all available papers, published and unpublished, which were eligible for consideration in the selection of the winner of the Ebert prize of 1937.

Among the eligible papers, a number of them were valuable and of high quality and, in the opinion of the committee, compared most favorably with those awarded the prize in other years. It was unanimously agreed, however, that no single paper was sufficiently outstanding to merit its

choice over others under the present rules of selection, as the winner of the highest award American pharmacy can bestow for a research achievement.

Accordingly, the decision was reached that the prize should not be awarded this year.

During recent years, a sentiment has been repeatedly expressed by past recipients of the Ebert prize, and members of Ebert prize committees as well as others, that the existing rules for the selection of the winner of the award are no longer adequate. The feeling has likewise been expressed by past recipients of the prize, as well as others, that a change in the physical character of the prize would be most welcome.

Among the questions which yearly confront each Ebert prize committee, which, of course, does not include that pertaining to the physical character of the prize, the following may be mentioned:

1. When a winning paper has more than one author, which author should be selected for the award, and upon what definite basis? Or, should each author receive a prize?
2. Should doctors' or masters' dissertations, or papers taken therefrom, be eligible for the award? If so, who should be selected for the possible award—the candidate for the degree or the individual who directed, and possibly executed, a substantial part of the work embraced by the paper?
3. When an individual is eligible in the competition for the award, should he be asked to serve on the Ebert Prize Committee?
4. When a clearly outstanding and important discovery or research achievement is reported in a paper, should the award be made at the usual time, or should the award be withheld until the accuracy of the conclusions have been confirmed or substantiated by others?
5. Should papers presented before sections other than the Scientific Section be excluded?
6. Should the Ebert Prize Committee be limited to three members? Or should sub-committees be established to deal with the papers embraced by the different fields of research?

For the purpose of deciding these, and possibly other questions of importance, the Ebert Prize Committee recommends that the ASSOCIATION shall appoint a special committee to study and re-state the ASSOCIATION'S attitude and policy with respect to the qualifications and requirements of those eligible for consideration as recipients of the Ebert prize for the guidance of succeeding Ebert Prize Committees."

The report was received and referred to the Council of the A. PH. A.

Chairman L. W. Rowe of the Committee on Nominations read the following report.

"The Nominating Committee desires to present the following nominees for the election to the various offices of the Scientific Section of the AMERICAN PHARMACEUTICAL ASSOCIATION for the year 1937-1938: *Chairman*, B. V. Christensen; *First Vice-Chairman*, C. F. Lanwermyer; *Second Vice-Chairman*, J. M. Dille; *Secretary* (term of 3 years), F. E. Bibbins; *Delegate to the House of Delegates*, Glenn L. Jenkins."

Chairman Jenkins announced that the report would be acted upon later in the session.

The following report of the Committee on Chairman's Address was read by Chairman A. H. Uhl.

"The Chairman's Address contains several recommendations as follows:

1. 'I recommend that the secretary of the Scientific Section in coöperation with the secretary of the ASSOCIATION be instructed to arrange, if possible, for a sub-section of the Scientific Section at the next annual meeting, details of the program and arrangements to be left to the officers of the Scientific Section.'

Your Committee recommends that the offices of the Section be empowered to request from the Council the institution of a sub-section of the Scientific Section and to present to the Council a definite program for this division.

2. 'That the suggestions for the more effective presentation of papers included in the address, edited by the incoming chairman and the secretary of the Scientific Section, be printed and reprints thereof be distributed with the annual call for papers for the Section.'

Your Committee recommends its adoption.

3. 'That the Standing Committee to coöperate with the National Conference on Pharmaceutical Research be discontinued unless suitable duties can be found for this Committee.'

Your Committee recommends its adoption.

4. Submitted by the secretary. 'Your committee recommends that the Council be requested to grant extra sessions of the section if deemed necessary by the officers.'

The report was received and adopted.

The presentation of papers was then resumed.

"Notes on Antiseptic Solution—National Formulary," by William C. Clark. Presented by title.

"Practical Method for Testing Non-Phenolic Disinfectants," by William C. Clark. Presented by title.

"Chemical Study of *Piscaria setigera* Piper (Eremocarpus). I. The Oil of the Seeds," by J. D. Smith, J. A. Mitchener, Jr., and Henry M. Burlage. Presented by title.

"Toxicity of Propylene Glycol," J. H. Weatherby and H. B. Haag. Presented by Mr. Haag.

"A Modified Reddish Cup Technique for Evaluating the Germicidal Activity of Liquid Antiseptics," by Arthur H. Bryan. Presented by title.

"The Standardization of Ergot. A Comparison of Results Obtained, by the Modified Smith Colorimetric, the Cock's Comb and the Broom and Clark Methods of Assay," by Asa H. Stevens. Presented by the author.

"Stability of Drugs," by Arno Viehoever. Presented by the author.

"The Toxicity of Cyanides," by J. C. Munch and J. C. Ward. Presented by Mr. Ward.

"Bio-Toxicology. I. Methods," and "Bio-Toxicology. II. Animal Tests upon Volatile Substances," by J. C. Munch. Both papers were presented by the author.

"A Series of Contributions to the Question of the Relation between Chemical Constitution and Local Anesthetic Activity. I and II," by W. A. Lott and W. G. Christiansen. Both papers were presented by Mr. Lott.

"Homologues of Cyclopropane-Methyl Cyclopropane," by W. A. Lott, W. G. Christiansen and L. F. Shackell. Presented by Mr. Lott.

"A Comparative Study of the Colorimetric Vitameter and Biological Tests for Vitamin A," by A. Black, R. D. Greene, H. L. Sassaman and C. Sabo. Presented by Mr. Black.

"A New Enteric Coating and a Laboratory Method for Its Control," by A. G. Worton, G. F. Kempf, P. L. Burrin and F. E. Bibbins. (Lantern.) Presented by Mr. Bibbins.

"A Critical Study of the Tannin-Bearing Galenicals," by S. W. Arnett and C. O. Lee. Presented by Mr. Lee.

"Drug Extraction. XIV. The Extraction of Podophyllum," by W. J. Husa and Paul Fehder. Presented by Mr. Husa.

"Drug Extraction. XV. A Study of Fractional Percolation," by W. J. Husa and C. L. Huyck. Presented by Mr. Husa.

"Drug Extraction. XVI. The Effect of the Form of the Percolator on the Efficiency of Extraction," by W. J. Husa and C. L. Huyck. Presented by Mr. Husa.

"Drug Extraction. XVII. Modified Repetition Diacolation," by W. J. Husa and C. L. Huyck. Presented by Mr. Husa.

"Drug Extraction. XVIII. Modified Diacolation," by W. J. Husa and C. L. Huyck. Presented by Mr. Husa.

"The Genuine Cardiac Glucosides," by Arthur Stoll. Presented by title.

Chairman Jenkins announced the completion of the presentation of papers and asked for action on the report of the Committee on Nominations. The report was received and the Chairman of the Committee was instructed to cast one unanimous ballot for the election of the nominees, which was done, and Chairman Jenkins declared them elected.

B. V. Christensen and C. F. Lanwermyer were then installed as Chairman and First Vice-Chairman, respectively. J. M. Dille was installed in absentia, as Second Vice-Chairman. F. E. Bibbins, who continues as Secretary, was given a round of applause. Speaking for the new officers of the Section, Chairman Christensen expressed appreciation for the honors done them, pledged their best efforts and heartily congratulated the retiring officers for their good work, especially the secretary.

As there was no further business the Session was then adjourned.



## SECTION ON PRACTICAL PHARMACY AND DISPENSING.

The First Session was held on Wednesday afternoon, August 18th. Chairman Whitney explained that Secretary Richards was prevented from attending the meeting and that he had requested Mr. Zopf to act as secretary.

Secretary Zopf took the chair while Chairman Whitney read his address.

"It is my pleasure to welcome you to these sessions of the Section on Practical Pharmacy and Dispensing. It is to be hoped you will find these meetings sufficiently interesting and educational to permit the extraction of some germ of constructive thought. Those of us in attendance at these meetings year after year have perhaps a better appreciation of the return in value received for the time given to these professional associations and conferences.

Of outstanding importance in the life of the Section during the past year has been the creation of the Sub-Section on Hospital Pharmacy. This provision for a definite place for Hospital Pharmacists in the AMERICAN PHARMACEUTICAL ASSOCIATION has been generally enthusiastically received. The splendid enrollment of Hospital Pharmacists in the ASSOCIATION attests to the desire of this professional person to organize for his personal improvement and the promotion of his professional career. Hospital Pharmacy always has had a prominent part in the annual meetings of the ASSOCIATION and it is to be hoped that the Sub-Section may, as time continues, become an even more potent force within the ASSOCIATION. It is hardly necessary for me to elaborate upon the excellent qualifications of this professional person before this group of understanding practicing pharmacists.

Thinking still in this same direction it occurs to your chairman that we may very well give thought to the expanded activities of this Section. I refer, of course, to the nature of the material presented each year before this Section over and above or beyond that type of material that would only seem to be encompassed by the restricting name of the Section. A change in the name to indicate more clearly that it is a "Section on Professional Interests" of larger character would better describe the expanded activity of the Section in the opinion of your chairman. As a consequence I propose to make such a subsequent recommendation that should permit the establishment of other sub-sections concerned with especial professional interests.

Beyond this there is little of general interest to be reviewed. I should, however, like to refer to the submission of abstracts and papers. The By-Laws of the ASSOCIATION make specific recommendations in this matter and strict adherence to these regulations should be a characteristic of the members of this Section. Such conduct will certainly obviate an otherwise unfortunate group of experiences for the officers of this Section.

Before concluding I want to pay tribute to the other officers of this Section for their encouraging cooperation in providing for this program. I refer to Secretary L. W. Richards, First Vice-Chairman W. J. Husa, Second Vice-Chairman E. L. Hammond and particularly to Louis C. Zopf, Chairman of the Sub-Section on Hospital Pharmacy. Mr. Zopf has been a literal spendthrift with time and energy in contacting Hospital Pharmacists or other individuals interested in arranging the Sub-Section program.

## RECOMMENDATION.

1. It is recommended that the name of the Section on Practical Pharmacy and Dispensing be altered to better encompass and describe the activities of the Section. The change in title to be sufficiently broad to embrace all the practical and professional interests now being displayed by the Section's programs and interests.

Proposed Section Name, with appended explanatory by-line:

## SECTION ON PROFESSIONAL PRACTICES.

For Hospital, Governmental and Professional Pharmacists."

