THE SECTIONS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION

Abstract of the Minutes of the Sessions Held in Rapid City, So. Dak., August 26 to 31, 1929.

(See also brief summary reports, Final Session House of Delegates, printed in October JOURNAL.)

SCIENTIFIC SECTION.

The First Session of the Scientific Section, A. Ph. A., was convened at 3:30 p.m., August 28th, by Chairman James C. Munch. First Vice-Chairman H. A. Langenhan presided during the reading of the Chairman's address.

THE CHAIRMAN'S ADDRESS.

BY JAMES C. MUNCH.

The Scientific Section of the American Pharmaceutical Association is an outgrowth of the Section on Scientific Papers which was established in the early days of the ASSOCIATION. At that period, some half dozen papers of a scientific character were presented during one of the annual sessions of the Association. The development of various phases of pharmaceutical interest and the consequent overcrowding of the Association program finally led to the creation of a number of separate Sections. The scientific papers were diverted into a Scientific Section. For the past several years complaints have been increasing that the Scientific Section program is greatly overcrowded. Two groups have been organized as independent units—the Plant Science Seminar and the Symposium on Genus Mentha. Even so, about sixty papers are offered annually to this Section. The By-Laws specify that not more than ten minutes shall be allotted to the presentation of each paper, and not more than five minutes for discussion. If every author were present and the full period of fifteen minutes used for each of sixty papers, a simple calculation shows that fifteen hours would be necessary for papers, beside the time spent in the transaction of the business of the Section. Each paper represents earnest thought and time, and should receive proper consideration and recognition. Because of the overcrowding of the general American Pharmaceutical Association program, it is difficult to arrange for more than two meetings of the Section, in addition to the Joint Meeting with the Section on Practical Pharmacy to discuss U. S. Pharmacopæia and National Formulary Revision problems and progress.

Membership in the American Pharmaceutical Association automatically carries with it membership in the Scientific Section. No formalities, examinations or qualifications for scientific or professional standing are imposed, as many of the other professional societies have instituted. The Scientific Section, as now constituted, serves solely and only as a clearing house for about sixty papers at two meetings of the Section during the American Pharmaceutical Association convention. During the interval between meetings, the chief task of the officers is to prepare appeals for papers for the next meeting. There has been some coöperation between workers in different fields of scientific study in the investigation of a common problem. However, many of the papers presented each year are unrelated, incomplete and at times startling conclusions are offered which subsequent work fails to verify. As a result of these conditions, the scientific standing of this Section leaves much to be desired.

To consolidate all the scientific work of the Association within the bounds of the Scientific Section, I would recommend—

1. That arrangements be made to combine the Plant Science Seminar and the Annual Symposium on Genus Mentha with the Scientific Section; that their programs be printed as a portion of the program of the Section; and that such papers as seem fitting be transferred to their programs. Arrangements whereby they meet at times which do not conflict with the meetings of this Section decrease congestion and should be encouraged.

To permit better grouping of papers along a general theme, I would recommend—1180

- 2. That all papers, together with a short (100-150 words) abstract, be in the hands of the Chairman or Secretary of the Section not less than four weeks before the date of the annual meeting. In case any author does not expect to be present to deliver his paper he should notify the officers and this should be stated in the printed program. In the absence of any author, the abstract of his paper should be read by the presiding officer in order that papers along a common theme may be expected at a certain period of the meeting. The present method of grouping papers into chemical, pharmacological, pharmacognostical and bacteriological groups has proved useful and should be continued.
- 3. That there be established an additional group embodying work on the general application of scientific principles to pharmacy. This group should not conflict in any way with the scope of the Section on Practical Pharmacy. A survey of the present membership of the Scientific Section should be made to determine into which of the five general subdivisions each member desires to be placed: (1) Bacteriology, (2) Chemistry, (3) Pharmacognosy and Botany, (4) Pharmacology and Bioassays and (5) Pharmacy.
- 4. That the Chairman and Secretary be authorized to assign a period of time for the presentation of each paper which appears suitable and justifiable to them, based upon the nature of the paper and abstract submitted for their consideration, availability of lantern projection apparatus, blackboards, etc., and the total number of papers to be presented.

Membership in a Scientific Society carries with it responsibility, as well as honor which is valuable in direct proportion to the difficulty of attainment and retention. Full membership should be based upon a certain amount of professional standing and training. Accordingly, I would recommend—

5. That some minimum qualification be established for full membership in the Scientific Section.

Experience in all scientific research has shown that coördinated, coöperative investigation yields the most profitable results. A thorough study of any problem is possible only when hearty coöperation from workers in a number of allied fields of scientific endeavor is obtained. I would therefore recommend—

6. That plans be developed for a coöperative investigation of one product each year by the entire membership of the Scientific Section; this investigation to be under the direction of the officers of the Section, assisted by a representative from each of the five subdivisions; that a single source of material be designated and adequate supplies placed in the hands of each collaborator within a reasonable time after each annual meeting; that all collaborators complete their studies within about three months and promptly submit reports to the subdivision representative for consolidation; that these representatives search the literature pertinent to their fields and consolidate this information with the collaborators' reports into a comprehensive summary; that a symposium be held at the ensuing meeting for presenting results of this collaborative investigation upon authentic material from a common source studied from the bacteriological, chemical, pharmacognostical, pharmacological and pharmaceutical phases; and that these summaries be edited and published as an American Pharmaceutical. Association Monograph upon the product in question.

As a different product is studied each year, this would lead to a series of authentic, thorough, scientific monographs which will in turn reflect credit and increased scientific recognition upon all participants. Such cooperation would give immediate confirmatory value to analytical procedures, would stimulate productive research and would be available for reference for the U. S. Pharmacoporia, the National Formulary, "New and Nonofficial Remedies" and similar publications. Close contact should be maintained with the National Conference on Pharmaceutical Research, the National Research Council, various committees of the American Pharmaceutical Association and research programs of drug manufacturers, schools and Federal and state authorities. Since the members of the American Pharmaceutical Association

committees are members of the Scientific Section, there will be no duplication of effort. Actual concrete developments may be confidently expected. Individual investigations will not be prescribed and the present opportunity for the presentation of this type of papers will be continued at the annual meetings. Thus our coöperative efforts will bring scientific standing and recognition to the Section while our individual reports record progress in our individual quests.

First Vice-Chairman H. A. Langenhan appointed the following as members of the Committee on the Chairman's Address: Francis O. Taylor, L. E. Warren and John C. Krantz, Jr.

(While the Committee on the President's Address did not report until August 29th, the report is added here for convenient reference.)

Report of Committee on Chairman's Address.

After careful consideration of the various recommendations made in the annual address of the Chairman of the Scientific Section, your committee desires to report as follows:

Recommendation No. 1.—We recommend that this Section approve the recommendations and that the question be referred to the Council for consideration and such action as they may desire. (This was withdrawn when a resolution embodying the recommendation was acted on in the House of Delegates.)

Recommendation No. 2.—We recommend that the Section adopt this recommendation.—Adopted.

Recommendation No. 3.—The committee recommends that the portion of this paragraph concerning the establishment of an additional group of papers be referred to the incoming officers for consideration and action if they so desire. We also recommend that the Section approve the second portion of this recommendation concerning a survey of the membership of the Scientific Section and that the officers of the sections be instructed to take the necessary steps to this end and that if it seems desirable to extend the survey to the entire membership of the Association they proceed as may be necessary.—Adopted.

Recommendation No. 4.—We recommend that the Section adopt this recommendation.—Adopted.

Recommendation No. 5.—We recommend that a special committee be appointed to study this recommendation and report at the next annual meeting.—Adopted.

Recommendation No. 6.—The committee recommends that the Section approve the general idea of this recommendation and that the incoming officers proceed with necessary study and plans for execution of the idea with proper reference of the entire subject to the Council.—Adopted.

August 29, 1929.

(Signed) F. O. Taylor, Chairman; L. E. Warren; John C. Krantz, Jr.

The Secretary's Report.

Your Secretary appreciates the cooperation which you have given in making possible this well-rounded program and trusts that you will feel well repaid for your efforts.

(Signed) L. W. Rowe, Secretary.

The report was accepted.

Chairman Munch appointed F. E. Bibbins, W. H. Zeigler and F. F. Berg members of the Committee on Nominations.

(Abstracts of discussions of contributions will be printed when the papers are published, unless some action requires prior publication.)

The following papers were read and discussed, presented in abstract, or read by title:

"Recent Studies in Molecular Carbon," by Edward Kremers. (Discussion.)

"Assay of Ointment Yellow Mercury Oxide," by L. W. Greene and R. E. Schoetzow. (Discussion.)

"Olive Oil, Fluorescence in Ultraviolet Light," by L. Deuble and R. E. Schoetzow. (Discussion.)

"Food as a Preventive Medicine," by E. A. Ruddiman. (No discussion.)

"Comments on U. S. P. Test for Rhapontic Rhubarb," by R. A. Konnerth and R. E. Schoetzow. (No discussion.)

"An Empiric Assay for Compound Pills of Mercurous Chloride," by L. E. Warren. (No discussion.)

"Amino Alcohols: 4. Reactions with Alkaloidal Reagents," by J. C. Munch and W. H. Hartung. (No discussion.)

"Amino Alcohols. 5. A Potentiometric Study of Certain Homologues of Ephedrine," by John C. Krantz, Jr., and W. H. Hartung. (No discussion.)

"Methylene Blue, U. S. P. as Precipitant of Irish Moss," by George E. Éwe. (Abstract.)
"The Mercuration of Phthaleins in Neutral Solution with Bichloride of Mercury," by
F. R. Greenbaum. (Abstract.)

"Methoxyl Content as a Criterion of the Composition of Creosote," by D. V. Sickman and R. P. Fischelis. (Abstract.)

"Aluminum as a Substitute for Zinc in the U. S. P. Test for Arsenic," by E. A. Southworth, E. O. Prather, Jr., and W. F. Ambroz. (Abstract.)

"Gleditschia Triacanthos Linné, a Preliminary Report on the Chemistry of the Fruit," by Loyd E. Harris. (Abstract.)

"Quantitative Analytical Methods for the Study of Peroxide Formation in Ether," by R. Van Winkle and W. G. Christiansen. (Abstract.)

"Catalytic Dehydrogenation of Iso Propyl Alcohol," by W. A. Lott and W. G. Christiansen. (Abstract.)

"The Preparation of Cyclopropane," by W. A. Lott and W. G. Christiansen. (Abstract.) "Studies of the Analysis and Chemistry of Neoarsphenamine. II. Studies on the Chemistry of Sodium Formaldehyde Sulphoxylate and Their Relation to the Structure of Neoarsphena-

"Coal Tar Food Colors," by Seward E. Owen. (Abstract.)

mine," by Alfred E. Jurist and W. G. Christiansen. (Abstract.)

"Ultraviolet Transmission of Liquids," by Ellery H. Harvey. (Abstract.)

"Reaction between Formaldehyde and Hydrogen Peroxide and a Quantitative Method Based Thereon," by Arno Viehoever and K. Shinohara. (Abstract.)

The session was adjourned to meet Thursday, August 29th, at 9:00 a.m.—The reading of papers was continued.

"The Bioassay of Capsicum and Chillies," by James C. Munch. (Discussion.)

"The Anthelmintic Qualities of Pepo and Cucurbita Pepo," by James S. Neely and Edward D. Davy. (Discussion.)

"Notes on Cascara Sagrada," Milford J. Harris and Edward D. Davy. (Discussion.)

"Further Studies of the Cat-Eye Method for the Bioassay of Mydriatics and Miotics," by J. C. Munch. (Discussion.)

"The Delicacy of Chemical and Physiological Tests for Strychnine," by J. C. Munch and J. C. Ward. (Discussion.)

"Bioassay of Aconite and Its Preparations. 2. The Comparative Toxicity of Tincture and Fluidextract of Aconite to Guinea-Pigs and Rats," by J. C. Munch and R. I. Grantham. (Discussion.)

"Bioassay of Aconite and Its Preparations. 3. The Pharmacology and Pharmacognosy of Various Species of Aconitum," by J. C. Munch and H. H. Crosbie. (Discussion.)

"Digitalis Assay Standards," by L. W. Rowe. (Discussion.)

