

SCIENTIFIC SECTION, AMERICAN PHARMACEUTICAL ASSOCIATION.
ABSTRACT OF THE MINUTES OF THE SESSIONS HELD IN NEW YORK CITY,
AUGUST 27, 28 AND 29.*

FIRST SESSION.

The first session of the Scientific Section, A. Ph. A., was called to order by Chairman E. N. Gathercoal, August 27, at 2 P.M. All the officers were present.

The Chairman's address was read following the reading of a paper by W. W. Stockberger on "Commercial Drug Growing in the U. S., in 1918."

First Vice-Chairman C. B. Jordan presided during the presentation of the Chairman's address, entitled:

THE FUTURE OF THE SCIENTIFIC SECTION OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

While the title just read might indicate that something in the nature of prophecy is to follow, such is not the case, for the author hasn't a particle of divine discernment and cannot really see a single moment ahead.

However, he has a real regard for the American Pharmaceutical Association and greatly desires its successful continuance. Nearly all persons become wrapped up in some particular interest, an interest outside of the daily earning of bread and butter—that gives a recreation, a zest to life which adds much to the joy of living. With me such an interest is the A. Ph. A., and I approach the subject named above as one who hopes and works for continual development and improvement, who dreads any retrogression, and who wishes to see our Association always in the front rank of scientific societies.

The fact, also, that pharmacists, and pharmacy as a science, have played so important a part in the medical service of the recent world war increases one's appreciation of the truly ethical and professional character underlying the apparent commercial spirit of pharmacy. Mr. Freericks states that ten thousand pharmacists were in the military or naval service of our country during the war. In Illinois a careful compilation indicates that about 800 pharmacists, out of 6,000 or 7,000 registered, were in the service and three-fourths of these in the medical department of army or navy.

Recently, while in discussion with a well-known officer of the A. Ph. A., this interesting statement was made to me: "If a true amalgamation should be brought about between the A. Ph. A. on the one hand, and the state pharmaceutical associations and the National Association of Retail Druggists on the other,—it would be but a short time before the Scientific Section of the A. Ph. A. would be so engulfed in the predominating commercial spirit of the latter organization that it could find no place for opportunity to hold its meetings at the annual convention—and would be forced into an organization of its own, or compelled to join some other organization such as the American Chemical Society."

This statement so startled me that it has held my attention since then.

As one reviews the activities of the national and local organizations of retail pharmacists, especially within recent years, it is evident that the A. Ph. A. represents the scientific side of pharmacy; the N. A. R. D. is particularly interested in the national legislative and commercial interests of pharmacy; the state associations are especially active along the lines of state legislation, and the local associations look after the local legislative, commercial, and social interests.

In my opinion, it is possible and very desirable to unite all of these organization activities of retail pharmacists under one national head, with the membership embracing a large percentage of the pharmacists of our country. Whether or not such amalgamation occurs, it is certain that retail pharmacy will continue organized and will steadily improve and strengthen its organizations.

The wholesale and manufacturing interests of pharmacy are also well organized and, while the National Wholesale Druggists' Association has never established a scientific section or committee, the American Drug Manufacturers' Association has recently formed a strong committee on standards and deterioration, which committee presented a very able and scientific report at the 1918 meeting of this organization. We understand also, that the latter organization is

*Papers with discussions will, hereafter, be printed apart from the minutes. It is understood, unless otherwise stated, that the papers were referred to the Publication Committee.

fathering advanced work in materia medica, and highly valuable publications may soon be issued under its auspices. It is well known to all of us that the scientific staffs of the great pharmaceutical manufacturing houses constitute one of the strongest supports to scientific pharmacy.

Just at this point, in order to center your attention on the discussion that is to follow, let me present three questions.

1. How can the A. Ph. A. fully maintain, in organized pharmacy of the future, its position as representing scientific pharmaceutical ideals?

2. Cannot the A. Ph. A. in its Scientific Section so direct its activities that it will hold and attract the interest of all persons interested in scientific pharmacy?