Since the address contained a recommendation it was received and referred to the Committee on Resolutions to which Mr. Zopf appointed the following: Edward Spease, *Chairman*, C. Leonard O'Connell and J. Solon Mordell.

In the absence of Secretary Richards the secretary's report was omitted.

Chairman Whitney appointed the following Committee on Nominations: L. W. Rising, *Chairman*, M. J. Andrews and William Gray.

Chairman Whitney announced that the report of two A. Ph. A. Committees had been referred to the Section by the House of Delegates and that they would be presented at this time. The first was that of the Committee on Weights and Measures, which this year reported progress since its exhaustive report in 1936 brought its work up to that year and the Committee's activities during this year had not been sufficiently completed to be reported. The second was the report of the Committee on Prescription Tolerances which was read by Chairman Husa.

"As one looks back over the history of pharmacy in the United States it is strikingly apparent that there has been a continuous effort to improve and standardize the quality of medicines. Pharmacists themselves have instituted and carried on this work, in which the AMERICAN PHARMACEUTICAL ASSOCIATION has always been a leader.

For many years the chief efforts were centered on establishing standards in the U. S. P. and N. F. for the more important drugs and preparations. Later the U. S. Bureau of Chemistry (now the Food, Drug and Insecticide Administration) began to give more attention to establishing tolerances for certain products which were not at that time official, such as ampuls, compressed tablets and hypodermic tablets, these items being chiefly made on a factory scale by the pharmaceutical manufacturers. In the past few years some of the state boards of pharmacy and other enforcement agencies have given increasing attention to the quality of the prescriptions dispensed in pharmacies. This has given rise to the question of the tolerances of error which should be allowed in prescription compounding.

Several years ago this committee was established to study prescription tolerances and attempt to set up tolerances of error for various types of prescriptions. A great deal of work has been done by members of the committee and some interesting data have been gathered but the problem is still far from solution.

The establishment of prescription tolerances requires a careful adjustment of opposing factors. Obviously the accuracy must be sufficient to protect the patient but it would be a mistake to insist on a needlessly high degree of accuracy which would increase the cost of medication for the customer.

In connection with the study of prescription tolerances, it is profitable to consider the methods which were used to establish tolerances for manufactured pharmaceutical items. The U. S. Bureau of Chemistry analyzed from time to time a sufficient number of samples of products made by pharmaceutical manufacturers and was able to formulate a fairly comprehensive idea of the accuracy being attained, and from these data drew conclusions pointing to the degree of accuracy which seemed to be attainable under good commercial practice. Later a Combined Pharmaceutical Contact Committee was formed which consisted of representatives of the American Drug Manufacturers Association, American Pharmaceutical Manufacturers Association and the U. S. Food and Drug Administration. This committee has been working since 1924, meetings being held in Washington two or three times a year. This committee worked out tolerances for such products as ampuls, compressed tablets and hypodermic tablets. I have no accurate data as to the cost of the work done by the combined pharmaceutical contact committee. However, from my knowledge of the cost of research and control work I know I am not far wrong when I say that a correct analysis of the cost would show that hundreds of thousands of dollars have been spent on this project by government and industry since 1924. In that time tolerances have been established for seventy-one products at a probable cost of thousands of dollars each.

In setting up tolerances for an item there are two factors (*a*) how accurately can it be prepared at a reasonable cost, and (*b*) how conveniently and accurately can it be analyzed. The factors differ for every preparation or prescription. For manufactured items each item has a separate tolerance statement and a separate method of analysis.

As stated the contact committee of manufacturers established tolerances for a few dozen items in about a dozen years. In setting up tolerances for prescriptions the chief difficulty is the great number of different prescriptions which are written. Given hundreds of drugs and preparations, an almost inconceivable number of combinations can be made. For example, five hundred drugs and preparations will make 257,838,552,475 different combinations, using from one to five items in each combination. You can surmise for yourself how much time and money it would take to set up individual tolerances.

The magnitude of the problem of prescription tolerances has perhaps not generally been realized. Some pharmacists seem to think that some percentage variation such as five or ten per

cent one way or the other could be adopted but such a general rule cannot apply to all cases due to differences in the drugs. Work has been done on weighing single powders, capsules, etc., but this does not show the content of active ingredients. It should be noted that the N. F. does not standardize the weight of individual tablets but only the content of active ingredients. When this is done there is the difficulty that a single dosage form does not contain enough drug for an analysis, hence the N. F. and contact committee tolerances are based on an analysis of a mixture of twenty or more tablets.

Our problem cannot be solved by analyzing the prescriptions prepared by students, state board candidates or anyone who is not working under drug store conditions or knows the prescriptions are to be analyzed. It is necessary to analyze prescriptions filled in the actual practice of pharmacy. Instead of going to the tremendous expense of setting up a staff to obtain and analyze a great number of prescriptions, it would be preferable to assemble and correlate the data which is already being gathered by law enforcement officials in the conduct of their duties. This committee is willing to serve as a clearing house and coordinating committee. Each state board of pharmacy can send us data as to the prescriptions gathered by their inspectors and analyzed by their chemists including a notation as to the results of the chemical analysis and a statement as to whether any action was taken and the result. Such data would be studied and correlated by this committee and as a final result each board of pharmacy would get back more information than they themselves gave.

In addition to the correlation of data obtained in actual law enforcement work, research studies in colleges and elsewhere bearing on the effect of varying techniques on the accuracy of compounding should be encouraged and this committee wishes to place itself on record as welcoming such research work.

It is safe to say that the problem of prescription tolerances will be with us perpetually. The problem cannot be solved over night.

It is true that at present we have no definite prescription tolerances. However, all problems that arise in actual work can be solved by the application of a little common sense. Enforcement agencies should not look for minute errors of no practical significance but should prosecute only the cases in which there is dangerous negligence or in which it can easily be proved that the error is inexcusable. Such a policy will protect the public and be fair to the compounder. In general it may also be said that prescriptions for official preparations such as saturated solution of potassium iodide may be governed by the official tolerances established for the preparation in the U. S. P. or N. F.

In connection with prescription tolerances it is of interest to note that a decision has been handed down in the District of Columbia to the effect that the Pure Food and Drug Act of 1906 does not apply to a retail druggist compounding a medicine on the written prescription of a physician and selling it in his own premises.

#### RECOMMENDATION.

It is recommended that the ASSOCIATION shall go on record as inviting all state boards of pharmacy to cooperate with the Committee on Prescription Tolerances by annually submitting data regarding the analyses of prescriptions gathered by inspectors and the action taken in each case so that the results can be studied and correlated by this committee."

The presentation of papers was the next order of business.

"Some Remarks Based upon a Prescription Ingredient Survey," Ralph W. Clark. Presented by title.

"Stability Studies on Certain U. S. P. Spirits," by Wm. F. Reindollar. Presented by the author.

"A Study of Emulsions," Paul T. Rees. Presented by the author.

"The Correction of Incompatibilities in Prescriptions. I," by Herbert M. Webb and W. J. Husa. Presented by Mr. Husa.

"Is the Pharmacist a Poor Merchant Because He Lacks Training in Accounting, Economics and Business Studies?" by Ralph R. Kreuer. Presented by the author.

"Some Observations on the Use of Objective Examinations in Pharmacy," by Lyman D. Fonda. Presented by title.

"Socialized Medicine in Tampa," by Frank L. Coniglio. Presented by title.

"The Determination of a Reasonable or Permissible Margin of Error in Dispensing; Elastic Filler Capsules," the sixth paper in a series under that title, by M. J. Andrews. Presented by the author.

"A Modified—One, Two, Three Enema," by Raymond J. Hansen. Presented by the author.

"The Pharmacist and Parenteral Solutions," by Sister Crescentia Wise. Presented by S. W. Morrison.

"The Rôle of the Pharmacist in Connection with Public Health Work," by Benjamin E. Holsendorf. Presented by the author.

The chairman stated that the following papers from the program of the Second Session would be heard at this time.

"Iodine in Liquid Petrolatum, Its Preparation and Method of Assay," by S. W. Bower and L. G. Freeman. Presented by L. G. Freeman.

"A Transparent Emulsion of Oil of Turpentine," by P. A. Foote and C. W. Holton. Presented by Mr. Holton.

Chairman Spease reported for the Committee on Resolutions that the Committee commended Chairman Whitney upon his address, particularly upon its brevity, and that it heartily approved the recommendation with respect to the change of name of the Section with the request that the secretary of the Section transmit the recommendation promptly to the Council of the A. P. H. A. with the hope that it can be acted upon at an early meeting of the Council. Several members spoke in approval of a change in name which will better encompass and describe the activities of the Section and still provide a place in the Section for the special groups of pharmacists, especially institutional pharmacists.

One member urged that some younger pharmacist who is keen and on the job, be delegated to report on the new developments in pharmacy during the year and that this presentation be featured as an outstanding service of this section in place of so much statistical material.

The report of the Committee was accepted and the recommendation adopted.

The Session was then adjourned.

The Second Session of the Section on Practical Pharmacy and Dispensing was held on Friday afternoon, August 20th. Chairman Whitney announced the presentation of papers.

"Solution of Ferric Chloride Easily Prepared," by C. O. Lee and F. J. LeBlanc. Presented by Mr. Lee.

"On Preparing Liquor Cresolis Saponatus," by C. O. Lee. Presented by title.

"Hydrogenated Castor Oil in Ointments. Part II. Cosmetics," by George W. Fiero and Laurence D. Lockie. Presented by Mr. Lockie.

"Researches in Percolation," by Kurt Feinstein. Presented by the author.

"It Can Be Done," Series 12, by J. Leon Lascoff. Presented by the author.

"The Uniform Jelly of Ephedrine Sulfate," by Adley B. Nichols. Presented by the author.

"A Professional Dispensing Problem," by W. D. Strother. Presented by the author.

"Grapefruit (*Citrus Grandus*, *C. Decumana* and related species) as a Pharmaceutical Flavoring Agent and Vehicle," by David J. Mason. Presented by the author.

"Extraction of *Nux Vomica* in the Making of Tincture," by Nellie Perry Watts.

"Why Simple Ointment," by Wm. A. Prout and James R. Adams. Presented by title.

"The Antiseptic Value of Calomel Ointment N. F. V and VI," by Lewis C. Britt. Presented by title.

At the request of Chairman Rising, of the Committee on Nominations, who was unable to be present, W. G. Crockett presented the names of: W. J. Husa, for *Chairman*, 1937-1938, L. W. Richards for *First Vice-Chairman*, R. W. Clark for *Second Vice-Chairman*, L. C. Zopf for *Secretary* and H. A. K. Whitney, for *Delegate to the House of Delegates*; and these gentlemen were elected.