"The Pressor Assay of Epinephrine-Novocaine Mixtures," by J. C. Munch and W. A. Deckert. (Discussion.)

"The Pharmacology of Ergot with Respect to Biological Assays and Standards," by Marvin R. Thompson. (Discussion.)

(A statement was made by the Chairman regarding the paper and discussion—that it has been a scientific presentation and all personalities have been intentionally excluded.)

"Comments on the Paper 'The Pharmacology of Ergot with Respect to Biological Assays and Standards,' " by H. H. Rusby. (Discussion.)

On account of the absence of Paul S. Pittenger, the Section elected the Chairman as delegate to the House of Delegates.

Presentation of papers was continued:

"The Effect of Certain Hypoglycemic Drugs upon the Seedlings of Lupinus Albus," by John C. Krantz, Jr. (No discussion.)

"Red Squill Powders as Specific Raticides," by J. C. Munch, E. E. Horn and J. Silver. (No discussion.)

"Amino Alcohols. 3. The Potentiation of the Action of Epinephrine by Arylpropanolamines," by J. C. Munch and W. H. Hartung. (No discussion.)

"A Comparison of Methods for Demonstrating Healing of Rickets in the Biological Test for Vitamin D," by C. F. Church and J. R. Lockwood. (Abstract.)

"Assimilation of Vitamin A When Dissolved in Liquid Petrolatum," by B. Moness and W. G. Christiansen. (Abstract.)

"The Vitamin Potency of Various Grades of Cod Liver Oil," by W. S. Jones and W. G. Christiansen. (Abstract.)

"The New Remedy Business: Its Uses and Abuses," by F. E. Stewart. (Abstract.)

"Studies of Astringency: A Method of Measuring Astringency," by E. R. Theis. (Abstract.)

"Effect of Digitoxin on the Heart of Daphnia," by Arno Viehoever and A. McReyya. (Abstract.)

"Effect of Digitonin on the Heart of Daphnia," by Arno Viehoever and M. Teubis. (Abstract.)

"Transparent Life," by Arno Viehoever. (Abstract.)

"The Therapeutic Activity of Neoarsphenamine," by Alfred E. Jurist and W. G. Christiansen. (Abstract.)

"The Assay of Pancreatin," by F. E. Wilson. (Abstract.)

"Critical Remarks on the U. S. P. Pancreatin Assays," by F. E. Willson. (Abstract.)

The session was adjourned to meet Thursday, August 29th, at 4:00 p.m.

The report of the Committee on the Chairman's Address was read. (See report following Chairman's Address.) On motion by F. E. Bibbins, seconded by F. W. Nitardy, and a vote the report of the Committee was approved. (See also recommendation No. 1.)

The report of the Committee on Nominations was read and held for action until the next session of the Section.

Reading of papers was continued.

"A Thought on the Place of Volatile Oils in Plant Economy," by Frederick E. Marsh. (Discussion.)

"Report on a Splendid Example of Coöperative Research," by Josiah C. Peacock. (No discussion.)

"A Comparison of the Tissue Toxicity and Germicidal Power of Germicides," by Lester C. Himebaugh and Emil C. Fanto. (Discussion.)

"Botanical, Pharmacological and Chemical Study of the Root and Stem Bark of Viburnum Rufidulum," by H. W. Youngken, J. C. Munch and F. J. Amrhein. (Discussion.)

"Medicinal Herbs of the Great Smoky Mountains," by K. E. Bennett. (By title.)
"Native Drug Plants of Nebraska," by E. T. Stuhr. (Abstract.)

"Pacific Coast Drug Plants," by E. T. Stuhr. (Abstract.)

"Oregon Drug Plants," by E. T. Stuhr. (Abstract.)

"An Investigation of Oregon-Grown Peppermint," by Alice H. Hayden and E. T. Stuhr. (Abstract.)

"A Phyto-Chemical Study of Pycnanthemum Miticans (Mountain Mint)," by H. W. Werner. (By title.)

"Polypodium Occidentale (Licorice Fern)," by F. J. Goodrich. (Discussion.)

"A Preliminary Study of the Constituents of Anaphalis Margaritacea," by E. C. Baillie and Nellie Wakeman. (By title.)

"Comments on U. S. P. X Test for Rhapontic Rhubarb," by R. A. Konnerth and R. E. Schoetzow. (Discussion.)

"Black Chokeberry Bark, Aronia Melanocarpa var. grandifolia as a Recent Substitute for 'Shonny Haw,'" by H. W. Youngken. (Discussion.)

"Study of Peppermint Oil Grown in the State of Washington," by A. A. Levine and C. H. Rayburn. (Abstract.)

"Umbellularia Californica, Nutt," by F. A. Nielson and H. M. Burlage. (Abstract.)

"The Seed of Euphorbia Marginata, Pursh," by L. E. Harris and Margaret Gallagher. (By title.)

"Histology and Microchemistry of Digitalis Seed," by Arno Viehoever and K. Shinohara. (Abstract.)

"Pharmacognosy of Psyllium Seed," by Arno Viehoever and E. L. McLaughlin. (Abstract.)

The Section then adjourned to meet in joint session with the Section on Practical Pharmacy and Dispensing.

JOINT SESSION SCIENTIFIC SECTION AND SECTION ON PRACTICAL PHARMACY AND DISPENSING.

The Joint Session of the Scientific Section and the Section on Practical Pharmacy and Dispensing was called to order by Chairman P. H. Dirstine of the Section on Practical Pharmacy and Dispensing on August 29th at 8:00 p.m. The first order of business was the report of the Committee on Pharmaceutical Research presented by Chairman H. V. Arny. (It is printed on page 968 of the September Journal.) The next number of the program was the report of the Committee on Colored Glass Containers presented by Chairman H. V. Arny. (It is printed on page 958 of the September Journal.)

The next order of business was the presentation of the report on U. S. P. X, presented by Chairman E. Fullerton Cook.

REPORT ON THE U.S. P. X.

BY E. FULLERTON COOK.

Because of the intense interest of pharmacy and the AMERICAN PHARMACEUTICAL ASSOCIATION in the Pharmacopæia it has grown to be a customary feature of the annual meeting of the A. Ph. A. for the Chairman of the Committee of Revision to make a report on the work of revision.

This report is, therefore, a Chairman's report and does not necessarily express the views of the entire Committee but the opportunity given at these meetings for a general discussion of many pharmacopœial questions has been of great value in establishing wise judgments concerning U. S. P. policies.

As is to be expected the close of a decade and the near approach of another Pharmacopœial Convention greatly stimulates the interest in Pharmacopœia matters.

The Pharmacopæial Committee has always invited full and free discussion of questions of policy and of fact; especially the latter which is, after all, the backbone of pharmacopæial usefulness.

The policies have been the result of slow evolution, they represent the combined judgment of one hundred and ten years of experience and earnest and honest thinking and should not be carelessly overthrown.

The Pharmacopœia of the United States has not always experienced smooth sailing throughout its long existence. A few may still remember the bitter criticisms of the 1870 Revision as I have found it recorded in history, and know of the demand at that time for an entire change in ownership and policy. It was the master mind of Charles Rice and his associates who saved the situation and established a new model for the U. S. P. which is still largely followed and is the admiration of all pharmacopœia makers.

Many remember the stormy days of 1910 and, from past experience are willing to trust the future to the wisdom and sane judgment of a large group of professionally-minded scientists assembled in serious conclave. Surely we may safely trust the ultimate decision of our own democratically organized Pharmacopæial Convention call for May 13, 1930.

Pharmacopæial Publicity.

One crying need is a constant maintenance of pharmacopœial facts before the physicians. The complaint is often heard from pharmacists that the young doctors are not taught enough therapeutics and pharmacology, that they learn their materia medica from the "detail man" and he only talks "specialties."

It is true that the old "materia medica" chair is gone in Medical Colleges but is it necessary to take time in a crowded medical course to teach the student the appearance of crude drugs, their botanical names and habitat? Its place is rightly taken by the new chair of therapeutics

and pharmacology which teaches the action of drugs. Here emphasis should be placed upon the reliable standard remedies, proved by hundreds of years of experience. It is to me a remarkable discovery that of the more than 300 (305) individual therapeutic agents (that is, simple substances and not preparations) now official in the U. S. P. X, 114 were official in the U. S. P. of 1820 and that there was included in the primary list such modern remedies as aconite, aloe, alum, ammonium chloride, belladonna, benzoin, calcium carbonate, camphor, cantharides, capsicum, cinchona, colchicum, colocynth, calumba, copaiba, digitalis, elaterin, ferrous sulphate, nutgall, gentian, mercury, ipecac, jalap, kino, lobelia, magnesium sulphate, myrrh, nux vomica, opium, phosphorus, podophyllum, tartar emetic, guaiac, rhubarb, castor oil, scammony, squill, senega, senna, mustard, sodium borate, stramonium, sulphur, oil of turpentine, veratrum viride, zinc oxide, zinc sulphate, ginger, etc.

It is interesting to note that the 1820 Pharmacopæia relegated to the secondary list the following: Ergot, menthol, quinine and its salts, morphine and its salts and cocaine and its salts.

In explanation of the secondary list of the 1820 Pharmacopæia the editor, doubtless Dr. Lyman Spalding, wrote:

The fault of the lists of the Materia Medica which have been adopted in different countries, has always been their redundancy, rather than their deficiency. The number of articles necessary for the management of diseases, and especially of those which any individual physician actually employs, is always very far short of the catalogue afforded by most Pharmacopæias. Besides, as the progress of medical discovery continually tends to the introduction of new articles into use, the Materia Medica must soon grow to an unmanageable size, if its enlargement be not followed by a corresponding retrenchment of superfluities. In consequence of reasons of this sort, many articles contained in European books have been omitted in the American Pharmacopæia. These omissions have been made only where the articles in question were considered inert, or where they were abundantly superseded by substitutes more powerful and more accessible. But, as it happens in most countries, the number of simples occasionally employed in practice is much greater than it suits the proper compass of a Pharmacopæia to contain. In the present work, those native articles have been introduced which were considered to possess qualities sufficiently important, or which were found to be so much employed by practitioners, as to give them any claim to the character of standard medicines. With a view of discriminating between articles of decided reputation or general use, and those, the claims of which are of a more uncertain kind, the Convention determined to refer to a secondary list such substances as were deemed of secondary or doubtful efficacy, retaining only on the principal list articles which might be considered of standard character."

Whose fault is it that the Pharmacopæia to-day and its approved remedies are not in more extensive use by physicians and why are "specialties" being so much more largely known and used? Part of the answer may be that which is so often charged against the medical schools, namely, that they do not devote enough time to the consideration of remedies, and consequently the new physician is not familiar with the Pharmacopæia and National Formulary.

But would this not apply equally to specialties? The fact is that the pharmaceutical manufacturers accept this as an opportunity and send their detail men and their literature directly to the doctor in his office and teach him to use their specialties.

If pharmacists are not making or dispensing official medicines of the right quality, and if they are not taking these to their physician friends in exactly the same way the detail man is doing, upon whom does the blame rest if the doctor uses the "specialty" and has forgotten the standard remedy which was spoken of by his professor in his student days?

There is no question of the value and efficiency of official remedies when they have been properly made and standardized and when the dispensing pharmacist has intelligently supervised their quality and preservation and hundreds of splendid pharmacists throughout the country can testify to the willingness on the part of physicians to talk about these remedies and use them when confidence is inspired by the personality, integrity and ability of the druggist. The success

of the professional side of the pharmacy is dependent upon the personal factor just as much as the success of the skillful doctor.

Excellent programs of U. S. P. and N. F. propaganda have been planned and it is the belief of the writer that to-day there is an unexcelled opportunity for its success, with many pharmacists thinking and planning for the future of real professional pharmacy. The Board of Trustees of the U. S. P. Convention have made a small beginning in this program by accepting an invitation from the A. M. A. for the past five years to present a Pharmacopoeial exhibit in the Scientific Section at their annual meeting. These have been prepared and exhibited by various Pharmacy Colleges located in the vicinity of the meeting and have been a distinct success, twice receiving the highest prize among the educational exhibits.