3. Is it not possible for the A. Ph. A. to so increase the value and attractiveness of its scientific program as to place the Association on a higher plane among scientific societies than it now holds?

To effectively answer these questions requires more brains than I possess. They have been asked that others might ponder and discuss them. However, a few self-evident facts may help us to get our bearings.

First. Many organizations are competing for all of the real, scientific knowledge produced. If the A. Ph. A. expects to retain its scientific standing, it must be prepared to compete for scientific papers. Apparently the most successful means in this competition are: A large and interested audience to hear and discuss the papers when read; a journal to widely circulate them to a reading public; a means of preserving them for ready reference by future investigators. Frequently, the sole reward for years of painstaking investigation is the publicity the investigator receives.

Second. Scientific investigation requires an increasingly greater outlay of time, money and knowledge. The A. Ph. A. must be in a position to offer facilities, often of an expensive nature, to the investigators in order to draw them to her ranks.

Third. An educated membership is essential to maintain the scientific reputation of an organization. No educated investigator cares to present his results to an unsympathetic, non-appreciative audience. The character of the audience will surely determine, in the long run, the character of the scientific matter put before it. Other scientific organizations have a membership largely, or entirely, of college-bred men and women. The A. Ph. A. must stand for the better education of all entering the practice of pharmacy.

Fourth. A strongly centralized, "one-man" power to lead the organization, especially in times of great need, is very desirable. Our Association could well use, at this time, a leader with high ideals, capable of enlisting in his following a majority of the membership, a good organizer with business acumen, conciliatory yet commanding.

During the preparation of this address, a consideration of the above conditions suggests the following questions: Is the A. Ph. A. increasing its scientific activities and, if so, to what extent? Is this increase proportional to the advance made by pharmacy as a whole, and to that of other scientific organizations?

An examination of the available data discloses the following interesting facts:

In 1892 the membership of the A. Ph. A. was 1380; the membership of 21 state pharmaceutical associations was 9051.¹

In 1917 (twenty-five years later) the membership of the A. Ph. A. was 2696; of 39 state pharmaceutical associations 22,308;² of the National Association of Retail Druggists, 16,000(?).

This numerical comparison would indicate that the influence of scientific ideals as compared with commercial influences is not growing in organized retail pharmacy. It should be borne in mind that the membership of the N. A. R. D. is largely identical with state association membership. On the other hand, the state associations in 1892 included in their meetings, as a rule, scientific programs, while now very few of these associations, possibly four or five, give any consideration to scientific papers.

In 1892 there were 30 colleges or schools of pharmacy in the United States with approxi-

¹ This includes all the larger associations. Of a few others I could obtain no data. Some of the associations included all the registered pharmacists of the state.

² See preceding.

mately 1800 students.³ There were practically no requirements for entrance, except the fees, and 1200 hours of instruction was considered a long course.

In 1917 there were 69 colleges or schools of pharmacy in the United States with 5952 students³ and 2043 graduates. At least 46 of these (the Conference Schools) required some high school work for entrance, and 1800 hours of instruction was considered a short course.

While the figures indicate a real advancement in pharmaceutical education, yet one cannot deny that university men hold in low esteem the average pharmacy course and look upon pharmaceutical degrees as of doubtful value.

In 1892, 26 papers were read before the Scientific Section and 37 in 1917. The abstracts in the Proceedings of 1892 numbered 4550, while in the Year Book of 1916 there were 1550.⁴ In 1892 the original scientific papers⁵ published in American drug journals totaled 205, in 1917, 185.

The establishment of the JOURNAL OF THE A. PH. A. was a great step in advance for the scientific standing of our Association. When one considers that in 1892 the Association published less than 30 papers which represented any original investigation while in 1917 the number of such papers was 70, one can gather some idea of the way in which our Journal is assisting in maintaining our scientific position.

No effort has been made to answer with definite figures the question as to the increase of pharmaceutical, scientific knowledge as compared with that of other scientific lines.