For the Committee Professor Crockett also presented the names of J. Solon Mordell as *Chairman* and S. W. Morrison as *Secretary* of the Sub-Section on Hospital Pharmacy for 1937-1938, and these gentlemen were elected.

As Chairman Husa and Vice-Chairman Richards were not present, Secretary Zopf took the chair and declared the Session adjourned.

## SUB-SECTION ON HOSPITAL PHARMACY.

The First Session was held on Friday forenoon, August 20th. Chairman Zopf requested H. A. K. Whitney to act as secretary and announced that the Committee on Nominations and on Resolutions, of the parent Section of Practical Pharmacy and Dispensing, would also act for the Sub-Section. Chairman Zopf also stated that as this was the initial meeting of the Sub-Section, there would be no committee reports and heartily welcomed those present to the meeting, which it was hoped was the beginning of a long and valuable life for this new and very important division of the AMERICAN PHARMACEUTICAL ASSOCIATION.

Secretary Whitney was requested to preside while Chairman Zopf read the following address:

"Our meeting this morning is the result of a breakfast conference of a group of men who were vitally interested in hospital pharmacy. These men were interested in doing something for hospital pharmacists other than an occasional paper in the Section on Practical Pharmacy and Dispensing. It was through their initiative at the Dallas meeting and their continued effort through the past year that it is possible for us to have this program.

It was a genuine surprise to me to be named chairman of this first hospital sub-section. I assure you that it has been a pleasant experience and an education. My humble efforts were supplemented by many men prominent in our ASSOCIATION, and together with the encouragement of these men and the people whose papers appear on this program, our first meeting as a sub-section is a reality.

It seems fitting at this time to give a brief résumé of our procedure during this initial year. To begin with I submitted inquiries to many of the men whom I knew had been active in the ASSOCIATION work, and particularly those who had given evidence of interest in hospital pharmacy. Certain it is, that I overlooked writing to some, but please believe me such was not intentional. Truly, it was difficult to know just where to begin, and after some correspondence received from the inquiries, it still remained doubtful as to the correct procedure.

Our major initial step was the construction of a letter which was mailed to all hospital pharmacists whose names were made available to us by Editor McDonnell of the *American Professional Pharmacist*. It was through his efforts and coöperation that our first letter received its mailing. This letter resulted in several hospital pharmacists joining the A. PH. A.

A second opportunity was given us when Dean Rufus A. Lyman, editor of the *American Journal of Pharmaceutical Education*, asked your chairman to prepare a paper on hospital pharmacy for publication in his journal. This article together with an article by Mr. LeRoy D. Edwards of Cleveland was reprinted in the College Section of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION. At approximately the same time your chairman was requested to prepare a paper for the Hospital Forum of the *American Professional Pharmacist*. My humble efforts were exerted both times and from the last issue of the *Professional Pharmacist* I find that there has been some kick-back. I am not at all discouraged by this, for if some one didn't find fault, I would feel that my efforts have been entirely in vain.

We have been working with the Committee on Pharmacy of the American Hospital Association endeavoring to get them to make a survey of their pharmacies and a statement of their needs in the pharmacy from their point of view. Mr. Edgar C. Hayhow, chairman of this committee, is keenly interested and has requested much information pertaining to hospital pharmacy. To have this committee in action is of importance to us for we must know their needs before our service can rightfully be termed adequate.

We have every reason to believe that hospital pharmacy is elevating itself. First to emphasize this fact we have the Minimum Standards of a Hospital Pharmacy as adopted by the American Colleges of Surgeons in their meeting of October 1936; and secondly the editorial in the November issue of "Hospitals," the *Journal of the American Hospital Association*, which makes clear their feeling toward our division of their institutions.

Shall we wait for demands to be made upon us or should we be the aggressors and offer a better and more comprehensive service? It is my belief that the problems of the pharmacy are the problems of the pharmacist, just as surgery is definitely and distinctly the work of the depart-

ment of surgery. We should be prepared to render a service in all hospitals large or small and that service should constitute hospital pharmacy and not merely hospital dispensing. We must practice pharmacy. It is a simple matter for any individual to count a few tablets, or capsules, or to measure eight ounces of a compound already prepared. Where our part comes in, is to practice pharmacy to the extent that prescription problems will be paramount; *first*, for the sake of the patient and *second*, for the reputation of the institution we represent. We should offer the hospital our services as manufacturers of such U. S. P., N. F. and other preparations which can be compounded at great savings to the institution. We should present ourselves as indispensable to the prescribing physician with regards to incompatibilities, vehicles, dosages and new products. Many hospital pharmacies are giving this type of service.

The thing which seems paramount is the establishment of pharmaceutical service for all hospitals. There are many hospitals particularly the smaller ones that operate a pharmacy without the supervision of a pharmacist.

My first recommendation, therefore, is that we seek to establish pharmaceutical service for all hospitals with the understanding that such pharmaceutical service be rendered only by competent registered graduate pharmacists.

From the 1921 address of the Chairman of the Practical Pharmacy and Dispensing Section I quote the following: "Hospital pharmacy is rapidly enlarging its scope and its possibilities and there is no phase of pharmaceutical practice that offers the opportunity for purely professional service such as is offered here. It is stated that there are about 1000 hospitals in the United States the bed capacity of which warrants the employment of a pharmacist. Statistics concerning the actual number of pharmacists so employed are not available but it seems certain that the number is large enough to render an organized group of them a potent factor in the pharmaceutical world. Mr. E. C. Austin of Cincinnati, Mr. Wm. Gray of Chicago and a few other hospital pharmacists have already conceived this idea of organizing and happily enough organization is to be effected, as the writer understands it, *within* the AMERICAN PHARMACEUTICAL ASSOCIATION. The aims of the organization are stated, in a clean-cut fashion, thus:

"1. To interest the Hospital Pharmacists of the United States in the work of the AMERICAN PHARMACEUTICAL ASSOCIATION.

"2. To improve and increase the importance of the Pharmacy Departments in American hospitals." In 1922 one-half of the annual sessions of Practical Pharmacy and Dispensing were devoted to Hospital Pharmacy. In 1923 the resolutions committee recommended the adoption of the following resolution of the Section of Practical Pharmacy and Dispensing:

"WHEREAS, In many hospitals the dispensing of medicines is left to internes and nurses lacking the needed and proper knowledge and training, and

"WHEREAS, Such practice endangers the life and health of patients,

"*Be It Resolved*, That it is the sense of the Section of Practical Pharmacy and Dispensing of the A. P. H. A. that the dispensing of medicines in hospitals should be under the supervision of registered pharmacists, and

"*Be It Furthermore Resolved*, That officers of State Associations, as well as individual pharmacists, be urged to do all that they can to encourage the proper pharmaceutical service in hospitals."

What happened that caused the termination of this excellent progress in hospital pharmacy can possibly be answered by some present. Was it lack of interest on the part of the hospital pharmacists or was it a case of division, as to type of organization they desired? Some hospital pharmacists feel that an individual national association of hospital pharmacists should be organized; others are of the opinion that the association of hospital pharmacists should be within the association of the hospitals.

To those wishing to establish an individual association, I should like to say that from a survey which I have conducted the past year, through the coöperation of the deans of the colleges of pharmacy, I find that we are small in number and such association would not carry the prestige of a section in this organization. A separation of this kind would take an important branch of pharmacy away from the association of all pharmacists. While in many ways our duties and problems are specific, yet there are many basic generalities which all pharmacists follow. We have a closer connection with a pharmaceutical association than with any other.

To the second group of hospital pharmacists evidencing a desire to affiliate with the American Hospital Association I quote from the minutes of the A. PH. A. a portion of a letter to the Chairman of the Hospital Committee, 1925:

"Your request that a Section on Pharmacy be established in the Annual Conference of the American Hospital Association was given thoughtful consideration by the Board of Trustees at a meeting held on Nov. 10th. The Trustees feel that, though it is not possible to establish such a Section in the ASSOCIATION, they would welcome the establishment of such a section in the AMERICAN PHARMACEUTICAL ASSOCIATION or in some other group and will encourage a provision for a meeting or meetings, at the Conference of the American Hospital Association at which matters of interest and importance, in relation to the practice of pharmacy in hospitals, may be considered and discussed."

Certainly such a connection would be a worthy one but they do not encourage such an organization and it is my opinion that it would not be the place for us any more than it is the place for the medical division. When hospital pharmacists become organized, and by this I do not mean unionized, and are able to present their problems to the American Hospital Association and the American Medical Association from the standpoint of sound basic pharmaceutical service and economic value, then we can really go places. In unity there is strength. Hospital pharmacists by themselves are not strong enough to accomplish much but allied with all pharmacists through the A. PH. A. we have a prestige we could probably never gain alone.

That the hospital pharmacists are interested is evident from the response we have received and from their activities in the various states through the formation of hospital pharmacy groups. Many of the larger cities have such associations. The most recent one to come to my attention is that organization known as the Nebraska and Western Iowa Hospital Pharmacists' Association. These are splendid groups and should receive our encouragement. We should request that the secretaries of the State Associations be requested to give consideration to Hospital Pharmacy in the planning of their Professional Programs. If we can get a state set-up of this type and make the national meeting a clearing house for the various problems discussed, then we have accomplished something.

We must be able to present a definite invaluable service to the hospitals. The problems of each individual pharmacist will naturally differ somewhat but in general the Service is essentially the same. Through such programs as we have scheduled this morning it is possible for others to learn of new methods of manufacture, practices and economy and service to the hospital as well as benefits to the patients.

Your chairman, if it be in order, recommends that the incoming chairman of the Hospital Sub-Section appoint a committee on Hospital Pharmacy for the purpose of studying the existing conditions of Hospital Pharmacies from the standpoint of the pharmacist.

The first year is over. Let's say the hardest year. We've had to break the ground and let us hope that the foundation that has been laid is one which will support our coming programs. It was no easy task, to say the least, but it was a pleasant one. Let us hope that our progress will be such that within the very near future we shall be privileged to remove the prefix "sub" from the word section and establish a distinct and definite place for hospital pharmacy in a section of its own. The continuation of our branch of pharmacy is primarily dependent upon us. Let's see it grow.

In closing may I thank all of you who have been so faithful with your suggestions, comments and encouragement, in this first year's work. I have sincerely appreciated all that you have done, and wish in particular to thank the deans of the colleges of pharmacy for their coöperation."

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

Mr. Morris Dauer then delivered the following address of welcome.