A movement has been successfully worked out for two years in Pennsylvania, whereby professional pharmacy has made a scientific exhibit at the annual State Medical Meeting. This was made possible by an invitation from the State Medical Society. This should spread into every state and be made a regular activity of the State Pharmaceutical Association and able pharmacists must be present throughout the meeting to talk about official products and pharmaceutical service.

This statement is preliminary to an invitation to the Pharmacy Colleges of the United States to cooperate in an exhibition proposed for the Eleventh Decennial Pharmacopæial Convention in Washington next May. This has been authorized by the U. S. P. Board of Trustees.

About forty individual exhibits are proposed. In one of these, the history of the Pharmacopæia and its revision methods will be presented; in several others, it is hoped that the several Government laboratories, coöperating with the Pharmacopæia, will make individual displays indicating the character of their activities and in the remainder of the booths pharmacy colleges are being invited to make effective and original exhibits of Pharmacopæial drugs, chemicals and preparations, classified according to their therapeutic activity. It is also hoped that this exhibit may subsequently be used as the basis for a booklet which may be largely used in promoting a knowledge and use of Pharmacopæial drugs.

The Extent of Use of Formerly Official Drugs.

The deletion of a title from the Pharmacopæia on the grounds that, in the opinion of the Committee, its value "is of a more uncertain kind," as Dr. Spalding so quaintly expresses it, always leaves open the course of reinstatement in a subsequent edition, should later developments indicate a mistaken judgment.

The Committee of Revision is earnestly desirous of checking this phase of revision, that authentic facts may be available to guide the new Committee. With this in view, a question-naire, covering all medicinal drugs, chemicals and preparations official in the U. S. P. VIII and IX, but not admitted to the U. S. P. X, has been prepared. It is interesting to note that about 55 per cent (205) of these titles, are now official and consequently standardized in the National Formulary V.

A study of this list, however, shows a distinct defect in the present method for providing medicinal standard under the Food and Drugs Act. In the main, the U. S. P. and N. F. cover the uncontrolled medicinals used in medicine in the United States but when a drug or chemical is deleted and there are no preparations of that "simple" in common use, the present N. F. does not recognize or standardize it.

The seriousness of this situation is evident when this deleted list is examined and we find no standard for such articles as diluted hydrocyanic acid, bismuth betanaphthol, crude calcium sulphide, monobromated camphor, cerium oxalate, diastase, sodium cyanide, strontium bromide, strontium iodide, etc.

The writer has several times suggested as one remedy for this situation the widening of the scope of the National Formulary so that simple drugs and chemicals may be included and standardized even if not used in a formula. There would seem to be no serious objection to this broadening of the N. F. field, especially as it already includes and standardizes hundreds of "simples." A change of title to "National Formulary and Standard," is all that is required to take away the limiting character of the present title. If this were done, the two books would function perfectly in their respective fields.

The active help of pharmacists throughout the country is urged in the securing of data concerning to-day's use of these substances.

Additions to the Pharmacopæia.

It will also be helpful to the next Committee of Revision if pharmacists and doctors suggest medicinals of the "Newer Materia Medica" which are suitable for admission to the next revision. This is also covered by the questionnaire just referred to, copies of which may be obtained by dropping a card to the Chairman of the Committee. Extensive publicity concerning this study will be given through the medical and pharmaceutical press during the next few weeks, and inviting the cooperation by physicians and pharmacists.

It may be of help to note that the 1929 edition of "Useful Drugs" of the A. M. A. includes the following unofficial titles: Ethylene for anesthesia, insulin, neocincophen, spirit of ether, solution of aluminum subacetate, sulpharsphenamine, tuberculin, streptococcic-scarlatina antitoxin, diphtheria toxin-antitoxin, antimeningococcic serum, antirabic vaccine, staphlococcic vaccine and typhoid vaccine.

The decade is drawing to a close—it has seen splendid coöperation between medicine and pharmacy in every phase of the revision—a true and equal partnership—and with each profession doing the utmost in their several fields of scientific service, we may properly anticipate in the future, a greater influence and importance for our Pharmacopæia in the effort to prevent and cure disease, than in any previous period of the century.

Following the report, Chairman Cook called attention to papers which had been distributed to the members giving a list of the titles of the official preparations. He also distributed questionnaires, and stated that the various medical and pharmaceutical publications had been invited to discuss the questionnaire. As wide distribution as possible of these questionnaires is desired; the Chairman said that every possible way for securing lists of those who are interested in the revision of the Pharmacopæia would be secured and questionnaires mailed. He explained that the questionnaire made inquiry of physicians relative to the drugs in use, and pharmacists were asked to what extent certain drugs and preparations were called for over the counter. An analysis will be made of the list and reports made thereon. These questionnaires have been devised as a means for securing knowledge for the Committee on Scope of the next Committee of Revision.

The next order of business was the presentation of the report on the National Formulary by Chairman Wilbur L. Scoville. (The report has been printed in the October number of the JOURNAL on pages 1037-1044.)

The report of the Committee on the Pharmaceutical Recipe Book by Chairman J. Leon Lascoff was read by E. Fullerton Cook.

On motion duly seconded the reports were received and referred for publication. (The report on the Pharmaceutical Recipe Book will be printed in this or a succeeding issue of the JOURNAL.)

Chairman Dirstine asked Chairman James C. Munch to preside during the remainder of the session. Chairman Munch called for the report of the Committee on Ebert prize. It follows:

Report of the Committee on Ebert Prize.

"The Committee recommends that the Ebert Prize for 1929 be awarded to J. C. Krantz, Jr., of Baltimore, Md., for his paper on, "The Buffer Capacity of Acacia and Tragacanth," as presented before the Scientific Section of the American Pharmaceutical Association at the Portland, Maine, meeting."

The closing feature of the Joint Session was the presentation of two papers constituting a Symposium on Bacteriology. The first paper was that by George F. Reddish on "The Antiseptic Action of U. S. P. and N. F. Ointments" and the second paper by L. F. Himebaugh on "Reddish Germicidal Test on Antiseptics of U. S. P. and N. F." (Both papers were illustrated by lantern slides.) The papers are to be printed and the discussion thereon will be included. After the reading of these papers the Joint Session was adjourned.

SECOND SESSION.

The Second Session of the Scientific Section was convened by Chairman Munch at 2:00 p.m. August 30th. The first paper of the program was "A Study of the Stability of Solution of Arsenous and Mercuric Iodide U. S. P. X," by W. J. Husa and W. W. F. Enz. (Discussion.)

President Jones introduced Frank D. Kriebs, Secretary of Agriculture for South Dakota, who spoke briefly. Secretary Kriebs is a graduate in pharmacy of Northwestern University in the class of 1899. He stated that the Department of Agriculture had the enforcement of pharmacy laws in charge and all other legislation that applies to the drug business in the state. He regretted his inability to participate in the Convention to a larger extent because he had an engagement in another section of the state.

Chairman Munch expressed appreciation of the Secretary's visit.

Reading of papers was continued:

"The Influence of Light upon the Hydrogen-Ion Concentration and Stability of Certain Pharmaceuticals," by John C. Krantz, Jr., and C. Jeleff Carr. (Discussion.)

"Suggestions Relative to U. S. P. X Revision," by Jules Bebie. (Discussion.)

"VI. The Standardization and Stabilization of Veratrum Preparations: The Hydrogen-Ion Concentration Factor," by E. E. Swanson and C. C. Hargreaves. (Discussion.)

"VII. The Standardization and Stabilization of Ergot Preparations: The Hydrogen-Ion Concentration Factor," by E. E. Swanson. (Discussion.)

"Stability of Anæsthetic Ether in Containers of Various Types," by E. Van Deripe, L. W. Greene and R. E. Schoetzow. (Discussion.)

"Rennin: Its Deterioration and Comments on the N. F. V, Monograph," by L. D. Havenhill. (Discussion.)

"Studies on the Acid Base Equilibrium of Tincture of Digitalis," by John C. Krantz, Jr. (Discussion.)

"Effects of Buffering the External Phase upon the Stability of Emulsions," by John C. Krantz, Jr. (No discussion.)

"The Bellier Test for Sesame Oil," by E. Fullerton Cook. (No discussion.)

"Evaluation of Pharmaceutical Glassware," by N. Storm and James C. Munch. (No discussion.)

Haziness of Final Chloroformic Extractions in Alkaloidal Assay," by George E. Éwe. (Abstract.)

"Comments on Some Tests and Assays of the U. S. P. X," by Herbert C. Kassner. (Abstract.)

Secretary John C. Krantz, Jr., of the National Conference of Pharmaceutical Research stated that he had no report but requested that the Scientific Section continue its coöperation.

Chairman James C. Munch reported that E. N. Gathercoal had been elected *Chairman* of the Conference, John C. Krantz, Jr., reëlected as *Secretary* and Philip I. Heuisler as *Treasurer*. The meeting of next year is to be held in Baltimore about the time of the meeting of the A. Ph. A.

A motion was made by F. W. Nitardy that a Board of Review on Papers for Presentation and Publication be provided.

It was voted that a Committee be appointed by the incoming chairman to study this matter and report at the Baltimore meeting.

The report of the Committee on Nominations was called for and the following officers were nominated:

Chairman, H. A. Langenhan, Washington.

First Vice-Chairman, E. E. Swanson, Indiana.

Second Vice-Chairman, W. J. Husa, Florida.

Secretary, L. W. Rose, Michigan.

Delegate to the House of Delegates, James C. Munch, Maryland.

The nominees were elected and thereafter duly installed. The retiring Chairman, James C. Munch, thanked the members for their coöperation and the incoming Chairman, H. A. Langenhan, expressed his appreciation of the honor conferred and asked for the support of the membership.

The Scientific Section was then adjourned.

SECTION ON PRACTICAL PHARMACY AND DISPENSING.

The First Session of the Section on Practical Pharmacy and Dispensing was convened at 9:00 A.M., August 29th by Chairman P. H. Dirstine.

Secretary H. C. Newton presided while Chairman Dirstine read his address.

CHAIRMAN'S ADDRESS.

BY P. H. DIRSTINE.

Your Chairman first wishes to express his appreciation of the honor conferred upon him when you elected him to the chairmanship of this Section at the Portland meeting, which he was unable to attend.

"I realize that there are a goodly number of most excellent papers to be presented before this Section, and I have no desire to present a lengthy address. I will, therefore, confine myself to a few remarks and suggestions of a practical nature.

"For a number of years there has been, from year to year, a greater number of pharmaceutical preparations put out by manufacturing firms, who in turn solicit the doctor through detail men and encourage the doctor in the dispensing of ready-prepared medicines. In many cases these ready-to-take medicines are like ready-to-wear clothes, they fail to fit the patient. Of course, this is the doctor's concern; but let us look at this from a pharmacy standpoint. We find an ever-increasing number of high-priced products on which the druggist is forced to charge a high price, but pays him a small per cent of profit. In my opinion, every effort should be made to encourage doctors to use the U. S. P. and N. F. preparations more extensively than at present, and also to encourage doctors to build up formulas of their own to prescribe. I believe that every encouragement should be given to strengthen the courses of Materia Medica, Therapeutics and Pharmacology in our medical colleges, to the end that graduates in medicine may be better able to prepare combinations of U. S. P. and N. F. drugs to suit the needs of their individual patients, instead of being practically dispensers of patent and proprietory medicines, a tendency with many doctors of to-day.

"We frequently hear of drug clerks being discharged because of dishonesty, and many proprietors complain that they are unable to find honest clerks. We oftentimes find on investigating these cases and charges, that the clerk is drawing a salary of \$110.00 to \$115.00 per month—a salary that the proprietor would not think of trying to live on, yet he expects his clerk to do so. I am wondering if it is not about time that druggists, as proprietors, should begin to realize that a drug clerk is a human being, and when they pay salaries of this kind they themselves contribute to the cause of the troubles of which they complain. A pharmacist who has spent three or four years in college, and has had some experience, should not be expected to work longer hours and for less salary, than is paid the untrained shoe clerk, grocery clerk and others in like positions. I am certain that when druggists pay their clerks salaries in keeping with their professional training and skill, the cases of dishonesty will be greatly lessened.