In conclusion, I would suggest that the Scientific Section authorize by resolution a Permanent Secretary of the Section. The by-laws already provide for the permanency of this office and also for a membership roll and other secretarial duties best accomplished by a continuing officer.

Further, that the Scientific Section endorse and recommend to the Council the following:

1. That an accurate, modern index of the 9 volumes of the Proceedings since the fifty-year index, be authorized; and that plans be laid for an index of the Year Book and a decennial index of the JOURNAL.

2. That the Association discontinue the Report of the Progress of Pharmacy in the Year Book, but publish same in monthly installments as a part of the Journal of the Association or in a new journal and that all abstracts be published within one or two months of the publication date of the original paper. The Year Book to be continued, but contain only the record of the activities of the Association during the year, be prepared by the General Secretary and published and distributed as soon as possible after each annual meeting.

3. That the Association either by itself or in collaboration with the United States Pharmacopoeial Convention and possibly other scientific bodies lay plans for substantial assistance to pharmaceutical scientific investigations. This assistance might take the form of a Pharmaceutical Research Institute with a capable Director at its head, through whom financial aid to investigators can be offered, and much be accomplished in the direction, coördination and collaboration of important investigations. Such an institute could very nicely collaborate with a Chemical Research Institute, if desirable.

On motion the address of Chairman E. N. Gathercoal was referred to a committee of three, consisting of F. R. Eldred, W. L. Scoville and E. A. Ruddiman.

The following papers were read and discussed.

³ No data could be obtained from a few unimportant schools.

⁴ Editor Henry Kraemer, in 1892, included, often by title only, a great many papers that were but distantly related to pharmacy and yet that did add to the completeness of the review of pharmaceutical literature. In 1916, Editor H. V. Army included only such papers as bore a strong interest to pharmacy. Furthermore, the war markedly decreased the number of scientific papers. Hence the decreased number in 1916 is not necessarily an indication of a decreased interest in scientific literature.

⁵ The definition of "scientific paper" has been difficult to frame, but the greatest liberality has been used in this tabulation. The journals examined were the *Druggists Circular*, *Pharmaceutical Era*, *American Journal of Pharmacy* and, in 1892, the *Pharmaceutische Rundschau* and Proceedings of the A. Ph. A., and in 1917 the JOURNAL OF THE A. PH. A.

"A Final Report of the Constituents of Gelsemium," by Lucius E. Sayre and G. N. Watson.

"Urorosein," by J. Atlee Dean.

"The Manufacture of Arsphenamine (Salvarsan) and Neo-Arsphenamine," by H. A. Krumwiede.

Caswell A. Mayo introduced Lieutenants, senior grade, Schaffer and Swiezbick. Mr. Mayo spoke of their services as a credit to pharmacy.

A paper by Isaac F. Harris on "Chloramine Products: Their Manufacture and Use," was read. A motion carried to recommend the inclusion of a formula for standardized Dakin's Solution in the National Formulary.

H. C. Hamilton read a paper on "The Germicidal Value of Mercuric Iodide, Alone and Associated with Soap."

Carl Braubach presented a paper on "Uniformity Necessary in Stating the Phenol Coefficient of Disinfectants." A resolution on the paper was referred to a committee consisting of Messrs. Hamilton, Gershenfeld and McEwen.

Then followed the reading of a paper on "Acid-Insoluble Ash Standards for Crude Drugs" and one on "The Resin of Man Root, Ipomoea Pandurata," the former by C. O. Ewing and Arno Viehoever and the latter by Ernest E. Stanford and C. O. Ewing.

The Chairman announced as members of the Committee on Nominations: George D. Beal, of Illinois; Jeannot Hostmann, of New York; and J. W. Sturmer, of Pennsylvania.

The first session of the Scientific Section was then adjourned.

SECOND SESSION.

The second section of the Scientific Section convened August 28, at 9.30 A.M.

Chairman H. C. Hamilton of the committee to pass on the resolution in the paper on "Uniformity Necessary in Stating the Phenol Coefficient of Disinfectants," reported that the author requested that no action be taken at this time, pending a more definite report to be announced at the coming meeting of the American Public Health Association. The request was complied with.