"It is my pleasure as Chairman of the Hospital Public Service Pharmacy of the New York State Pharmaceutical Association to welcome you here this morning. For a long time it has been my ambition to see a section on hospital pharmacy in the AMERICAN PHARMACEUTICAL ASSOCIATION. The chairman has expressed this morning the importance of this section. While sitting here and listening to the chairman I thought of a little story of ancient origin of a legendary bird called a phoenix.

They tell us that this bird had the power to fly very, very high. This bird had lofty ideals and he flew above all other birds in the air. First the other birds became very jealous of this

phoenix and they always attempted to throw him down. When he was thrown to the ground he liberated fire from his own body and was burned to ashes. All the other birds being jealous of this noble bird with his noble and lofty ideals looked upon the ashes and said, "He is gone. He will soon be forgotten." However, this bird also had the power to come to life again and when he came to life he flew higher than ever. They also tell us that this bird had another power which other birds did not possess. All the other birds when they flew had to use both wings. This bird flew with one wing and reserved the other wing so that when he got tired of flying with his right wing he could fly with his left wing. Isn't that true with pharmacy? It is especially so here this morning.

The pharmacist is the phoenix of nineteen thirty-seven. The pharmacy wing is tired, I mean the retail pharmacy wing. The hospital pharmacy wing is not tired. The hospital pharmacy wing will continue steering this bird, will continue carrying this bird up in the air, up in the sky and will continue his lofty ideals. It is important that the pharmaceutical phoenix preserve the strength of both of his wings. For this reason I am going to appeal to all of you here, to the chairman, that when appointments are made later on this morning every member who will be appointed by our worthy chairman regardless of position, whether chairman of the committee or sub-committee, whether a member of a sub-committee, to pledge himself that he is going to carry on these lofty ideals and ideals that your chairman and Mr. Whitney have carried on, and also that they will attend the next annual convention, because it is very important that we have these gatherings.

In conclusion, I hope that this gathering will forge a strong ring between the hospital pharmacists in the United States. Thank you."

Chairman Zopf thanked Mr. Dauer for the cordial remarks, and announced that the presentation of papers was the next order of business.

"Earliest Hospitals," by Eleanor Kairis. Presented by the author.

"Production of Ointments at the Falk Clinic," by Frank S. McGinnis. Presented by the author.

"Developing the Profession of Pharmacy through the Hospital," by Don A. Brooke. Presented by the author.

Secretary Kelly was then introduced. He said,

"I am here representing President Beal, who had another engagement this morning, to officially congratulate this group for the AMERICAN PHARMACEUTICAL ASSOCIATION, on the establishment of this section. President Beal had looked forward to being here this morning and could have given a more official character to the message than I can; however, I hope you will accept it as just as cordial a statement from the ASSOCIATION as if delivered by him in person. I would like also to express appreciation to those who helped you, Mr. Chairman, and your associates in arranging this program. I think it is a remarkable accomplishment for the first year to secure such an interesting group of papers. I will add that we are tremendously interested in this hospital pharmacy program and are ready and prepared to give this group and the hospital pharmacists as a whole every support and encouragement possible in the working out of their problems.

I know your program is very full and I just want to say again that the ASSOCIATION deeply appreciates the added interest of this group and wishes you every success in the world."

In thanking the ASSOCIATION and President Beal, through Secretary Kelly, Chairman Zopf said the next chairman will have a real program. This is just a beginning. Watch us grow.

The presentation of papers was then resumed.

"The Duke Hospital Pharmacy," by I. T. Reamer. Presented by the author.

"A Beginning Course in Hospital Dispensing," by T. Elida Larson. Presented by title.

"Professional Opportunities Open to the Hospital Pharmacist," by Charles O. McCullom. Presented by title.

"Pharmacist-Physician Relationship," by Carl A. Abend. Presented by the author.

"Medical Requirements of the Hospital Pharmacy," by W. J. Stainsby. Presented by the author, who was introduced by Dr. E. Fullerton Cook.

"Hospital Pharmacy," by Edward Spease. Presented by the author.



"The Value of the Pharmacist to the Hospital," by Oliver W. Young. Presented by Dr. D. A. Clark.

"Problems of the Hospital Pharmacy," by S. W. Morrison. Presented by the author.

"Pharmaceutical Coöperation with the Hospital Staff," by Aaron Liehtin. Presented by the author.

"Hospital Pharmacy's Opportunity," by W. Wilson McNeary. Presented by John N. McDonnell.

Chairman Spease then presented the report of the Committee on Resolutions, submitting four resolutions, the first based on a recommendation in the Report of the Committee on Prescription Tolerances of the A. Ph. A., and two based on recommendations in the report of the Chairman of the Sub-Section on Hospital Pharmacy, as follows:

No. 1. *Resolved*, that the State Boards of Pharmacy be requested to coöperate with the Committee on Prescription Tolerances by submitting data regarding the analysis of prescriptions gathered by inspection, and such action as was taken, in order that the data may be studied and correlated by the Committee.

No. 2. *Resolved*, that the incoming chairman of the Sub-Section on Hospital Pharmacy appoint a Committee on Hospital Pharmacy for the purpose of studying the existing conditions of hospital pharmacies from the standpoint of the pharmacist.

No. 3. *Resolved*, that it is the sense of the Sub-Section on Hospital Pharmacy that the dispensing of medicines in hospitals should be under the supervision of registered pharmacists and that the officers of State Associations as well as individual pharmacists be encouraged to do all that they can to provide for proper pharmaceutical service in hospitals.

No. 4. *Resolved*, that Chairman Zopf be commended for his effective work during the year and for providing such an excellent address and program for this session."

Certain minor changes were suggested in the resolutions before they were presented in the form given above. The report was received and the resolutions adopted.

Chairman Zopf announced that the report of the Nominating Committee would be presented at the Second Session of the Section on Practical Pharmacy and Dispensing.

The presentation of papers was resumed.

"Public Health and Hospital Pharmacy," by Morris Dauer. Presented by title.

"Hospital Pharmacy and Its Relation to Retail Pharmacy and Medicine," by Morris Dauer. Presented by the author.

"Hospital Pharmacy in the College Curriculum," by Morris Dauer. Presented by title.

"The Outlook for Hospital Pharmacy," by W. B. Smith. Presented by title.

"Hospital Pharmacy," by J. S. Mordell. Presented by title.

Under the head of new business, Mr. Morris Dauer suggested that a suitable definition of a hospital pharmacist should be prepared for guidance in the work of the Sub-Section, which he predicted would soon be four times as large, and not for the purpose of distinguishing between a hospital pharmacist and any other pharmacist. Mr. Dauer reviewed a definition that he had prepared.

Mr. R. S. Fuqua inquired why would it be necessary to define a hospital pharmacist and expressed the opinion that a satisfactory definition of a pharmacist should include those that practice in or outside of hospitals. He also pointed out the position of the older hospital pharmacists who might not agree with the definition.

Mr. H. J. Goeckel thought it extremely important that the hospital pharmacist should be suitably defined since his experience and qualifications differ so radically from other groups especially the neighborhood pharmacist.

Mr. Meyer Feinberg said that he is far more interested in what the hospital pharmacist does and how well he does it than in a suitable definition of him, and suggested that the schools and colleges of pharmacy should give more attention to hospital pharmacy in their teaching since a pharmacist who is not well trained can do the profession more harm than good.

Mr. William Gray expressed the opinion that a definition was not needed.

Chairman Zopf in closing the discussion thanked Mr. Dauer for the suggestion and those who had discussed it, and asked that the suggestion be carefully considered during the coming year.

There being no further business to come before the Sub-Section the Session was then adjourned.

## SECTION ON EDUCATION AND LEGISLATION.

The First Session was held on Wednesday afternoon, August 18th, Chairman Shicks presiding.

The program was changed to provide for the presentation of the Secretary's Report, which was read by Secretary McCloskey and accepted.

"With your pleasure may I submit the following as the Annual Report of your secretary for the Section on Education and Legislation for the year ending August 18, 1937?

Under the guidance of the Officers of the Section, your secretary made a deliberate and distinct effort to secure papers and material from that large group of pharmacists not directly connected with the educational side of the profession.

The objects of this effort were threefold:

1. To encourage them to present material possibly not heretofore presented, or, their own ideas and opinions of the problems frequently discussed.
2. Working in the practical application of the profession, they would see the problems and plans from an entirely different angle. These viewpoints we hoped to obtain.
3. To make them conscious of the fact that the ASSOCIATION is theirs and that they should participate in the sections when in convention.

Though the objectives were not reached the effort was not in vain, because it is hoped that future secretaries will follow this procedure and in time results will be obtained.

With that ever-helpful and willing coöperation and guidance that comes from the Washington office of the ASSOCIATION, your secretary was able to proceed with his work efficiently and rapidly. We take this means of publicly thanking Dr. Kelly and Dr. Eberle for their help.

Your secretary sent out over 300 letters, the majority being mimeographed; however, there was considerable personal correspondence in contacting the contributors of papers as well as keeping the officers of the section informed as to the progress of the program. The promptness of the replies to the numerous letters sent the chairman, as well as to Dr. Eberle, are greatly appreciated.

Of the 300 letters sent out, 110 went to State Board Members; 50 were sent to State Association Secretaries; 70 were sent to members directly in the field of education; 20 were sent to persons not included in the above and the remainder were of personal nature pertaining to the program.

A large number of those solicited for material were generous in sending in replies explaining why they could not make a contribution this year and these little courtesies are publicly acknowledged.

To those contributing were sent appropriate letters of thanks and our appreciation for the time, thought and consideration they have devoted to the preparation of these worth-while papers that will follow.

The burdensome work of the secretary would be materially lightened if those persons solicited would realize that the time element is most important in programs of this nature. If once they have decided to contribute something, they would immediately begin to prepare the paper so that the finished product in duplicate, double spaced and abstracted would be in the hands of the secretary at least a month before the convention convenes. However, since procrastination is one of the frailties of our nature, we can only hope for the best in the future.

The expenditures made are:

Postage.....	\$ 11.47
Stationery.....	3.10
Stenographic.....	4.00
	<hr/>
	\$ 18.57"

Chairman Schicks appointed H. S. Johnson, *Chairman*, S. H. Dretzka and Leslie Ohmart as members of the Committee on Nominations; and Ralph W. Clark, *Chairman*, Henry Brown and Frank A. Delgado as members of the Committee on Resolutions.

Vice-Chairman Moulton presided while Chairman Schicks read his address.

"There are but two things I shall touch upon in this report: one, Fair Trade Legislation; the other, increasing the professional business of the pharmacists.