"I hope that this Section, at this session, will pass a resolution condemning the special registration feature of some State Boards of Pharmacy, wherein they require schools of pharmacy to register with their State Board, in order to make the graduates of that school eligible for reciprocation, or to take the state examination in that state. It seems to me that if the membership of a college of pharmacy in the American Association of Colleges of Pharmacy means anything, it should mean more than the very meager requirements of various State Boards of Pharmacy. When the American Association of Colleges of Pharmacy puts its approval upon a college, by giving it full membership, in my estimation, that should fulfill the requirements permitting the graduates of that school to appear before any Board of Pharmacy for reciprocal registration, or to take the examination in that state, provided experience and character requirements are met.

"Recently, one of my own graduates from the four-year course in pharmacy was denied the right to appear before a State Board in the Middle West, because of the fact that our school had neglected to register with, and fill out a set of blanks required specifically by that State Board of Pharmacy. When the blanks were received it was found that our school was so far in advance of this state's requirements, that it was amusing, necessitating that the blanks be nearly made over in order to set forth our present requirements. I think this is a requirement for which there

is no justification, and should be a relic of the past. I sincerely hope that pressure may be brought to bear, to the end that requirements such as these, be abolished, and when one wants to know if a school of pharmacy is of high class, that he may turn to the official membership list of the American Association of Colleges of Pharmacy and, if the name appears there, let it be recognized as meaning something; that its requirements are not less than, but equal to, or above those of any State Board. In other words let us lend our support to the proposition that the American Association of Colleges of Pharmacy shall set the pharmaceutical educational requirements for this country. Laws for reciprocal registration should be uniform throughout the land, and should be based upon a national inspection.

"The prescription pharmacist is especially interested in the style and type of container in which the product of the manufacturer is marketed, be it a bottle or a package. For the products sold directly to the consumer this is of less importance, but for those products used exclusively by, or frequently prescribed by physicians, the style of package is of utmost importance. I shall give a few illustrations to make clear my point. If a doctor wishes to dispense certain proprietaries in the original package, he is unable to do so even though he disguises the odor, and colors the product, because of the fact that the name of the product, as well as the name of the manufacturer is blown in the bottle. Neither can the druggist use the bottle for the dispensing of any other product when the bottle is empty, because of the same reasons, as well as the peculiar shape of the bottle. On the other hand if we have a call for another preparation on a prescription, we place the bottle under the tap, the label comes off readily and we have a perfect prescription bottle; note the saving in time and expense. Should the bottle be returned for refill on a prescription we can dispense anything desired in it, or place it in stock as a new bottle. In the case of capsules, ampuls, etc., the same is equally true. As an example: I have a well-known capsule package in mind. All that is necessary in the dispensing of them is to open the package, remove the circular enclosed, apply your own label, which if of standard size covers completely the written material on the package, making a perfect dispensing package. As to a highly undesirable dispensing package, I have in mind another ampul package; a more ill-conceived package for dispensing purposes is hard to imagine, and yet, it is used practically exclusively on doctors' prescriptions. If we could encourage manufacturers to package their products for dispensing in plain and serviceable containers for the trade, be it in liquid or solid form, we would eliminate a national waste and save the pharmacists of this country thousands and thousands of dollars, every month.

"I have tried to call to your attention a few simple present-day needs of a practical character. Perhaps one or two of them may seem at first out of place being presented here before this Section, nevertheless they concern the every-day practice of pharmacy, and I hope they may merit your consideration.

"In closing I express my thanks and appreciation for the most excellent manner in which our secretary, Dean H. C. Newton, has carried on the work of his office, and I know we will all enjoy the splendid program he has been instrumental in arranging for us. I also wish to thank the contributors to the program of this Section, as it is through them and their efforts that this Section is able to present from year to year its interesting and instructive programs."

Abstract of Discussion.

John Culley stated that he had never dispensed a proprietary preparation in its original bottle or package; that invariably the containers of the store were used for prescriptions.

He was surprised to learn that any Board of Pharmacy would turn down a candidate from a well-equipped college.

In reply Chairman Dirstine said that a number of states require a signed application before the candidates are eligible.

Mr. Culley said that the requirements for reciprocity are based on what the state requires and not on the qualifications of the candidate. He said the N. A. B. P. has instituted a survey of pharmacy. A beginning has been made by the effort to study the schools of pharmacy.

W. J. Husa asked whether it would not be better to discuss this address after the Committee on Resolutions made a report.

The Acting Chairman stated that he realized there might be considerable discussion at the present time which would be repeated after the report of the Committee has been made. After further discussion by Messrs. Fuhrmann, Gray and Newton, it was decided to defer action on the Chairman's address until after the Committee on Resolutions, to which the recommendations of the address were referred, had been heard from.

Chairman Dirstine then resumed the Chair and called for the report of the Secretary.

REPORT OF THE SECRETARY.

BY HOWARD C. NEWTON.

To the members of the American Pharmaceutical Association:

The By-Laws of the Section on Practical Pharmacy and Dispensing state that the report of the Secretary shall be brief and that it shall have as its subject the condition of the Section. Complying with these requirements I would report that, in my opinion, this Section is enjoying a state of dormant health—if such a condition is possible. I have found a keen interest in the work of this Section exhibited by nearly all member pharmacists with whom I have corresponded. Such interest surely indicates the health of the Section. However, there is a noticeable hesitancy on the part of most of these pharmacists when it comes to presenting at our meetings the results of work that they may have done in attempting to solve some of the problems in practical pharmacy and dispensing. It is this hesitancy that causes me to characterize the health of the Section as dormant. It has been said that there is a tendency on the part of research workers "to accumulate a superabundance of facts and data and to devote too little time and effort in the proper correlation and interpretation of them." Perhaps this tendency has caused some of our members to hesitate in offering the results of their work in the interpretation, correlation and application of facts and data, fearing that such are not "in style," no matter how valuable they may be in practice.

I believe that it is one of our duties to make the practicing pharmacist realize that he is in a preferred position in the matter of solving problems in practical pharmacy and dispensing and, furthermore, that he owes it to his profession to give other pharmacists the benefit of the results that he has obtained in solving these problems. While I have some very definite ideas as to how this improvement can be accomplished, I do not feel that this is the proper time to express them. I will merely state that from my position as Secretary I am confident that it will not be difficult to change the present condition of dormant health to one of very healthy activity within the Section.

After some discussion the report, on motion of P. H. Utech and seconded by John Culley and a vote, was referred to the Committee on Resolutions.

A paper was presented by P. Henry Utech entitled "Some Official Preparations."

Abstracts of discussion of contributions will be printed when the papers are published unless some action requires prior publication.

The following papers were presented:

"Clinical Laboratory Work a Prescription Aid," by Lee S. Coy. (Discussion.)

"A Prescription Containing Guaiac and Acacia," by John. C. Krantz, Jr., and C. Jeleff Carr. (Discussion.)

"Commercial Aspects of Professional Pharmacy," by H. S. Noel. (No discussion.)

Chairman Dirstine appointed as members of the Committee on Nominations—Louis Saalbach, of Pennsylvania, J. L. Powers, of Michigan and Gustav Bachman of Minnesota; as members of the Committee on Resolutions—Clyde M. Snow, Illinois, Wm. H. Glover, Massachusetts and C. M. Brown, Ohio.

The First Session of the Section on Education and Legislation was then adjourned.

The Joint Session with the Scientific Section was held August 29th, 8:00 p.m. For program see Scientific Section.

SECOND SESSION.

The Second Session of the Section on Practical Pharmacy and Dispensing was called to order by Chairman P. H. Dirstine at 3:30 P.M. The reading of papers was continued:

- "A Survey of the Prescription Business in Buffalo," by Leon Monell. (By title.)
- "A Method for the Qualitative Estimation of Chloroform Liniment," by Alfred C. Anderson. (By title.)

- "Preparation of Enteric Capsules," by S. L. Hilton. (Discussion.)
- "Preparation of Ampuls," by S. L. Hilton. (Discussion.)
- "A New Explanation of an Old Incompatibility on That of Glycerin and Sodium Borate," by Charles W. Bauer. (Discussion.)
 - "Pharmaceutical Practicalities," by Robert J. Ruth. (No discussion.)
 - "Prescription Bottles," by W. J. Husa. (Discussion.)
 - "Who Is to Blame?" by J. Leon Lascoff. (By title.)

Chairman Gustav Bachman reported for the Committee on Nominations as follows: Chairman, H. C. Newton, Nebraska; Vice-Chairman, Charles V. Netz, Minnesota; Secretary, E. O. Leonard, Idaho; Delegate to House of Delegates, John C. Krantz, Jr., Maryland. The nominees were elected in regular order.

The report of the Committee on Resolutions was presented by Clyde M. Snow. The Committee recommended that the address of Chairman Dirstine be referred to the Committee on Resolutions of the House of Delegates and approved the report of the Secretary. After considerable discussion on motion duly seconded and a vote the report of the Committee was accepted (see pages 1088 and 1089). The reading of papers was continued:

"Physicians Prescriptions in Relation to the U. S. P. and N. F. Preparations," by P. J. Kolb. (Discussion.)

"A Further Study of the Incompatibility of Sodium Bicarbonate and Sodium Salicylate," by John C. Krantz, Jr., and C. Jeleff Carr. (Discussion.)

"The Manufacture and Dispensing of U. S. P. Digitalis Preparations," by Robert P. Fischelis. (By title.)

"The Advance of Pharmacy in California," by P. W. Howard. (By title.)

"A National Welfare Fund," by Edward Swallow. (Discussion.)

The Final Session of the Section on Practical Pharmacy and Dispensing was then adjourned.

SECTION ON EDUCATION AND LEGISLATION.

The First Session of the Section on Education and Legislation, A. Ph. A., was convened by Chairman A. L. Winne, at 9:00 A.M., August 29th. Charles E. Mollett presided during the reading of the Chairman's address. It follows:

THE CHAIRMAN'S ADDRESS.

BY A. L. I. WINNE.

It is customary for the chairman of this Section to render a report, or make an address, and while I would gladly pass by this portion of our program and devote the time to the splendid papers which we have on our program, I suppose I may not do that, so will do the next best thing and will address you very briefly.

The program of this Section is devoted to discussion of matters of educational interest and those of legal and legislative importance, and an examination of our tentative program this year discloses that we have an unusual range of subjects and many distinguished speakers to present them. I wish here to commend our efficient secretary on his good work in enlisting these speakers, and to thank the speakers who will follow for their interest in the work of the Section.

The ground which I could cover in this paper appears to me to be well covered in the papers which appear on the program, and I would not take advantage of the prior position which I hold on the program to go into a discussion of the subjects selected by those who are interested enough to prepare papers and come here to present them.

I may briefly touch on one or two matters, however, without trespassing, I hope, on the ground covered by speakers who follow me. I have been interested in Pharmacy Corps legislation during the past year, and without going into details of what has been done or what we hope to do, I merely want to express my gratitude for the help rendered me as chairman of the committee handling that matter by the members of the committee associated with me, and to say a word or two about the splendid assistance given the committee by Secretary Kelly. In reality Secretary Kelly did most of the work and the rest of us merely gave a helping hand on occasions. Of the progress of the legislation and the hearing held before the Congressional Committee, you will be told, I believe, by one of the speakers on our program.

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Looking further at the program I find that four other speakers will discuss legislative matters, such as "The Parker Bill," "Prohibition and Food, Drug and Insecticide Law," while another will talk about matters partly legislative and partly educational. The educational side will be treated from the point of view of educating the public relative to pharmacy, teacher training, training men for the neighborhood stores, failures before State Boards and the work of the junior colleges in relation to pharmacy education. Perhaps this Section has in the past had programs better balanced than this one, but I doubt it. I hope we will gather the maximum from our several sessions.

So much for the program which is to follow.