The following papers were read, discussed and referred:

"Preliminary Note on a New Pharmacodynamic Assay Method" (2nd paper), by Paul S. Pittenger.

"Digitalis Standardization by the Cat Method with Some Suggested Modifications," by L. W. Rowe.

"Maintaining Frogs for Testing Purposes," by L. W. Rowe.

"The Biologic Test of Digitalis," by Robert A. Hatcher.

"The Standardization of Blood Coagulants," by H. C. Hamilton.

REPORT OF THE COMMITTEE ON THE CHAIRMAN'S ADDRESS.

Chairman W. L. Scoville reported for the Committee on the Chairman's Address:

The first recommendation, that the Scientific Section authorize by resolution a permanent Secretary of the Section, was *not* recommended for adoption by the Committee. The reason for the report was, that there is in the by-laws a provision for making the officer permanent by re-election, if desired; other officers than the secretary, however, can hold office for no more than two succeeding terms.

After a somewhat prolonged discussion, wherein the desirability of a permanent secretary was expressed, the report of the Committee was adopted.

The Committee recommended the adoption of the following, and was sustained by the Section:

That an accurate modern index of the 9 volumes of the Proceedings since the fifty-year index, be authorized and that plans be laid for an index of the Year Book and a decennial index of the Journal.

Chairman Gathercoal recommended,

That the Association discontinue the Report on the Progress of Pharmacy in the Year Book, but publish same in monthly installments as a part of the JOURNAL of the Association or in a new journal, and that all abstracts be published within one or two months of the publication date of the original paper.

The Committee recommended this for adoption with the exception of the fixed time for the publication date of the abstracts of papers, making this read— * * * that all abstracts be published "within as early a period as possible" * * *

The Section concurred in the change made by the Committee and approved the recommendation as amended.

Chairman Gathercoal recommended,

That the Year Book of the Association be continued, but contain only the record of the activities of the Association during the year, to be prepared by the General Secretary, and published and distributed as soon as possible after each annual meeting.

The Committee recommended that this be *not* adopted.

Considerable discussion ensued. The report of the Committee was approved, the understanding of the members being,— that if the Year Book be discontinued the matter of publishing Association records will be provided for, as the Association and Council deem best.

(The Council referred the action taken by the Section anent the Year Book to the incoming Executive Committee of the Council for further consideration, and this Committee is instructed to report to the Council.)

The recommendation,

"That the Association either by itself or in collaboration with the United States Pharmacopoeial Convention and possibly other scientific bodies lay plans for substantial assistance to pharmaceutical scientific investigations. This assistance might take the form of a Pharmaceutical Research Institute with a capable Director at its head, through whom financial aid to investigators can be offered and much can be accomplished in the direction, coördination and collaboration of important investigations. Such an institute could very nicely collaborate with a Chemical Research Institute, if desirable."

Chairman Scoville stated that while the Committee favored the idea, the Committee on Research, A. Ph. A., was just getting under way, and that it was not wise to complicate matters by two different plans. The Committee recommended that this be *not* adopted.

Most of the views expressed were favorable to the proposal, none opposed. The reason assigned by the Committee seemed to meet the approval of the members. Final action of the Section resulted in the adoption of an amendment by Mr. Murray to refer Chairman Gathercoal's suggestion to the Committee on Research, for incorporation with their plans.

The second session of the Scientific Section was then adjourned.

THIRD SESSION.

The third session of the Scientific Section was convened August 29, at 9.30 A.M.

The following papers were read, discussed and referred for publication:

"The Permanence of Alkaloidal Fluidextracts and Tinctures," by W. L. Scoville.

"The Identification of Gums by the Phenylhydrazine Test," by C. W. Ballard.

"A Suggested Change in Technique of U. S. P. Assay of Opium," by H. W. Jones.

"The Solubility of Some Volatile Oils in Weak Alcohol," by Horatio C. Wood, Jr.

"A Study of Chenopodium and Its Volatile Oil," by Elmer H. Wirth.