A year ago conditions in pharmacy were not as bright as they are at the present time. The national improvement in economic conditions has made, as might be expected, an increase in the business of the pharmacist. The passing of the Fair Trade Act in so many states holds real possibilities of stemming the tide of unsound cut-rate practices. Pharmacists have put forth much thought and energy to get this legislation enacted. Now that we have this law, the same effort and power used to obtain it should continue to control and enforce it.

The Fair Trade Act does help the commercial side of pharmacy which is a part absolutely essential to the operation of most drug stores but it does not increase the professional, scientific business of the pharmacist. Legislation cannot do this. This is accomplished only by individual effort and putting into practice the knowledge at the command of the pharmacist. New outlets, although old in name, must be developed by the pharmacist if he wishes to enjoy more of those things which some of his friends or neighbors may possess.

Whatever professional standing the pharmacist enjoys to-day has been obtained through one thing and only one, and that is the contribution he makes in practicing scientific pharmacy. Some have greater opportunities than others to practice scientific pharmacy but all, I dare say, could do much more than they are doing. Probably every pharmacist enjoys being well thought of professionally. It gives him confidence as well as prestige. It gives him a different standing in his community.

Since pharmacy is built around its professional and scientific accomplishments, would it not be a wise pharmacist who puts forth every possible effort to further develop this part of the drug business? If the same effort used to obtain Fair Trade Legislation were used to increase the professional side of pharmacy, then a "heyday" for the pharmacist really would be here.

I have attended meetings of pharmacists endeavoring to pass Fair Trade Legislation where a seat could not be had and standing room was at a premium. If men in the same numbers would listen to speakers explaining how to get more professional business and then go back to their stores to devise ways and means of putting such information into operation, they, I believe, would be greatly pleased with the result. Supposing the so-called Captain Plan or some other similar plan were used to keep the pharmacists in each state informed on scientific information pertaining to pharmacy, is it not reasonable to believe that this side of their business would increase? When the prescription department is adequately developed through service to the physician, dentist and others whose business it is possible to obtain, the pharmacist has then built the kind of business which brings the greatest return and the greatest happiness.

A year from now, perhaps, many of the opportunities the pharmacist still has to increase his professional activities may be diminishing. Improved economic conditions appear to be the means of creating many other changes which unfortunately usually go with more prosperous times. People become more independent; they are not so willing to share with others; they are less tolerant with the ideas and suggestions of others; they are less sympathetic and coöperative; they more or less accentuate a smug, satisfied feeling of contentment. When this condition prevails, as it has many times in the past, the efforts of pharmacy to gain the helpful coöperation of allied medical professions must be tripled or quadrupled. The friendliness that accompanies hard times is quite conspicuous by the lack of it when conditions improve.

One problem we have before us is to instruct and, may I say, educate the pharmacist to the many possibilities of increased business which lie before him. How to get information to the pharmacist so that he may coöperate intelligently with projects under way for coöperation with the allied medical professions, is also a problem. Perhaps the Captain Plan, where certain leaders meet with small groups in various sections of the state, is the best means of gaining the attention of the pharmacist. At least the procedure is worth trying.

The few remarks made in these pages will probably take the course of most papers. The men who are listening to me are men who probably do not need this information. I could figure on talking to about the same men whether I talk in New York or Dallas, Texas. These men are familiar with the problems of pharmacy and the possibilities for advancement in its practice. They will approve or disapprove of what is said and that perhaps is the end of it. Those who read these remarks when they are published in the JOURNAL will, in all probability, be made up largely of individuals interested in some phase of pharmacy who wish to keep informed on the activities of the pharmacist so he may develop his business. The problem of reaching the ones who need help most is still a difficult one. More retail pharmacists should be visiting the various sectional and

general meetings of this convention. Of medicine, dentistry and pharmacy we represent the largest number but no doubt we shall have fewer registered at this convention than were present at the medical or dental meetings.

When we can devise a plan to reach the pharmacist and explain to him to the point of interesting him in the value of increased professional service in addition to the commercial side of his business, a real contribution will be made.

In closing I should like to compliment Secretary McCloskey for the great amount of work he has done in developing the program for this section. One troublesome factor was to get the contributors to the program to send copies and abstracts of their papers to him in time for Doctor Eberle to publish them in the JOURNAL. No doubt many do as I have done: leave the paper until the last minute to write and then it is difficult to get it ready on time for others to make the proper use of it. Despite the fact that our Vice-Chairman George A. Moulton is the president of the National Association of Boards of Pharmacy and busy with all the work this office entails, he found time to make many helpful suggestions for our Section."

The address was received.

The next order of business was the presentation of papers.

"Educating the Physician and Pharmacist Regarding Official Type of Prescription *versus* the Proprietary Type," by Frank A. Delgado. Presented by the author.

"Physicians, Patients and Prescriptions," by Chester I. Ulmer. Presented by the author.

"Meaning. . . ?" by Wilbur L. Scoville. Presented by the author.

"Medical Economics and Pharmacy," by Roland T. Lakey. Presented by the author.

"Motivating the Course in Materia Medica," by Victor Lewitus. Presented by the author.

"Recent Developments in the American Council on Education," by Rufus A. Lyman. Presented by the author.

"Laboratory Work in Drug Store Arrangement Courses," by Joseph A. Goodness. Presented by the author.

"The Necessity for a Specific Course in Bacteriology for Pharmacy Students," by Fanchon Hart. Presented by the author.

The chairman stated that the paper on "Types of Examinations and Methods of Examining in Organic Chemistry," by James Dick Russell had been read in another Section, and suggested that the paper by E. F. Kelly go over until the next session since the author could not be present.

"Working conditions in Retail Pharmacy," by Wortley F. Rudd. Presented by title.

Chairman Schicks called attention to the two resolutions submitted in this paper and read them. After a general discussion, it was voted to refer the resolutions to the Committee on Resolutions of the Section to be reported back with recommendations.

The Session was then adjourned.

---

For the Joint Session of this Section, the Conference of Pharmaceutical Association Secretaries, and the Conference of the Law Enforcement Officials, see the abstract of minutes of the latter organization (page 1185).

---

The Second Session of the Section was held on Friday afternoon, August 20th.

Chairman Schicks introduced Dr. George Urdang who said, "Ladies and Gentlemen: I want first to express my feeling of pleasure and gratitude to be here in the United States, in the midst of the representatives of American pharmacy. For many years I have read your pharmaceutical journals and have gained—until now only through correspondence—many friends. I therefore hope you will look at me as what I want to be, not a stranger, but one of you, and will allow me to tell you about my experiences in a matter which seems to be of greatest interest for your future. And in this sense I beg you to listen to my paper."

"Pharmacy's Position under Regulated Community Medicine," by George Urdang. Presented by the author who was given a rising vote of thanks.

"The Status of Exempt Narcotics under the State Narcotic Acts," by R. L. Swain. Presented by the author.

"A Course in Laboratory Glass Blowing in a College of Pharmacy Curriculum," by Horace M. Carter. Presented by the author.

"Are the Colleges of Pharmacy Fulfilling Their Duties When They Merely Prepare Graduates in Basic Sciences?" by E. J. Parr. Presented by title.

"Should the Certificate of Qualified Assistant Be Given by the Pharmacy Board after 1937?" by Ernest Little. Presented by the author.

"Objectives of Pharmaceutical Education," by William A. Jarrett. Presented by the author.

Chairman Schicks interrupted the presentation of papers to ask Vice-Chairman Moulton of the Section to extend a word of greeting—Mr. Moulton said, "It has been a pleasure for me to observe how fine a program this year's secretary has prepared. The only suggestion that I have to offer is one which I just discussed with Dean Little and Dr. Kelly. We have listened to a very fine paper by Dean Jarrett, and we have very few members here. It seems too bad that we haven't a larger attendance in this session. There must be a reason and that reason unquestionably is that there are so many papers in the various other sections that the member simply hears the ones he wishes to hear and leaves one section to go to another section. I wonder if some coördination couldn't be worked out and studied before another annual meeting. In other words, instead of having 74 papers, as we see on that board, if we had 4 instead, and more open discussion, in order to bring forth some points, I think that would be considerably more successful. I suggest that this be thought of during the next year, and perhaps some of these papers might be read by title, and those who wish to interchange between sessions may still do so. I think thereby there would arise a lively and interesting and intelligent discussion of the papers as presented. The program should be lined up so that everybody could listen to the paper he chooses to hear."

Chairman Schicks stated that the author of the next paper could not be present at this time and requested the secretary to read the paper.

"The Number of Graduate and Registered Pharmacists Necessary to Maintain the Professional Personnel at the Proper Level," by E. F. Kelly.

"Let's Not Mistake the Campus for the World," by H. C. Newton. Presented by the author.

"The Problem of Aptitude Testing in Pharmaceutical Education," by Samuel S. Lieberman. Presented by the author.

"The Value of Technical Training to the Pharmacist and Legislation Practicing Same," by D. B. R. Johnson. Presented by title.

The Committee on Nominations presented the names of George A. Moulton for *Chairman for 1937-1938*, John F. McCloskey for *Vice-Chairman*, A. O. Mickelsen for *Secretary* and George C. Schicks for *Delegate to the House of Delegates*, and these gentlemen were elected.

The Committee on Resolutions submitted no report.

There being no further business the Session was then adjourned.

#### SECTION ON COMMERCIAL INTERESTS.

The First Session was held on Wednesday afternoon, August 18th, Chairman Lakey presiding.

Vice-Chairman Hein took the chair while Chairman Lakey read the following address.

"The Commercial Interests Section is fifty years old to-day. It was organized during the convention of 1887. At that time the AMERICAN PHARMACEUTICAL ASSOCIATION had been in existence for thirty-five years. Its annual programs had dealt almost entirely with the professional interests of pharmacy. This apparent neglect of the commercial interests had led four years previously (1883) to the establishment of a business association called The National Retail Druggists Association (N. R. D. A.). The present National Association of Retail Druggists should not be confused with this earlier organization, for the N. A. R. D. did not come into being until fifteen years later (1898).

Representatives of the N. R. D. A. attended the convention of the 1887 A. PH. A. The result of this conference was the expansion of the A. PH. A. to include the business side of the retail drug store in its programs. A special section or committee to be known as the Commercial Interests Committee was established. Dr. Albert H. Hollister of Madison, Wisconsin, the president of the N. R. D. A., was elected as the first chairman of the new section. The N. R. D. A. then went out of existence as a separate organization through this merging of officers and interests.

Enthusiastic members predicted that the new section would become the most important division of the A. P. H. A. Its tidal history reveals many interesting things but it does not show that these optimistic prophecies were well founded. Perhaps the answer lies in the lack of a sound and consistent philosophy in the face of a combative and changing practice.