Now, if I may use a few minutes more, I would like to go back to the matter of legislation looking for better pharmacy in the Army of the United States. Without encroaching too much on the speaker who will talk about this matter, I would like to draw attention to the fact that this legislation is a matter which is of great importance to pharmacy, and is one worthy of the interest, active interest, of all who hold pharmacy worth while. Our bill will be introduced at the next regular session of Congress and if it is to become a law it will require the whole-hearted efforts of all who wish to see pharmacy advance. It will not be enough to wish the committee and our secretary well in the fight to be made. Each and every pharmacist in this organization must dig in and do a part of the fighting. This can be done by arousing the interest of the pharmacists of your own state and locality, and by getting in touch with your Senators and Representatives and presenting the matter to them so that they will understand what it is all about if the issue comes to a vote, as we hope it will. The influence which you can bring to bear from your own state outweighs anything which Association officials can do, and it will depend on what you do whether this bill ever becomes a law. The organizations of pharmacy have done what they could do in the way of giving approval and going on record in favor of the measure. This is useful, but by no means all-sufficient. The voters back home still have the voice of the masters. A piece of work yet remaining to be done, to a large extent, is enlisting the aid of such patriotic organizations as the American Legion, Veterans of Foreign Wars and like ex-soldier bodies. These have a large influence, and can be reached in each state best by those who live in these states.

Passing from the legislative to the educational phase of our work, I hope you will bear with me a little bit longer, while I touch briefly on a phase of the teaching of pharmacy which may not be of a great deal of interest to some of you, and which may even be regarded by some as taboo in this Section. I want to talk about the teaching of Commercial Pharmacy, or, if you prefer, as one speaker attending our annual meeting termed it "So-Called Commercial Pharmacy." What we call it makes little difference.

If you will pardon again personal reference I may state that from a number of years of experience in pharmacy work, retail, wholesale and board and association work, I have been able to view matters from more than one side, and I have, like most of you, come to recognize that the commercial activities of the pharmacist constitute a fairly large part of his activities, and I believe that he should be trained to perform these commercial duties as well as to perform his professional duties. It is my opinion that in the schools of pharmacy as operated to-day he is being well trained for his professional work and miserably trained for his commercial work. There are, of course, exceptions. Many schools are making real headway in this field, but much remains for the best of them to take on and do well.

Early this year I undertook a limited survey of the work being done in commercial pharmacy by the schools which are members of the American Association of Colleges of Pharmacy. To a questionnaire sent out to all of them thirty-five replied, and their answers boiled down to a few words disclosed that almost all of these attempted to teach commercial pharmacy in some fashion, some using textbooks and others not using any, and very few of them devoting anything like adequate time to the subject. I could give you an array of figures on various phases of the replies returned, but I am not going to do that. In bringing this to your attention I have in mind the hope that the schools will wake up to the urgency of properly training the men whom they turn out as graduates, to go into drug stores and work, so as to make these men more useful to the men who employ them, more useful from the start. A school has not done anything approaching a finished job when it turns out a pharmacist trained for only half the work which will be expected of him by bis future employers, or which he will have to do for himself if he enters

the drug business. I believe that I am extremely liberal when I say half the work may be of a professional type. Many say that his professional work does not constitute twenty-five per cent of his activity, and others rate it at ten per cent or less. Whatever is correct, in the large majority of instances, it certainly is a fact that more than ninety per cent of the graduates of schools of pharmacy engage in retail drug work. Why not recognize that as a fact and train the men to meet the conditions which will confront them as soon as they leave college?

The failure of many schools to do this work properly is to be attributed, I believe, to the fact that the men who are teaching in these schools do not know very much about the conducting of a retail drug store and assume an attitude which they may use as a shield for themselves and their own ignorance of the matter by saying that it is not the province of a school of pharmacy to teach commercial subjects. There are, of course, two sides to the question. Some, I know, interpose honestly conceived objections. I respect their attitude, while differing radically with their conceptions. The majority of schools teaching pharmacy are trying to accomplish something along commercial lines, and the greatest weakness in this work at the present time is that the efforts being made are too feeble, and this is so, I think, because the men who are trying to teach these subjects are not properly qualified to teach them. They have no background of their own, in a commercial way, and try to put the subject over by brushing up superficially on some of the high points of the commercial phase of pharmacy. That will never lead very far. It is a case of the blind leading the blind.

Commercial pharmacy, and that is just another way of speaking about the whole field of retail merchandising, has as many sides and facets as has professional pharmacy, and it is today the phase of the drug business which all too often is paying the freight for the whole enterprise. Without in any manner attempting to minimize the importance of professional pharmacy, because I believe that that in itself is the solid rock on which the drug business is moored, I do believe that the schools could do the drug business a great service, and in that way do pharmacy a service, if they would wake up to the fact that there is a bread and butter side to the game which their graduates must play in after-life, and seriously attempt to equip those graduates to enter the fight without unnecessary handicap.

In my humble judgment Commercial Pharmacy is worthy of a place alongside Professional Pharmacy throughout the three- or four-year course given by any school, and it is worthy of the services of teachers trained in the subjects which they essay to teach. Few schools of pharmacy in the United States to-day are taking this matter very seriously. I do not hesitate to predict that eventually every school of pharmacy which hopes to survive as such and to have any following will be forced to wake up to the needs of the times and make proper provision to meet them.

L. D. Havenhill moved that the Chairman's address be accepted. The motion was seconded by A. H. King, and carried by vote.

Secretary Glenn L. Jenkins, of the Section, reported that the large number of papers make it advisable to limit the maximum time allowed for presentation and discussion.

(Abstracts of discussions of contributions will be printed when the papers are published unless some action requires prior publication.)

The presentation of papers followed. The first item of this part of the program was a discussion of the Parker Bill by E. F. Kelly. (To be printed; see also resolutions page 950, September JOURNAL.)

The first paper of the program is entitled "What the Food, Drug and Insecticide Administration Is Doing for Pharmacy," by L. E. Warren. (See October JOURNAL, pages 998–1004.)

Other papers presented were the following:

"The Proposed Transfer of Prohibition Enforcement from the Treasury Department to the Department of Justice," by James H. Beal. (See pages 1028-1031, October JOURNAL.)

"Student Branches, A. Ph. A.," by B. V. Christensen. (Discussion.)

"Pharmacy Needs an Objective Policy," by R. L. Swain. (See pages 1016-1020, October JOURNAL.)

"Teacher Training in Pharmacy," by E. T. Motley. (No discussion.)

"What the Pharmacist May Do for Himself," by E. C. Brokmeyer. (See pages 1020-1024, October JOURNAL.)

A discussion followed on Publicity and Pharmacy Week, participated in by Messrs. Maxwell, Kemp, Brokmeyer and Walton.

Chairman Winne appointed a Committee on Nominations composed of R. L. Swain, B. V. Christensen and M. N. Ford. The First Session of the Section on Education and Legislation was then adjourned.

SECOND SESSION.

The Second Session of the Section on Education and Legislation was called to order by Chairman A. L. I. Winne at 2:30 P.M., August 30th.

The Chairman stated that Dr. James H. Beal had been requested to draw up a resolution and asked for its presentation at this time. (The resolution is printed on page 950 of the September JOURNAL.) The Section by vote approved the resolution.

Reading of papers was continued:

"Bromatotherapy and the Drug Store," by L. F. Kebler. (No discussion.)

"The Neighborhood Store-How to Train for It," by Wortley F. Rudd. (Discussion.)

"Many Candidates Fail State Board Examination in District No. 3. Why?" by Rudolph H. Raabe. (Discussion.)

"Comments on the Revocation of Permits Issued under the National Prohibition Act," by W. Bruce Philip. (Discussion.)

"The Junior College in Relation to Pharmaceutical Education," by Frederick J. Wulling. (By title.)

"Educating the Public on the Profession of Pharmacy," by D. B. R. Johnson. (By title.)

"Summary of Regulations Governing the Sale of Drugs and Medicines in Sweden," by Knut Sjöberg. (See pages 896 to 902, September JOURNAL.)

The Committee on Nominations presented the following names of the officers for the ensuing year: Chairman, Glenn L. Jenkins, Maryland; Vice-Chairman, B. V. Christensen, Florida; Secretary, Rudolph H. Raabe, Ohio; Delegate to the House of Delegates, Wortley F. Rudd, Virginia. The nominees were elected in due order. The Final Session of the Section on Education and Legislation was then adjourned.

SECTION ON COMMERCIAL INTERESTS.

The First Session of the Section on Commercial Interests, A. Ph. A., was convened by Chairman R. B. Rothrock at 4:00 p.m., August 28th.

Chairman Rothrock stated that he would not take up the time of the Section by delivering an address because of the business before the Section, and Secretary Joseph G. Noh reported on the status of the Section on Commercial Interests. He regretted that there were not more papers but felt assured that the quality would make up for the number.

Chairman Rothrock appointed the following as members of the Committee on Nominations: Leonard O'Connell, B. M. Keene and Charles J. Clayton; of the Committee on Resolutions: Fred W. Meissner, W. Bruce Philip and A. C. Taylor.

The reading of papers was proceeded with.

"An Old Fashioned Drug Store in a Modern Setting," by Thomas Roach. (See pages 1014–1016, October JOURNAL.)

"The Ethics of Commercialism." (No discussion.)

"The Independent Retail Drug Store a National Necessity," by R. E. Lee Williamson. (Discussion.)

The First Session of the Section on Commercial Interests was then adjourned.

SECOND SESSION.

The Second Session of the Section on Commercial Interests was convened by the Chairman, R. B. Rothrock, at 8:30 p.m., August 29th. The reading of papers was proceeded with.

"A Five-Foot Shelf of Journals," by E. H. Niles. (See pages 1013, 1014, October Journal.)

"What is the Matter with the Drug Business and What Is to Be Done about It?" by Charles J. Clayton. (Discussion.)

"Dividing Your Inventory to Find Your Proper Rate of Turnover," by W. Bruce Philip. (Discussion.)

"Taking the Prescription Department Out of the Red," by H. S. Noel. (No discussion.)
"Why not Establish a Regular Fee for the Pharmaceutical Profession," by Edward Swallow. (By title.)

"Shall the Independent Druggist Sink or Swim? It Depends upon His Initiative and Effort," by H. W. Heine. (No discussion.)

"Keeping Independent," by Edward S. Rose. (No discussion.)

"Activities of Druggists Research Bureau," by E. L. Newcomb. (Referred to the Committee on Resolutions.)

The Committee on Nominations reported the following names for officers of the ensuing year: Chairman, Denny Brann, Iowa; Vice-Chairman, Joseph G. Noh, Nebraska; Secretary, Rowland Jones, South Dakota; Delegate to House of Delegates, R. B. Rothrock, Indiana.

In regular order the nominees were elected.

A motion was made and carried thanking the retiring officers; the Section was then adjourned.

SECTION ON HISTORICAL PHARMACY.

The First Session of the Section on Historical Pharmacy was convened by Chairman Lyman F. Kebler, at 3:30 p.m., August 22nd.

The Chairman announced that he would present a sketch of James Henry Shepard, in place of the usual formal Chairman's address.

JAMES HENRY SHEPARD, B.S., M.A.1

BY LYMAN F. KEBLER,

one of his admiring pupils.

HUMANITY AND HERO-WORSHIPERS.

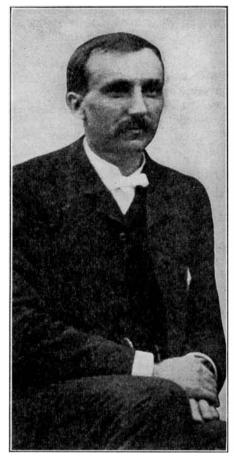
I am a hero-worshiper. Hero-worshiping is an inexpressibly precious fact. It stimulates world activity. Much of history is based on it. Hero-worship exists everywhere from Divine adoration to the humblest practical recess of life. Most human lives are influenced for better or worse by our heroes, large or small. The folk-lore of nations embodies much hero-worship. Nations are in a measure built up and around its heroes—civil, military, political, religious, educational, poetic, scientific, professional, dramatic, athletic and aeronautic. We all have our Washingtons, Jeffersons, Lincolns, Roosevelts, Napoleons, Platos, Socrates, Prescotts, Procters, Remingtons, Lindberghs, etc., but the most potent heroes, are those who mold our characters during the formative periods of our lives; our parents, our teachers and those who aid us in the development of our avocations, whether business, professional, educational or otherwise.