"Analysis of Solution of Magnesium Citrate," by Joseph L. Mayer.

"The 'Shaking-Out' Method for the Quantitative Estimation of Alkaloids, II. Effect of Clarification and 'Salting-Out,'" by George D. Beal and Thomas S. Hamilton.

"Observations on *Digitalis Sibirica*," by H. W. Youngken.

Then followed a Symposium on Scientific Phases of U. S. P. Revision.

Introductory Remarks were made by Chairman Charles H. LaWall.

(These and the papers of the Symposium will be printed in a succeeding issue.—
EDITOR.)

The contributors to the Symposium were Henry Kraemer, W. L. Scoville, A. R. L. Dohme and George D. Rosengarten.

REPORT OF THE COMMITTEE ON THE EBERT PRIZE.

Fellow Members:

Your Committee on the Ebert Prize begs to report that the prize is awarded to Arno Viehoever, C. O. Ewing and J. F. Clevenger, for their paper on "Some Commercial Viburnum Barks and Preparations."

The Committee also recommends that hereafter in awarding the Ebert Prize, papers of a scientific character presented before any of the Sections of this Association be considered as eligible for the prize. When the Ebert Prize was established papers on scientific subjects were only presented in the Scientific Section; now we have the Section on Practical Pharmacy and Dispensing; in fact, all papers of a scientific character presented in any of the Sections should be considered in the award. Moreover, Mr. Ebert was primarily interested in the development of practical pharmacy, and we feel that it would be in accordance with his desires that papers relating to that phase be considered in the award.

Mr. Clark called attention to the fact that papers of other Sections had been heretofore considered in the award of the Ebert Prize, and moved to accept the report and endorse the recommendations. Carried.

The following papers were read by title and referred to the Publication Committee:

"Microscopical Method for the Quantitative Determination of Vegetable Adulterants," by Fanchon Hart.

"Unusual Method for Testing the Alcoholic Strength of Pharmaceuticals," by William G. Toplis.

"Lac Fermentatum," by Joseph W. Harrison and Ivor Griffith.

"Laboratory Notes," by Geo. E. E'we.

"An Investigation of the Accuracy of the So-called Dispensing Tablets," by K. F. Ehmman and Jos. W. E. Harrison.

"Oil of Sandalwood," by Azor Thurston.

"The Permanency and Deterioration of Some Vegetable Drugs Twenty-Five Years of Age," by E. N. Gathercoal.

"A Method for Estimating Quinine and Strychnine Occurring in Common Solution," by A. R. Bliss, Jr.

"The Pharmacognosy Laboratory, Its Activities and Aims," by Arno Viehoever.

"Partial Analysis of 330 American Crude Drugs," by C. O. Ewing and J. F. Clevenger.

Chairman Gathercoal stated that the latter paper had particular value in connection with the coming revisions of the U. S. P. and N. F.; that it was a paper of considerable length and had involved in its preparation the expenditure of considerable time and money.

It was moved by H. V. Arny, that the Scientific Section request the Publication Committee to publish this paper and direct it to the attention of the Revision Committees. He did this, because the paper was lengthy and the Publication Committee did not look with favor on long papers, unless of exceptional value. A. H. Clark added to the motion, with the consent of the mover, that other papers appertaining to the revision of the standards be published before the meeting of the Pharmacopoeial Convention. Motion carried.

OFFICERS FOR 1919-1920.

The report of the Committee on Nominations was received. A motion carried to close the nominations and that the ballots be spread. The following were elected: *Chairman*, Jacob Diner, of New York; *First Vice-Chairman*, A. R. Bliss, of Atlanta; *Second Vice-Chairman*, C. W. Ballard, of New York; *Secretary*, A. G. DuMez, of Washington, D. C.

Chairman E. N. Gathercoal spoke briefly, conveying his thanks for the assistance given him during the year and the sessions of the Convention. Chairman Jacob Diner expressed his appreciation of the honor conferred.

There being no further business the Scientific Section was adjourned.