Looking over the half century of the existence of our section as recorded in the proceedings of the A. P. H. A. we find no attempt has been made to rationalize our thinking with an understanding of the causative fundamentals of the economic evils besetting the drug store. We have primarily occupied ourselves with an exposition of our competitor's private sins and a defense of our exclusive virtues. We failed to recognize their similarity of origins. We discovered no satisfactory methods of diagnosis. We invented no workable means of control. Our superficial studies afforded us not even an assurance of a reasonable prognosis of our ills. We have dealt usually with interesting but seldom profitable subject matter. We have no economic philosophy except that which originated from individual and emotional reactions rather than that which we might have built upon the broader foundation of the economic structure of the whole of commerce instead of our fractional portion thereof.

No matter how much we may desire it we cannot escape the shaping influence of the general commercial trends that political and social development occasion. We have been in the position of the physician of fifty years ago, who was usually a superficial observer of the symptoms of disease. He accepted these manifestations as his whole problem instead of seeking the deep underlying causes. The rational treatment of ills is based upon a correct diagnosis founded upon facts, not fancies. This is the philosophy of both sound science and of progressive business.

Knowing fundamental causes may not provide the remedy to cure a given ailment, but we will have to admit that we are in a better position to carry on the research necessary to the final solution of the problem.

The blame for not perfecting a more constructive program should not be directed at the individuals who through the past half century have given of their time and talents for the purpose of helping to promote the business side of retail pharmacy. Their efforts have been circumscribed by the limitations imposed by the usual meaning placed upon the word commercial. The term commercial applies mostly to the anatomy of business intercourse, very little to the physiology and practically not at all to the basic science of this practice. Successful trading is the art elaborated from the application of certain principles of the science of economics.

This section as a division of a professional association should concern itself with the study of the economic backgrounds of commercial practices and leave to the N. A. R. D., the state and local retail druggists' associations the consideration of schemes of promotion, mediums of defense and systems of practice. Not that we have no interest in these things but that we may be providing a place in our programs to direct more attention to the study of the fundamental underlying causes of commercial problems and thereby help the retail pharmacist to scientifically develop his art of commercial practice. It is for this reason that I submit to you the following motion.

I move that the secretary of this section notify the Council that we the members of the Section on Commercial Interests desire the official title of this section to be changed to read "The Section on Pharmaceutical Economics" and the name "Commercial Interests" discontinued."

Following his address, Chairman Lakey called attention to the recommendation that the name of the section should be changed from Section on Commercial Interests to Section on Pharmaceutical Economics and moved that the secretary notify the Council of the A. P. H. A. that the members of the section desire this change. The motion was seconded.

It was discussed pro and con by Messrs. Hein, Olsen, Zonies, Lakey, Carstater, Kopald, Lascoff and Seeley, was put to vote and carried.

Secretary Goodness submitted a verbal report in which he reviewed the duties carried on during the year, the efforts which had resulted in the program of the meeting and expressed his thanks to all who had cooperated. The report was accepted.

Chairman Lakey appointed F. D. Lascoff, *Chairman*, Henry Brown and R. B. Rothrock as members of the Committee on Nominations, and suggested for consideration and action at the Second Session if thought advisable, the organization of several committees of the Section for specific studies of problems to be included in the program.

The presentation of papers was the next order of business.

"Principal Causes of Low Profits in Drug Stores," Paul C. Olsen. Presented by the author.

"Taxation: Vertical vs. Horizontal," James C. Carstater. Presented by the author.

"Influential Intangibles," Clarence N. Brown. Presented by the author.

"Some Uses of Color in a Drug Store," George F. Archambault. Presented by Mr. Goodness.

"The Importance of the Pharmacist's Allied Professional Services to the Community," John McDonnell. Presented by the author.

"The Place of the Professional Display in a Drug Store," Medford M. Cooper. Presented by the author.

"Advertising Professional Pharmacy," Joseph A. Ottolan. Presented by the author.

"No One Wishes to See a Morgue," Charles Ely. Presented by Mr. Goodness.

"The Voice of Professional Pharmacy," Marvin J. Andrews. Presented by the author. The Session was then adjourned.

The Second Session of the Section on Commercial Interests was held on Friday afternoon, August 21st, Chairman Lakey presiding.

The presentation of papers was resumed.

"Fair Trade, Past, Present," Samuel Shkolnik. Presented by the author.

"On Twenty-Five Cigar Counters," Walter Chase. Presented by the author.

"The Monopoly and Competition in Trade-Marked Articles," B. Olive Cole. Presented by the author. (Pub. JOUR. A. PH. A., Aug. 1937.)

"The Chain and Independent Drug Store Situation as Revealed by the Census of American Business," Frank A. Delgado. Presented by the author. (Pub. JOUR. A. PH. A., Oct. 1937.)

"Must a Pharmacist Be a Psychologist?" Alice-Esther Garvin. Presented by the author.

"Law, Economics and Business in Buying a Drug Store," Joseph H. Goodness. Presented by title. (Pub. JOUR. A. PH. A., Sept. 1937.)

The chairman submitted the report of the Committee on Nominations presenting the names of Henry Hein for *Chairman* of the Section for 1937-1938, Paul C. Olsen for *Vice-Chairman*, J. H. Goodness for *Secretary* and F. A. Delgado for *Delegate to the House of Delegates*, and thanked Mr. Goodness for his willingness to continue as the Secretary rather than to be promoted, as well as for his splendid work during the year just closing.

These nominees were elected by ballot.

On account of the lateness of the hour the formal installation of officers was omitted, and the Session was adjourned.

#### SECTION ON HISTORICAL PHARMACY.

The First Session of the Section was held on Wednesday afternoon, August 18th, Chairman Harris presiding.

Secretary Ireland took the chair while Chairman Harris read his address, which was accepted.

"It is an honor to be elected to serve as chairman of this Section and I assure you that I appreciate it. The secretary, Dr. Ireland, has, however, arranged the program. To him and to those of you who are to present papers, I want to express my sincere appreciation and thanks. It is also my pleasure to welcome each of you to these sessions and I hope that you will participate in the discussions.

There are many reasons for the study of history. One must be careful that he does not make precedent his guide and continuously move backward. We can and should use history to serve as guideposts, pointing to the things that we should avoid and to those that we follow. If we will but think as we read of past accomplishments and failures, we will avoid many of the pitfalls that are so frequently encountered. When we start upon a research problem, the first thing to do is to search the literature. It gives us a lot of assistance to know what has been done by others. In the light of past experiences, we are given new ideas and often new ideals.

History has become a great aid in the study of social improvement. Most of us can remember that we were taught dates, names and places in our history courses. The historian of to-day is attempting to show causes and results and is making the textbooks more interesting and readable.

An interesting commendation for the work of this section is the demand for abstracts from the papers presented, to be used as publicity material for the daily newspapers. They are anxious to get copy on many of the subjects discussed. Surely, pharmacists should be more interested in the historical side of their calling than the daily press-reading public. There should be more interest in this section than there has been in the past. Two full sessions should be possible without solicitation for papers on the part of the officers."

Secretary Ireland then read his address which was accepted.

"The secretary's report has always been traditionally short. This year, I just wish to tell you that we have accepted fourteen historical papers which will be distributed over two sessions, and have arranged a Memorial Service on Thursday morning at the Second General Session of the A. P. H. A.

"In addition, this year the secretary has arranged an historical exhibit which is in the parlor off this hallway in conjunction with the United States Pharmacopoeia and National Formulary Exhibit.

"One of the exhibits deals with Dr. William Beaumont, the papers of which will be given next Friday afternoon.

"The secretary also wishes to mention at this time that we are honored in having two foreign historians with us—Dr. George Urdang and Dr. Kurt Feinstein—both of whom we welcome."

Dr. Edward Kremers, at the request of the chairman, then introduced Dr. Urdang.

"Ever since the World War I have had no desire to go to Europe except once, and that was a few years ago when the International Congress for the History of Pharmacy met in Basle. The reason why I had a desire to go over at that time was because I wanted to meet some of the pharmaceutical historians of the Old World with whom I had been corresponding these many years.

"My hopes did not realize, but to one extent at least they have been realized, since Dr. Urdang has turned the tables on me and has come to the United States to visit with us. It gives me extreme pleasure to be able to call on Dr. Urdang to say just a few words to this Section at this time."

Dr. Urdang responded as follows:

"I am so deeply touched by the kind words of Professor Kremers that it is hard for me to find words to give to you my feeling.

"Notwithstanding the fact that I am here in the United States for the first time and I came as a stranger to the States, I am no stranger to the AMERICAN PHARMACEUTICAL ASSOCIATION, and I am no stranger especially to your Section.

"Professor Kremers was kind enough to tell you about my work, but in beginning my work I always endeavored to find an inner connection to the American pharmaceutical historians and especially to Professor Kremers, for whom I have a great admiration.

"He has introduced me to the American pharmaceutical world when I had published my first book. He has introduced me with the strings of his serious labor, with the purity of his ideas. You all know him and admire him as I do. So since that time all my work in historical pharmacy was done in coöperation with Professor Kremers.

"He was always the first to whom I mentioned the progress of my work, and through him I have been informed of the endeavors and the difficulties of the historians of the American pharmaceutical world. Now, being here in your midst, I feel certain that the work of the pharmaceutical historian finds its place of equality with the other fields of serious scientific American pharmaceutical research to the enjoyment and to the benefit of the old pharmacy and not only of the pharmacy of the United States.

"So, gentlemen, I thank you very much for your kind reception and I wish that the work of your Section has a great success and give you and all of us the satisfaction we hope of it."

Dr. E. G. Eberle then read the Historian's Report, which was received.

"The proceedings of the AMERICAN PHARMACEUTICAL ASSOCIATION for August 4, 1903, record that the First Session ever held by the new Committee on Historical Pharmacy was called to order in the Casino of the Grand Hotel at 8:30 P.M., Mackinac Island, Michigan. At this time Edward Kremers, chairman of the Committee, read a comprehensive address. The opening paragraph is quoted: 'The general interest in the history of American pharmacy manifested at the Philadelphia meeting, caused some of the members of this ASSOCIATION to consider the desirability



of perpetuating this interest, if possible, both for the benefit of this ASSOCIATION, and the profession it represents.'

This Committee in due course developed into this Section, organized at the Atlantic City meeting, September 5, 1905. The late Albert E. Ebert was named the first Chairman and Edward Kremers was elected Historian and he served the ASSOCIATION for a number of years with outstanding ability. Others followed and the work of the Section has been carried forward as evidenced by the annual programs, leaving records which will be of interest and value when the transactions and contributions can be properly catalogued.