James Henry Shepard is one of my heroes. He, a stranger, called me Lyman and made me feel at home. I am probably Prof. Shepard's oldest living pupil who followed in his footsteps as a chemist, particularly along lines of pure foods and drugs. Our work often brought us together and it gives me very great pleasure and pride to relate briefly, at this meeting held in his adopted state, the manner in which he influenced my career; his eminence as a chemist, a beloved teacher and a good citizen; his contact with pharmacy; his excellent work for pure foods and his investigations of agricultural problems that he dealt with for more than a third of a century. I first met him face to face as Principal of the Saline High School, one of the units of the wonderful Michigan State Public School system, when I applied for admission in 1879. I may have met him while he was a student in the University of Michigan and I, a lad, playing under its eves. I heard of and saw many of the pranks of the University students long before I entered the Saline High School. I well recall the kindly and sympathetic manner in which Prof. Shepard plied me with questions; a sun-burnt, horny-handed, rough-shod, frightened farmer's lad, just released for school by my father, after the fall's work was pretty well along for the winter. All farm boys know what the fall work means. Some also know what it means to begin school work in the middle of the term, as we called it then. It is no child's play, but grit and determination were with me. I was a Red School House protégé. We there learn self-reliance. Give and take was part of our training.

I now understand Prof. Shepard's interest in me. He was likewise a farmer's lad with similar environment. He was born April 14, 1850, the son of a pioneer Michigan farmer who died

¹ The First Professor of Chemistry and Pharmacy of the South Dakota State College.

during the boyhood of his son, who was raised by relatives and friends. My education was acquired in a short-term unorganized country school where the teacher taught and disciplined all comers. My teachers were all mighty fine women. They taught me ABC, reading, writing, arithmetic, geography and some algebra. How well the work was done in our little red school house is shown by the fact that the generous-hearted principal entered me without a condition. This was a great compliment to my teachers and made me feel very proud. Professor Shepard taught physical geography. I selected this study and learned then to admire him. He was my





JAMES HENRY SHEPARD.

LYMAN F. KEBLER.

When James and Lyman Met.

first man teacher. Geography always fascinated me. We studied physical geography in Wilson's Fifth Reader, which was a veritable Bible to me in the country school. I learned many valuable lessons from its pages on Botany, Chemistry, Physics, Physiology and Physical Geography. I still read it with pleasure. It gave me the foundation which made me proficient and gave me standing in my hero's eyes. He told us so many fascinating things about these sciences. His enthusiasm, knowledge and encouragement decided me on a future career but environment stepped in and separated us for how long, no one knew at the time.

SHEPARD MUCH-LIKED IN SALINE.

Shepard was greatly admired in Saline. I can best express it in the following words of Goldsmith:

"The village all declared how much he knew;
'Twas certain he could write and cipher too;
While words of learned strength and thundering sound
Amazed the rustics ranged around—
And still they gazed, and still their wonder grew,
That one small head could carry all he knew."

Shepard obtained his education in the school system of Michigan. The B.S. degree was conferred on him by the University of Michigan in 1876.

My hero left Saline to take up post-graduate work at the University of Michigan and I felt obligated to contribute my earnings to the family chest to help my parents bring up my younger brothers and sisters. The future looked anything but bright, so far as acquiring an education was concerned. Prof. Shepard drifted out of my life. When I was past twenty, my father released me from further contributions, advised me to save my earnings and augment my schooling. The idea was fine but its accomplishment some problem. Where would it be possible for me to get a foothold with some assurance of success, with my limited education at my age? I was employed in the building trade in Ann Arbor and considered attending its high school, but everything, including the building that I often passed, looked so formidable that I could not reconcile myself to undertake the task there. In time (1884) I learned that Prof. Shepard was teaching the sciences in the Ypsilanti High School. He was appointed instructor in 1882. I took occasion to make him a friendly visit. We talked over my problem. He told me that I had a hard task before me but could master it with my stamina, grit and determination. He assured me of his moral support. Later I went to Ypsilanti to start in. Professor Shepard was on hand. He took me to the Superintendent, R. W. Putnam, who later became my staunch friend, explained my problem and vouched for me. The Superintendent entered me with one year's credit. Three more years of school work. Professor Shepard was my mentor. He was the only human being I knew in the city. It looked like a gigantic undertaking. I was strong and husky, with no fear of work, but associating with the small boys and girls who seemed to know so much more than I did was an awful trial. It was my greatest handicap. I took as much scientific work under Professor Shepard as the rules of the school permitted, the first year, including chemistry and physiology. Shepard's "Elements of Chemistry" was just coming off the press in page proof (1884). This greatly enhanced the standing of this genial teacher in my eyes. It practically superceded every small chemical textbook then on the market. We were given advance sheets for class work. The book laboratory work. Under the guiding hand of Professor Shepard and the encouragement of other teachers, the year's work was very creditably done. He urged me to continue, suggesting that he would let me do some special work in chemistry under his guidance. I planned to take the county teacher's examination and spend the next year in teaching. The examination was taken. I qualified as a teacher but when fall rolled around, the urge to continue the high school work was so great that all teaching opportunities were passed up. I had earned enough money during the vacation time to see me through another year. My teachers then talked to me about preparing myself for a chemical career, taking the course in the University of Michigan School of Pharmacy. This seemed like building air castles. We talked about it again and again. I dreamed Professor Shepard gave me a course in water analysis, taught me in microscopical work and assisted me in making a goodly number of galenicals. This had a great appeal. His personality, urging, encouragement and good wishes, together with the inspirations of my other teachers, won for me a University education. I have brought myself considerably into the picture so far. It brings out a side of our hero's life that many of his students admire. The deep impressions he made on many determined their life work. I shall let others tell more about this later. I am personally unable to more than feebly express my gratitude for the remarkable encouragement and inspiration I received at his hands.

DR. A. B. PRESCOTT AND PROFESSOR JAMES H. SHEPARD.

Albert Benjamin Prescott and James Henry Shepard had similar careers. Both were outstanding chemists. Both were drafted into pharmacy. Both were my revered teachers. A. B. Prescott was professor of Organic and Applied Chemistry and Pharmacy of the University of Michigan at the time Shepard acquired his B.S. degree and undoubtedly sat at the feet of our be-

loved teacher. When Shepard took his post-graduate work, Prescott was dean of the School of Pharmacy. Shepard probably learned his pharmacy from Dean Prescott.

PROFESSOR SHEPARD TAKES UP HIS NEW LABORS.

Professor Shepard, in 1888, identified himself with the South Dakota College and Experiment Station, where he spent the remainder of his busy life. His name appears as Chemist in Bulletin No. 4, issued in July 1888. He was vice-president of the College for ten years, director of the Experimenting Station for six years and chemist for the State Pure Food Commission from 1901 to his death, February 21, 1918. About his new field of labor, he writes, "My appointment as Chemist for the Station was issued in June 1888. At that time the Station had neither laboratory nor appliances. Practically nothing had been done in this department. Instructions were issued to purchase apparatus and chemicals, sufficient to carry on the work." He did the first analytical work in the state. Bulletin No. 8, December 1888, on "The Drinking Waters of Dakota," written by him contains his analyses. The same year he established a course in toxicology. It was also decided by the officials to include courses this year in the curriculum which might assist in the training of students for the position of assistant pharmacists. The catalog of 1888 describes a rather extended course in materia medica. In 1889 the regents officially established a two-year course in pharmacy in the following language:

"The two-year course in pharmacy is designed to fit young men or women for the business of druggists, and it is hoped that arrangements may soon be made by which graduates from this course may become licensed as assistant druggists."

Professor Shepard at the time, bore the title of "Acting Professor of Chemistry, Physics and Pharmacy." The late, brilliant Cyril G. Hopkins, one of his esteemed pupils assisted him. Professor H. B. Matthews, of whom we shall hear later, at present—Professor of Physics in the South Dakota State College—was assistant in the pharmacy laboratory. There were ten in the first graduating class, in 1890. With the appointment of Bower T. Whitehead as Professor of Pharmacy in 1897, Professor Shepard devoted his entire time to the various chemical problems that arose.

The following published in the Ypsilantian, Ypsilanti, Michigan, August 14, 1890, is of interest to Rapid City and probably explains why Professor Shepard did not accept the deanship of the South Dakota School of Mines, located at Rapid City: "A private letter from Professor McLouth of Brookings, South Dakota, informs us that Professor J. H. Shepard was offered the deanship of the Dakota School of Mines at Rapid City with a salary of \$2500, but after visiting Rapid City in the 'Hills,' where the school is located, he had decided not to accept." The train, on which the Professor was, was "held up" in Nebraska by robbers, and an enforced contribution levied on the passengers, so it seems that the Professor is compelled sometimes to watch a system of "re-actions" not known to chemistry.

Many of the delegates to this convention will go over the same route, traveled by Professor Shepard to the city in the "Hills," nearly thirty years ago, and it is hoped there will not be any holdups.

SOME OF PROFESSOR SHEPARD'S OUTSTANDING WORK.

He gave special attention to the control of nitrogen in cereals and the milling and analyzing of macaroni wheat, introduced into the state by the U. S. Department of Agriculture. This involved the investigation of bleached flour, concerning which he made an international reputation for himself. He testified in a number of court cases brought under the Federal Food and Drugs Act against flour bleachers, conducted a hearing before the U. S. Secretary of Agriculture, on the subject, and was called to the English Courts to testify against flour bleaching. The bleachers lost, but most white flour on the market at present, in the United States, is still bleached.

Shepard was among the first to make a systematic analysis of whisky. His report entitled, "The Content of Whisky," 1906, has been translated into many modern languages. It laid a foundation for judging whisky. At the meeting of the State Food and Dairy Commissioners, held in connection with the St. Louis Exposition in 1904 and later meetings of the association, he reported on the harmful effects of preservatives and dyes on digestion. His papers and exhibits attracted world-wide attention. The Commissioners delegated him to represent the pure food interests at the hearing before President Taft in 1909, for the purpose of determining "What is

Whisky?" I was present when some of these activities took place. He is the author of many bulletins covering the examination of waters, foods, forage plants, sugar beets and macaroni wheat. He developed a superstrain of beets; in fact, he is credited with growing the world-record sugar beet, containing 26.2% of sugar by weight.

SHEPARD, A WORTHY, THRIFTY CITIZEN.

He gave the world three fine citizens, two boys and one girl; was an elder in the Presbyterian Church; a Bible class teacher for many years; a 32nd degree Mason and a member of many other organizations. His wife Clara, still living, was a wonderful helpmate. He owned a valuable quarter section of land near the College and gave special attention to the breeding of thoroughbred registered stock. His herd of Duroc Jersey swine was one of the best in the West. He also grew macaroni seed wheat for Government experiment.

HEAR WHAT SOME OF HIS OTHER PROTÉGÉS SAY.

Shepard had a keen, analytical and judicial mind, yet in the class room his personality counted most. His enthusiasm and zeal were contagious. He possessed the essentials of an ideal teacher, with a unique style often tinctured with humor. Even students unfit to grasp the intricacies of chemistry welcomed his lecture hour. To a notable degree, he molded the careers of the better students. A goodly number became chemists or physicians. I am well aware that my presentation of the influence and work of our beloved, amiable teacher and colleague is most inadequate, but will let others amplify the encomiums to which I shall say amen.

Dean E. R. Serles writes, "While he was not actively associated with the Department of Pharmacy after 1897, he was vitally interested in the work at South Dakota State College and gave many of the graduates of Pharmacy opportunities to do special work in the Experiment Station Laboratory. I count myself particularly fortunate, having served in such capacity during the last four years of his life."

Listen to the interesting story told by H. B. Matthews, at present Professor of Physics in the South Dakota College:

"I feel that I had a rare privilege in having been a student under Professor Shepard and later an Assistant in his department. During the early days of State College Professor Shepard not only had the Chemistry but the Pharmacy. C. G. Hopkins gave the instructional work in Pharmacy while Professor Shepard and myself looked after most of the laboratory work. While my success as a teacher may not be phenomenal, still I feel that such success as I have had is to a certain extent due to my many years of close companionship with Professor Shepard and my observations on his methods. Of course, I do not do things as he did. No one could do that. He had a personality and a uniqueness of presentation peculiarly his own. I have often wondered at his uncanny ability to hold the attention of students. His peculiar habits caused you to watch him. His word pictures were skillfully presented. His humor was contagious. His mind was keenly analytic. He was able to figure what the other fellow was going to do, which was evidenced many times during the political turmoils that affected the state and educational institutions of early days in South Dakota.

"I have mentioned his keen sense of humor. He often illustrated something in the text by a story. His preliminary actions, before actually telling the story, had the interest of the students aroused and often they would be laughing in anticipation before the story began.

"May I say personally that Professor Shepard meant a great deal to me and his memory is still precious. He did more for me than any other man in helping me to a start in life. His suggestions and advice were always timely. All students that came in contact with him were inspired to continue in their work. I know that Dr. C. G. Hopkins, as long as he lived, almost worshipped him. This is true of such men as Dr. Adams Dutcher, Pennsylvania State College; Dr. Guy Youngberg, University of Buffalo; Dr. F. A. Coller, University of Michigan; State Chemist L. E. Walter, University of Wyoming, etc.

"I believe that no one questions but that he was a real chemist. As you will remember he had a very large nose. I have often thought that it was as useful as it was large for he could come nearer telling what things were by the sensation of smell that any man that I ever saw."

Grant Houston, M.D., pharmacy class of 1890, adds some personal touches.

"I have a picture of the first class in pharmacy, graduating in the spring of 1890, the group

with Professor Shepard in the center. There were ten in the class. I remember him as a very pleasant but rather firm teacher and my most intimate recollection of him in the class room is his sitting at the end of the room on a high stool and his position on the stool was stooped forward, stroking his tiny moustache and I distinctly recall the peculiar facial expression he had when answering one of our quesitons in chemistry or waiting our reply to some chemical question.

"He was a very kindly man and a splendid teacher, one who always wanted the work done in an exact and prompt manner. I remember that he asked one of the members of the class, Will Bentley, to do something in the chemical work for him but he saw by Bentley's expression that he did not quite get Shepard's point and after explaining it for a while to him, he turned away and said, 'Here, Houston, you can do it quicker than I can explain to Bentley what I want done.'

"He was always interested in sports and life of young people, particularly those in his classes. He was an untiring worker and a man whose soul was tied up in his profession."

Irwin D. Aldrich, Secretary of the Pierre (South Dakota) Commercial Club, reminisces excellently about our hero.

"I entered college at Brookings about the first of March 1889, which was then the middle of the school year. I classified as a pharmacy student, and jumped into the middle of the course in physics, taught by Professor Shepard. I had had some physics and was able to do this. He also taught the class in pharmacy. The first work we did in this was in determining specific gravities, which gave us some practice in handling the balances.

"I came from the farm to college with the supposition that college professors would use language in ordinary instruction which it might be difficult for a farm boy to understand. In this respect Professor Shepard was a disappointment. In fact he had so many old yankee farm expressions that he was a continual delight to me. The simplicity with which he would state a proposition made all his students like him. I remember when we were studying sound he once said, 'Now if you take a piano key and kindo tunk on it,' etc. I recorded some of these in one of my school books, but it was destroyed by fire.

"Professor Shepard had a habit of throwing in bits of simple philosophy from time to time, before a class. He had been a student of Richard Olney, in Michigan, the mathematician and author of textbooks in mathematics. Something came up in class once which caused him to digress with a reminiscence about as follows:

"Now this man Olney was a kind of a h-a-r-d-h-e-a-d-e-d, p-r-a-c-t-i-c-a-l man, a-f-t-e-ra-1-1, and he said to us once, in class: 'If you don't learn anything else in college, except not to be afraid of a man because he is a college graduate, the course will be worth something to you.

"'And he chuckled in the peculiarly Shepardian way."

"Our relations were always very pleasant, and later on as a member of the Board of Regents and as secretary of the Board, viewing his work from a little different angle, I continued my high

"Speaking of the attempt that was being made in those days to show that the word wine as used in the Bible meant the unfermented juice of the grape, he once said, 'Why that was rediculous. Look what it did to Noah.'

"Our 1890 Pharmacy class had for its motto Nulla vestigia retrorsum. He looked at it quizzically, chuckled, and said, 'Aldrich, I hope that is no reflection on the efficacy of the physic you boys will dispense."

Even a short biographical sketch like this, requires no small amount of effort and research, but it is well worth while in both pleasure and thrill, to say nothing of the justice to those who have gone to the promised land of human perfection and the good it may be to future generations. In closing may I urge others to engage in this line of endeavor.

Chairman Kebler exhibited pictures of Professor Shepard and a photograph of himself taken at the time he entered the pharmacy school. He then called upon Dean E. R. Searles of the Division of Pharmacy of South Dakota State College, also a student of the late Professor Shepard, who presented the following:

SOME REMINISCENSES OF PROFESSOR SHEPARD.

BY E. R. SERLES.

It was my good fortune to be very intimately acquainted with Professor Shepard for a good many years. I took my work in pharmacy at South Dakota, majoring in chemistry, and carried out the major portion of my work in chemistry under him. One of the more recent pictures Dr. Kebler has shown is the last picture taken of Professor Shepard in the laboratory. It was in connection with his work done with sugar beets. He did extensive work on them for twenty-seven years. He pioneered in their development from a low percentage of 10 or 11 per cent with cross-breeding bringing it up to a final average of 18.2 per cent. A good deal of that work was done at the Bellefourche project, which lies sixty miles northeast of Brookings, and is a development of the Orman dam, which is one of the largest earth dams in America. This development reached its climax in the successful development of one strain, one breed of which reached the world's record of 26.2 per cent. I was working in the laboratory when that beet was analyzed.

One picture shows the crude machinery which Professor Shepard used in boring the beets. It was a sewing machine with the wheel left on and portions of the head taken off, and an auger used for boring.

I do not know whether Dr. Kebler has revealed the number of bulletins published by Professor Shepard at the South Dakota State College. We have twenty-one. There were in all thirty-five. We were unfortunate in losing a great deal of his work through the total loss by fire of our Chemistry Building a little over a year ago. By the titles of these bulletins you can see how diversified were his interests.

Some of the titles are as follows: "The Drinking Waters of South Dakota;" "The Sugar Beet of South Dakota;" "Artesian Wells of South Dakota;" "Deep Wells and Shallow Wells;" "Irrigation in South Dakota;" "Forage and Garden Crops in the James River Valley;" "Drouth-Resisting Forage Plants;" "Nutritive Forage Plants Introduced for Ensilage;" "Marketing Wheat and Its Value in Bread-making."

This last was perhaps the most outstanding work of Professor Shepard. It attracted so much attention that upon the completion of the last two bulletins and his investigation in bleached flour work, he was called to London on the famous Bleached Flour Trial as an expert witness. It is interesting to know that the State flour mill is carrying on work at the present time which is purely a continuation of those experiments started in 1905.

Immediately following that, Professor Shepard went into the question of steam canning in the Pure Food and Drug Laboratory here in South Dakota, which was located at the South Dakota State College at that time.

I presume you will imemdiately link him up when I say he was closely associated with Dr. E. H. Ladd, of North Dakota and Dr. H. W. Wiley. In 1906 came the National Food and Drug Act.

For a long time Professor Shepard was consultant for all experimental work of the South Dakota State College, including the development of food products of South Dakota, various farm crops, and such chemical problems as happened to come in connection with other fields of endeavor.

One bulletin, which I do not have in my possession, which is called for all over America and in all other civilized countries, was the bulletin which he compiled after appointment to the commission of the President of the United States for analysis of sugar. You can readily see why there was such call for it. Immediately following that work, Professor Shepard went to New Orleans on the New Orleans Molasses Trial as a witness to decide whether it was real sorghum or not. His testimony was effective in controlling that product as a food for our tables of to-day.

In his later years—the time I was most closely associated with him—he gave a good deal of time and thought to the revision of one text which he published—"Shepard's Elementary Chemistry"—which was built around an analysis scheme of his own. I am free to say very nearly every inorganic chemistry to-day is modeled closely after his original piece of work. Dr. Shepard's health failed so utterly that he was unable to complete that revision. Thus far, no one has had the time or interest to revise the book.

In personality, I have never met a man with such kindly tendencies toward his fellow men. He was profoundly religious. It is said in his own community, he had a men's Bible class at the First Presbyterian Church for eleven years, and taught it without missing a Sunday. He used to chide us about our ignorance of the Bible when we went for consultation on another problem.

He was not particularly active in many public activities—civic organizations, etc. Rather, he was what you would call a home man, devoted entirely to the service of his home and College.

One rather prominent educator made this comment concerning Professor Shepard. He

said, "He is able to take a scientific subject and discuss it with the average uneducated layman and the scientist, each in his own language, and yet keep them both interested."

I can say frankly to you he is my greatest inspiration as a teacher.

On motion, duly seconded, the two contributions were received for inclusion in this report. Chairman Kebler then called on the Secretary, Dr. George D. Beal, who stated that he had no formal report to present. He expressed his appreciation for the coöperation of the members of the Association in arranging for the program of the Section. He stated that at least thirty-five, of all persons to whom requests were addressed, were instrumental in getting contributions for this program.

Chairman Kebler remarked that if all other secretaries would do as well as Dr. Beal, in a few years the Section on Historical Pharmacy would have a program that would exceed that of other sections, because there is so much material to work on.

The chairman called for the Historian's report, which follows:

THE HISTORIAN'S REPORT.

BY. E. G. EBERLE.

A memorial tablet in Cramer's pharmacy at Paderborn bears the inscription "In diesem Hause entdeckte 1803, Fr. W. Sertuerner das Morpheum." More recently a memorial plaque was unveiled in the medical clinic of Muenster commemorating the fact that this pharmacist was born in Westphalia in 1783, and that he was the discoverer of morphine. On the 2-mark German emergency note of 1921 there is a picture of Sertuerner and under it these words:

"Deine Huette verfallen, Dein Grab verwest, Dein Werk wird bleiben, so lange die Erde steht."

Sertuerner laid the foundation of alkaloidal chemistry; his discovery was followed soon after by those of other pharmacists. In the closing paragraph of an article by P. J. Hanzlik in the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, 18 (April 1929), 375–384, we find this statement: "Now on the 125th anniversary of this important discovery, we reaffirm our gratefulness for the timely effort and native talent of the once obscure pharmacist of Paderborn."

In 1879 to 1885 our veteran member, John Uri Lloyd, contributed a series of articles published in the Proceedings of the A. Ph. A. which are accredited with laying the foundation of colloidal chemistry. In the Jour. A. Ph. A., 11 (June 1922), 410–423, Part I of "Physics in Pharmacy," by J. U. Lloyd is published and in this Section we have on the program "Physics in Pharmacy. Part II," by John U. Lloyd, Wolfgang Ostwald and Walter Haller; the article is illustrated by sixty half-tones.\(^1\) This work checks up that of the senior author, of fifty years ago; and the subject deals with the forms of menisci; it is largely a review of the work of J. U. Lloyd. The methods employed are more exact than those in the earlier contribution, however, Dr. Ostwald commenting thereon states "Especially it occurs to me that we have perhaps not compared sufficiently the new experiments with the old ones, although we have indeed confirmed almost all of your (J. U. Lloyd's) results by using a more exact method." It is a source of pride that the honored member has contributed his researches to our Association. Incidentally, his 80th birthday was celebrated by Cincinnati in April; there was almost a week of celebration. A Cincinnati daily paper said editorially: "When such a man as John Uri Lloyd celebrates the eightieth anniversary of his birth it is more than a personal event. It becomes a public matter."

Pharmacists of Sweden last year celebrated the 150th anniversary of their organization. The history of their profession, as such, really dates to 1621, when King Gustavus Adolphus granted them royal privileges and stipulated that no new shops were to be opened without authorization by the state. Swedish pharmacists enjoy an equal social standing with physicians. For this meeting in the Section on Education and Legislation we have a paper by Pharmacist Knut Sjöberg, of Stockholm, on "Summary of Regulations Governing the Sale of Drugs and Medicines in Sweden."²

One of our honorary members, William Kirkby, presided over the centenary meeting of Manchester Pharmaceutical Association. The Lord Mayor, in congratulating President Kirkby

¹ See Jour. A. Ph. A., XVIII (September 1929), 862-875.

² Ibid., XVIII (September 1929), 896-902.

and the Association, commended the objects of the organization—the advancement of pharmacy, the protection of legitimate trade interests and the promotion of fellowship; in motives, the members are actuated by a sense of responsibility, and seek only the public good.