During past years no systematic record has been kept, but things are shaping themselves so that the material which was not filed in proper order can be indexed for reference. Included in this work are the reports, papers and donations made from time to time.

The World's Fair at Chicago, created a greater interest in Pharmacy and that of visitors at the AMERICAN INSTITUTE OF PHARMACY is quite evident. Last year the exposition at Dallas was successful and this year the Pan-American celebration marks an International event in which the medical professions are under supervision of the director of the pharmaceutical exhibit. The section is located in the U. S. Government Building.

The recognition given at the conventions, national and state, is encouraging and the place of Section N—Medical Sciences, Section N<sub>2</sub>—Pharmacy in the Association for the Advancement of Science, is distinctive of a higher appreciation of professional pharmacy. This is also in evidence by the desire and support of the activities to be developed in the AMERICAN INSTITUTE OF PHARMACY.

Pharmacy Week has been a promoting influence in the advancement of professional pharmacy and may be noted by the increase in number of professional pharmacies, the displays and the publicity given in various ways. May it be said, without reflection, that more coördinated thought is given in impressing students with the greater possibilities in professional advancement by the Schools of Pharmacy, as is also evidenced by the forming of a Hospital Pharmacy section in the ASSOCIATION program.

The editions of the U. S. P. XI and National Formulary VI, have shown relative advancement and responsive thereto a greater interest by pharmacists and those who are served. The First Supplement of the Eleventh Revision of the U. S. Pharmacopœia has just been released; its issuance inaugurates an advanced program. It makes possible prompt revision of texts and makes this standard more responsive to progress, more serviceable as a technical guide.

The reception of the National Formulary by the health professions and the invitation to acquaint the medical, dental and other organizations speaks for progress. A movement responsive to the needs of revision work will result in the establishing of a laboratory in the AMERICAN INSTITUTE OF PHARMACY and speaks for greater service.

The Pharmaceutical Recipe Book has justified its promotion as evidenced by recognition in departments under Government direction. The pharmaceutical publications have promoted professional pharmacy and stimulated historical study. The U. S. P. and N. F. Committees have pointed the way for helpfulness in creating professional publicity.

The history of pharmacy has been contributed to by the programs of State Associations. The background of pharmacy must be known in order to understand its history and development. The writer may be pardoned by personal reference; the Wisconsin State Association gave Dr. Edward Kremers the opportunity to sketch pharmaceutical history in connection with events of the convention city, Manitowoc.

Walter B. Adams brought together historical facts of Texas, and photographs of all officers from the time of organization of the State Association. Matt Noll wrote the history of Kansas pharmacy. These references show the possibilities in the studies of early medical and pharmaceutical practice.

The *Badger Pharmacist*, in recent issues has pointed the way for coördinating the historical accounts with the shaping of pharmaceutical practice and to make useful application is the work of this Section.

L. D. Havenhill has said in connection with 'The Early Days of Pharmacy in the West,' by John T. Moore; 'with the fullest intention of being an assistant historian of a vanished cycle, the easy-going narrator can easily fall by the wayside by yielding to the urge of the untold funny story. the ludicrous detracting from the sober consideration of points more interesting.'

It may not be out of place to refer to the Stabler-Leadbeater Pharmacy in Alexandria where the Washingtons secured their medicines, because the time is coming when this pharmacy will become a museum. It will interest the visitors not only because of the history of the founders of this country, but because it very clearly depicts pharmaceutical developments, as the invoices and prescriptions are part of the material in possession of the AMERICAN PHARMACEUTICAL ASSOCIATION.

Events of the past are brought into contact with the present by the annual meetings.

'The idea of the forming of the AMERICAN PHARMACEUTICAL ASSOCIATION was conceived and carried out by the members of the convention of Pharmacutists convened in the city of New York, in October 1851, to take into consideration the subject of Standards for the guidance of the special examiners of Drugs, Medicines, etc., at the several Chief Parts of Entry.' The sessions were held in the rooms of the New York College of Pharmacy, No. 511 Broadway, October 15th at 5 P.M.

The name, 'AMERICAN PHARMACEUTICAL ASSOCIATION,' was adopted at the organization meeting, held in Philadelphia, October 7, 1852. Daniel R. Smith, of Philadelphia, was elected its first president.

This year revisions of pharmaceutical textbooks have appeared. The Centennial of the United States Dispensatory is being celebrated by the issuance of the twenty-second edition. Before the first edition of the U. S. Dispensatory appeared, other dispensatories had been published, notably the American Dispensatory which made its appearance in 1806 under the direction of John Redman Coxe.

#### DONATIONS.

The bequest of the late Frederick N. Kilmer provides a trust fund for the AMERICAN PHARMACEUTICAL ASSOCIATION, of \$3000, the income from which is to be applied in the form of a prize, for rewarding of meritorious work in pharmacognosy.

The will of Sir Henry Wellcome has many provisions which are still to be carried out. He was an active member of the AMERICAN PHARMACEUTICAL ASSOCIATION for more than sixty years.

Quite a number of donations have been made, which are matters of record in the JOURNAL and ASSOCIATION transactions.

An Analytical Balance was donated by Samuel L. Hilton; Fred W. Connolly, of Dorchester, Mass., donated a number of beautiful ointment jars. Contributions have been made to the Library and Museum. Turner F. Currens donated several valuable mortars and pestles.

It has been our pleasure and privilege to loan historical items relating to pharmacists to various government displays in Washington, and also to displays at some of the Institutions of Pharmacy. Among the latter, one that has a bearing on the history of Pharmacy is The Old Apothecary Shop of Revolutionary Days, which was arranged by the Pharmacy Department of the Medical College of Virginia. It is a prominent feature of an exhibit showing two hundred years in medical progress, which is also part of the Virginia Capital Bicentennial Celebration of the founding of Richmond.

An unusual number of deans of Schools and Colleges of Pharmacy have retired or entered the "Unseen Temple" during the year; among them are: Willis G. Gregory, Honorary President of the A. P. H. A., deceased; Theodore J. Bradley, former president of the A. P. H. A., and president of the American Association of Colleges of Pharmacy, deceased; Henry B. Carey, University of California, deceased. Retired—William B. Day, H. V. Arny, Charles F. Heebner, Wilber J. Teeters, William C. Anderson and Charles Fuhrman.

#### OBITUARY.

The following members and men prominent in Pharmacy, of whom mention was made in the JOURNAL, have passed on since we last convened:

Frank G. Abbott, Charles H. Avery, John A. Beard, A. H. Beardsley, Clarence O. Bigelow, Frank A. Blair, Wilhelm Bodemann, Wm. H. Brown, Ethan Allen Burford, Henry R. Carey, George A. Clapesattle, Bert N. Dalton, N. L. Debus, Wm. H. de Hartzog, George C. Diekman, Jacob Diner, Carl F. J. Dyna, Herman Fry, C. Thurston Gilbert, Charles S. Gore, Willis G. Gregory, F. N. Mainert, Mary R. Hamilton, Carl G. A. Haring, William Morlic, F. A. Leslie, W. S.

Maltman, R. V. Mattison, Thomas F. Meehan, Samuel Meyer, Ambrose Mueller, John C. Muth, Cornelius Osseward, David J. Reese, Frederick Rohnert, Hugh C. Russell, Max Samson, Frank A. Scheuber, Herbert K. Watson, Theophilus Zimmerman, John F. Zueukeler.

In the list, given in the foregoing, Clarence O. Bigelow was active in New York pharmacy; Wilhelm Bodemann, enthusiast in Veterans Association work; George C. Diekman, member of the faculty of New York College of Pharmacy; Jacob Diner, Fordham University, and active in U. S. P. Revision; C. Thurston Gilbert, president N. A. B. P., Carl G. A. Harring, secretary of the Conference of Pharmaceutical Association Secretaries; Cornelius Osseward, for a number of years in work of the Section on Practical Pharmacy and Dispensing.

#### INTERNATIONAL PHARMACY.

The International Pharmaceutical Federation, in which the AMERICAN PHARMACEUTICAL ASSOCIATION holds membership, will convene August 26th in Copenhagen and continue until August 30th.

The Coronation of George VI was an event of general interest in which pharmacy had a part.

Our German contemporaries have carried interesting illustrated issues of pharmacies that date their foundations back several centuries, bringing history of the past to the present.

During the past year a number of German apothecaries visited the AMERICAN INSTITUTE OF PHARMACY.

We are honored this week by Dr. George Urdang, well and favorably known German historian of Pharmacy and hope to be honored by Dr. Fritz Ferchl of Mittenwald, known here for the *Kalenders of Pharmacy*.

We are also honored by Dr. Kurt Feinstein, of Switzerland, who has recently prepared a comprehensive theoretical and practical Research on Percolation."

Chairman Harris appointed J. T. Lloyd, *Chairman*, Paul Janke and L. F. Kebler as members of the Committee on Nominations.

The presentation of papers was the next item of business.

"Early American Pharmaceutical Inventions," by Charles Whitebread. Presented by title.

"The President of the First Convention Called to Formulate the United States Pharmacopœia—Dr. Samuel Latham Mitchell, 1764-1831," by L. F. Kebler. Presented by the author.

"State Pharmaceutical History," by Edward Kremers. Presented by the author.

"The Unfortunate Drug Experiences of Daniel Gabriel Rosetti," by David I. Macht. Presented by title.

"Dr. Benjamin Bullovan," by W. T. Bradley. Presented by the author.

"The Story of the Soda Fountain," by Ina Griffith. Presented by the author.

"The Authorship of the First Lititz Pharmacopœia," by C. O. Lee. Presented by the author.

"Pre-Revolutionary Commerce in Drugs in North Carolina," by J. H. Hoch. Presented by the author.

The Session was then adjourned.

The Second Session was held on Friday afternoon, August 20th. Chairman Harris called for the presentation of papers.

"Johann Bartholomæus Trommsdorff," by Curt P. Wimmer. Presented by the author.

"Alonzo Robbins, Pennsylvania's Number One Pharmacist," by John E. Kramer. Presented by the author.

"A Comparison between an Early Drug Catalogue and the United States Pharmacopœia," by Ralph W. Clark. Presented by the author.

"Dr. Wm. Beaumont—an American Physiologist and Pharmacist," by E. J. Ireland. Presented by the author.

"Some Notes on Drugs of the Bible," by L. E. Warren. Presented by the author.

"The International Pharmacopœia of 1885," by Edward J. Niles. Presented by title.

"Pharmacopœia Estonica," by Oscar Loddy. Presented by title.

Dr. Urdang then delivered the following address.

"I have had the pleasure of attending the First Session of this Section. As the Chairman was kind enough to ask me for a short talk on pharmaceutical historical work in Germany I will now try to give you a brief review.

Even on the Continent we have had early pharmaceutical historians. In the Eighteenth Century we had first the French and then the German, but all this naturally was amateur work.

It was work from France on history, but it was not a work of historians, and naturally that is the beginning of such work in every country of the world. At first you have to learn and then you have the knowledge, and it is in human life as it is in scientific work.

The real scientific work in historical pharmacy is not old. Even if we take the largest pharmaceutical history we have the greatest challenge. Then we must say that this large compendium is an archive for all pharmaceutical historical facts, but in the real sense of the word it is no history.

You see, all work begins as it must begin with the collecting of some material, but even if we have a collection of stories we may not have a history, and to make up a collection of stories a real history, that is the problem and the task of the historian.

Now, I have heard many papers here and I was astonished and glad to see that you are indeed on the real scientific way. This way we have to see in the combination of facts and sense, in the trial to find out whether the facts that we have found are in the sense of the epochs and in the sense of the centuries in which they took place.

To show you from my own work, I have written a large history of German pharmacy and I worked for about ten years to collect the material and out of this material I made a history.

How do I understand the word "history?" It is to give the development of the facts and to show whether and in what manner they are in the sense of the time, to see if I have followed the real instruction at all times.

Naturally, it was impossible to always know the sense of the time. You must compare what you have found with the quiet atmosphere of this time. Sometimes I have found that the document that I had discovered did not give the atmosphere of the time and then I looked for other documents of the same period; after checking I knew that the document in my possession really was of that particular period. Sometimes it may have been only an accident and not an example of the time.

So it is impossible not only to pick out the facts, but to make a story out of them. You must compare. We must seek other documents of the same era. For that purpose I have founded the Society for the History of Pharmacy in Germany; not only in Germany but later for the whole Continent.

I have divided my history of pharmacy into five divisions: One must be devoted to the legal matters of pharmacy, to the laws, to the professional pharmacy, to the education in pharmacy. In short, to all of the things, business and professional.

*Secondly*, it must be devoted to the technique of pharmacy, to the development of instruments and industrial means in pharmacy.

The third must be devoted to scientific pharmacy and that is the hardest one, naturally, because here it is necessary to separate pharmacy from the other fields of scientific work. It is not possible to go over the limited ways into other fields. You must separate the history of medicine and the history of pharmacy. You must separate the history of pharmacy from the history of chemistry, from the history of botany, and from all of these fields of scientific work close to pharmacy.

When you do that you must ask yourself what belongs to the field of the history of medicine or chemistry or botany and what belongs to the field of the history of pharmacy. In the history of pharmacy belong the date on which your remedy comes into official or unofficial use, the development of the use in pharmacy, the development of the preparation of the drugs in pharmacy.

Then you must find out in what period a drug has come into use, because we have certain tests, certain contents. You must find out when the real contents were discovered and what the contents were.

The fourth field is the collection of biographies of foremost pharmacists, and bibliographies of pharmaceutical works. When you have collected all these facts you must try to bring them together.

So we have made our trials in Germany and the Continent and we have found that in this way we could work together with the historians of other sciences. We have worked so that none

of these historians could say that we are dilatory, because we have strictly avoided going into their fields and, you see, even though we have restricted our work we have made a good job of it. Thank you."

In reply to an inquiry as to the interest in the history of pharmacy in Germany, Dr. Urdang said, "When we founded the Society for the History of Pharmacy we had two purposes in mind: One purpose was to have the place and the means to publish historical abstracts. I think you all know how hard it is to find the possibilities for publishing historical abstracts.

"The newspapers, naturally, have only a restricted amount of space for that. It is impossible for them to publish all papers. Therefore, the first purpose of our Society is the publication of American historical papers. In the last ten years we have published about forty publications, most of them are in this book.

"The second purpose is to give the pharmacists and the public an idea of the value of historical work. We had three hundred members in our Society the first year and in 1933 we had one thousand members all over the world. Half of the membership live in Germany and five hundred are in different parts of the world. We have connections with them.

"I think I may say that we have given the pharmacists a new feeling of their profession; not only to the pharmacists, but we have given this feeling to the public, because we have given books, we have given ideas, we have given illustrations, we have given advice to all our members. Half of it we publish in their own tongues so that they may be able to speak about historical subjects in their own language. We have had the best of things.

"Naturally, we all want pharmacy to be a profession, but it is a business also. The public only sees the business side and not the professional side. The pharmacist sometimes forgets that it is a profession. Therefore, I think the task of the pharmaceutical historian is not only to write papers or to write books. I beg your pardon. I myself have done it, but I don't think that is the best way.

"The best way of doing that is to make our colleges and the public see what a pharmacist is indeed and to give the pharmacist the possibility of going on in the spirit of his profession in this work."

Chairman Harris introduced another distinguished visitor, Dr. Kurt Feinstein of Switzerland, who read the following paper.

"Allow me to give you a brief outline of the history of percolation, which is significant for so many of our pharmaceutical manipulations. The ancient Greeks and Romans knew a lixiviating process for the extraction of vegetable ashes which was based on the percolation principle. The similar principle of displacing a concentrated liquid by water was used in the Eighteenth century for obtaining malt solutions in breweries and for clearing sugar solution. You all know the method of making coffee by percolation, a method which was already known in the Eighteenth century and is also nowadays extensively in use. In the year 1816 the percolation principle was for the first time pharmaceutically used for extracting drugs. The filter-press of *Re'al* consisted in a cylindrical vessel containing the powdered drug to be extracted; for forcing the extracting water through this drug column *Re'al* used a water column about thirty feet high, which produced a pressure of about one atmosphere and which was placed on the drug column.

"Several German chemists and pharmacists continued to work on this pressure principle until in the year 1833 the French pharmacists Boullay, father and son, discovered that extraction by 'displacement,' as it was called, could be equally well carried out without this pressure tube. They laid the basis for our modern percolating system. In 1837 Boullay's method appeared in the French Codex, two years later in the Edinburgh pharmacopœia.

"In the meantime, the percolator process had become known in this country, and it was Duhamel, a Philadelphia pharmacist, who published the first American investigations on percolation. Prof. Procter accepted the process and introduced it into the United States pharmacopœia of 1840. The drug powder was packed dry into the percolator, afterward menstruum was to be added, and after a few hours the liquid was allowed to drip off. In the years 1858 and 1859 there were published three papers on percolation: one by Professor Procter, one by Prof. Grahame and one by Dr. E. R. Squibb. It was Squibb's paper which gave the most valuable indication concerning the best method of carrying out percolation. Squibb introduced a definite time for the swelling of the moistened drug powder previous to packing into the percolator. He ad-

vised that the powder be pressed only slightly when packing it. He indicated a slightly conical percolator to be the best suited and he did not determine the rate of flow by various degrees of the drug powder, but by applying a stopper at the lower end of the percolator. These improvements, however, were not introduced into the United States pharmacopœia until 1882. The United States pharmacopœia of 1864 contained the so-called 'Procter's Process,' which was more old fashioned, and the United States pharmacopœia of 1873 contained 'Campbell's Process,' with a very long macerating time of the drug in the percolator. In the meantime, Dr. Squibb published several important papers on percolation, in which he dealt with economy of alcohol in percolation and with the necessity of a thorough swelling of the drug. He also introduced repercolation.

"Another very valuable paper was published by John Uri Lloyd on the conditions necessary to successfully conduct percolation. In 1879 Diehl described a new form of the percolator; high and slightly conical. This form was later known as the Oldberg percolator and has proved to be the most appropriate form.

"The United States pharmacopœia of 1882 contained a percolation process which was mostly based on Dr. Squibb's investigations. This process included the previous moistening of the drug powder, a sufficient swelling time, a maceration time and an exact rate of flow. This is the same method that we still use to-day. It is, therefore, fifty-five years old. In recent times we have many valuable papers on percolation by American pharmacists and scientists. I mention those published by Couch, Hatcher and Lichtman, Kelly and Krantz, Dickey and Nitardy, Scoville, Wruble and, as the most important ones, those by Prof. Husa and his fellow workers.

"In summing up, we can say that the percolation process had its origin in Europe, but that all the improvements on it and the establishment of the modern percolation method were made in the United States of America."

Dr. Feinstein was given a rising vote of thanks and Dr. Eberle mentioned that Dr. Feinstein has prepared a very exhaustive research on percolation.

Secretary Ireland read a letter from the daughter-in-law of William Procter, Jr.

Chairman Harris read a Memorial to Henry Benjamin Carey, by Prof. T. C. Daniels, which arrived too late to be read at the Memorial Hour on Thursday forenoon.

The committee on Nominations presented the name of Edward J. Ireland for *Chairman*, of Will T. Bradley for *Secretary* and E. G. Eberle as *Historian*, and these gentlemen were unanimously elected. Later, Loyd E. Harris was appointed as *Delegate to the House of Delegates*. Messrs. Ireland, Bradley and Eberle were then installed and the new Chairman said, "I appreciate the work of Dr. Harris and I want to thank all those present who have helped to contribute to this section during the year.

"I didn't realize how much work Dr. Eberle really had to do. I think, with the new secretary we will do a better job than I did.

"I have one thing that I would like to bring out at this time. Those of you who were here on Wednesday heard Dr. Dworkin's suggestion regarding more activity from state associations and various pharmaceutical organizations throughout the country, in order to have a greater opportunity of selecting papers for this Section. I think this suggestion is very good.

"Dr. Kremers at the time stated that it had been tried and had failed. If we follow Robert Bruce—I believe it was Robert Bruce who was in a cave after six or seven defeats and he was lying on the cot looking up at the ceiling and he saw a spider weaving a web. The spider tried six times and failed and the seventh time he swung over to the corner and made the web.

"I think just because we failed in the past is no reason that we can't try it again. The secretary is to have Dr. Dworkin help us in collecting material and collecting papers and doing anything that he can to further this Section. I know the secretary will work very well with him at any time during the year.

"We can put on a more active campaign than we have in the past. Maybe we, too, can write a large history of pharmacy some years in the future."

After a general discussion, it was voted that a Committee to Collect Historical Material, of three members, be authorized of which Mr. Dworkin shall be the *Chairman* and of which he shall select the other two members.

In reply to an inquiry, Historian Eberle stated that work would soon begin on the compilation of the papers presented in previous years, to the Section.

There being no further business, the Session was then adjourned.

---