This has been a year of Golden Anniversaries of state associations; as far as our records show, six of these organizations have celebrated the 50th year of their accomplishments—Iowa, Kansas, Illinois, New York, North Carolina and Texas.

Former President George Judisch added \$200.00 to the Lillian Judisch Memorial Fund, and contributed an historical account of the Association's activities.

Matt Noll, former president of Kansas Pharmaceutical Association, contributed an historical paper on "Fifty Years of Pharmacy in Kansas." The past-presidents were presented with gold badges.

Curt P. Wimmer gave an illustrated historical account of New York Pharmaceutical Association; pictures of former conventions were shown.

The program of the Illinois Association had a cover of brilliant gold. Secretary Day has prepared a history of the Association, which is part of the program of this Section.

Gold badge buttons were presented to the five living charter members of North Carolina Pharmaceutical Association—E. V. Zoeller, F. W. Hancock, John H. Hardin, F. R. Hood and H. R. Horne; the latter is in his 90th year and still active in pharmacy.

The early records of Texas Pharmaceutical Association were scattered until Secretary Walter D. Adams compiled them into an historical number of the Texas Druggist. The work of Secretary Adams deserves commendation; a bound copy of the History together with the Proceedings of the Golden Anniversary Meeting will be presented to the Library of the American Pharmaceutical Association. The Association has sponsored a fund to be known as "Texas Fund," for equipping, and as far as possible maintaining, the editorial rooms of the A. Ph. A. Headquarters.

Our honorary member, Dr. J. J. Hofman, represented the AMERICAN PHARMACEUTICAL ASSOCIATION at the meeting of the International Pharmaceutical Federation, held during the Jubilee meeting of the National Association of Pharmaceutical Syndicates of France, July 10–12, 1928. Report on formulas of international importance was made by Messrs. Herissey, Greenish and Begium; that on melting and boiling points, by Prof. Dr. Eder and Prof. Dr. Schoorl. Messrs. Collard and Linstead made a number of suggestions for a standard pharmacy law; Prof. Dr. Tiffeneau reported on biologic standards for digitalis preparations, and Prof. Dr. Wasicky on standards for drugs of lesser activities. Stockholm was chosen for the 1930 meeting. A report of the meeting is printed on page 1157 of the November Jour. A. Ph. A. (1928).

The Gesellschaft fuer Geschichte der Pharmazie has added more publications to its list of valuable monographs; a noteworthy number is that by Dr. Leudy, of Switzerland, on alchemical and chemical characters; the book contains 30 illustrations and 128 tables. The former include a number of half-tones of jars and bottles on which the characters are employed to designate the contents. The Society for the History of Pharmacy (France) contemplates for its members the issuance of a de luxe edition of some beautiful work. The secretary of the Society is E. H. Guitard.

Thomas Greenish and Professor Dragendorff were largely responsible for the establishment of the Hanbury medal in memory of the late Daniel Hanbury, who was an honorary member of this Association; Professor Dragendorff also was a member of the A. Ph. A. Former President, H. H. Rusby, will receive the Hanbury medal in October; and two other American pharmacists have been thus honored—Prof. John M. Maisch and Dr. Frederick B. Power.

The College of Pharmacy of the City of New York, Columbia University, celebrated its centenary in June. The program of the celebration was most interesting; a memorial volume, compiled and edited by Curt P. Wimmer, has been published. Historic Drug Store exhibits were arranged by Dr. J. Leon Lascoff, through whose energy and interest the old apothecary shop and modern pharmacy were made possible. The centenary event was further enhanced by the conferring of the Doctor of Science in Pharmacy degree on Drs. R. A. Hatcher and W. A. Bastedo, Dean F. J. Wulling; Chairman of N. F. Committee, Wilbur L. Scoville, and Charles F. Schleussner, a veteran graduate of the College.

Hugh Mercer's apothecary shop at Fredericksburg, Va., in which General George Washington maintained a desk for twelve years, has been recently restored to its former condition, as

far as this is possible. Strange to say, a side of the room with shelves and bottles thereon was boarded up, presumably for the purpose of keeping that part of the store intact for another apothecary occupant. The building was occupied by others who were not apothecaries and the shelving and bottles remained undiscovered until restoration was recently proceeded with. The work of restoration and maintenance is under the direction of the Citizens' Guild. Reference to the Mercer Apothecary Shop can be found in the June Journal, for 1926 and in the September issue of 1928.

The Fifth International Congress of Military Medicine and Pharmacy was held in London, May 17th. U. S. pharmacists were not represented—see June JOURNAL, pages 547 and 611. The reason given is, that Congress made no provision for defraying the expenses of such delegates.

Action was taken at the Portland meeting that the Association should seek to have provisions made for a Pharmacy Corps in the Medical Department of the U. S. Army. The Hearing on the Pharmacy Corps Bill, held on February 20th, gives an account of the evidence presented for the need of a Pharmacy Corps. As much more evidence is in hand it is reasonable to assume that Congress will not ignore the request, because it is right and just, and because reason will not permit the members to ignore the rights of soldiers to the same protection given other citizens. See pages 295–299, March Journal.

"The Production of Pharmacopæias in Various Countries" was the subject of a report of Hugh N. Linstead of the Pharmaceutical Society of Great Britain and Secretary J. J. Hofman of the International Pharmaceutical Federation before the latter body. See JOUR. A. PH. A., 17 (1928), 795-797.

The U. S. Pharmacopæial Convention will assemble in Washington next May for revising the present edition of the U. S. Pharmacopæia. The "Father of the U. S. Pharmacopæia" was Dr. Lyman Spalding, to whose efforts, time, money, energy and persistence the U. S. Pharmacopæia was established. New York University has a Hall of Fame in which men and women who have contributed largely to the welfare of humanity are memorialized. We should see to it that Dr. Lyman Spalding receives the recognition to which he is entitled because of the value of his work to humanity. Nominations will be received February 1st to March 15th and should be sent to Dr. Robert Underwood Johnson, Hall of Fame, New York University. Though Dr. Spalding was not a pharmacist, he recognized the importance of pharmacy. Strong efforts should be made to enlist the interest of medical men and citizens everywhere in this movement; every pharmacist can have a part. The elections are held every five years and only very few are given the distinction.

Dr. John Phillips, member of the Revision Committee of the United States Pharmacopœia was one of the victims of the frightful explosion in the Cleveland Clinic, of which he was the founder

Nagayoshi Nagai, emeritus professor of the Imperial Academy, Japan, died February 10, 1929, aged eighty-four years. He made many important researches in pharmacology, one of the most notable being the synthesis of ephedrine.

This report would extend beyond its limitations to sketch briefly those of our Association who have ceased their labor among us and, therefore, with few exceptions, only the names of the deceased will be given; the numbers in brackets refer to pages in the issues of the Journal, published since our last annual meeting; they are:

Clarence C. Ballou, Boise, Idaho [308]; Narciso Rabell Cabrero, San Sebastian, P. R. [308]; Harry R. Cameron, Port Deposit, Md.; Fred Welcome Churchill, Proctor, Vt. [58 and 323]; Otto Ferdinand Claus, St. Louis, Mo. [307]; Alfred DeLang, Cincinnati, O. [85]; Wm. Larremore DuBois, Catskill [529]; Mrs. John A. Dunn, Lynbrook, L. I.; John Henry Flint, San Francisco, Calif. [529]; Manuel Bernard Francis, Belmont, Mass.; Harry Tower Galpin, Amityville, L. I.; Henry R. Gering, Plattsmouth, Neb. [308]; John G. Godding, Boston, Mass. [433]; Frank S. Goodman, Washington, D. C. [435]; James F. Guerin, Worcester, Mass. [323 and 434]; Harry W. Harris, Chicago; H. L. Haussamen, Grafton, N. Dak. [407]; H. E. Holmes, Seattle, Wash. [1251]; Thomas N. Jamieson, Pasadena, Calif. [84]; James H. Jones, New York City [530]; Gus C. Kendall, Meridian, Miss. [1251]; James D. King, Haddonfield, N. J.; Charles S. Koon, Muskegon, Mich. [1251]; Erich H. Ladish, Chicago, Ill. [307]; Leroy A. Lallance, Bradenton, Fla. [307]; Ferdinand Luedke, Oak Creek, Colo.; James D. Nutt, Wilmington, N. C. [741]; Charles A. Oats, New York City [195]; Harry Pick, New York City;

John R. Pitt, Middletown, Conn. [1162]; D. W. Ramsaur, Jacksonville, Fla. [195]; Wm. H. Rogers, Middletown, N. Y. [195]; L. J. Schlesinger, Yonkers, N. Y. [530]; Albert Schneider, Portland, Ore. [1161]; C. H. Schoenhut, Cleveland, O. [1162]; F. A. Seaman, Daytona, Fla. [308]; Lorentz A. Seitz, Sappington, Mo. [1162]; Otis W. Smith, Sedalia, Mo.; I. A. Solomons, Savannah, Ga.; T. V. Sords, Cleveland, O.; Louis Carl Staudt, Aurora, Ill. [307]; Wm. P. Thomason, Guntersville, Ala. [1251]; Michael Uhorchak, Jersey City, N. J. [530]; Abraham Waisbrod, New Brighton, L. I.

The same issue of the Journal, namely, that of December 1928, carried announcements of the passing of two distinguished British pharmacopæial workers, Edmund White and Sir Nestor Tirard. The Pharmaceutical Journal and Pharmacist said editorially that "there will always stand out to the credit of Edmund White's memory his great and enduring work for education, the decisive stand he took against the practical exclusion of official pharmacy from the work of Pharmacopæial revision, which, endorsed as it was by the Society's Council, undoubtedly precipitated the reorganization of the machinery for this purpose, of which pharmacy now forms an integral part." The name of Sir Nestor Tirard is familiar to American pharmacists chiefly through his joint editorship (with Prof. H. G. Greenish) of the British Pharmacopæia of 1914.

We were shocked by the news of the death of former President John Granville Godding on April 7th. For more than fifty years he was a member of the American Pharmaceutical Association and served as its president 1911–1912. A sketch of our late member is printed in the Journal for April, page 433. Another has said of him, "In his service to pharmaceutical organizations, he thinks only of the cause and asks nothing for himself." Mrs. Godding has attended most of the meetings of the Association with her beloved husband. This year she will be absent and will be missed by her many friends. The loss she has sustained will be keenly felt by her this week. As most of you know, Mrs. Godding is a member of our Association.

At our meeting in Portland the veteran member, in years, W. L. DuBois, celebrated his ninetieth birthday. As usual, he was accompanied by his daughter, Miss Charlotte. The meeting was a most happy one for him, for he enjoyed being with his friends. He also contributed a paper at the last meeting published in the January Journal, page 52. The deceased was honorary president of the Association in 1923–1924. Reference to other issues of the Journal, speak of the esteem in which Mr. DuBois was held.

Thomas Nevin Jamieson contributed largely to fraternal relationships by founding the Chicago Veteran Druggists' Association. Under the direction and from the pen of Wilhelm Bodemann we have a number of contributions in his memory. An article by the latter on his favorite topic appears in the August Journal.

William Henry Rogers, one of the signers of the Incorporation Certificate of the A. Ph. A., a former honorary president of the Association, died January 24th. Those who knew him best speak of him as a man of sterling qualities. A sketch is printed in the August Journal for 1926, and also in that of January 1929.

Dr. Albert Schneider died October 27th, from cerebral hemorrhage. Few members of our Association, or, for that matter, men in other professional lines, have contributed more to the literature of their respective activities than he did. Always active and energetic and seeking information, his years were fully occupied. A sketch of the deceased is printed in the November Journal, 1928. Extended comments could be made relative to all of the deceased, but the references made to the issues of the Journal in which sketches of them appear will serve the purpose better.

The attention of publishers and authors has been called to a coöperative service by inscribing copies of their publications for the AMERICAN PHARMACEUTICAL ASSOCIATION and in this way widening their circle of acquaintance and develop the library service. Doubtless individuals, rather than realize that their libraries will be of little value after their passing, prefer to donate part of their collections to the Headquarters; others have duplicates or historic volumes which they would like to leave to posterity.

Very few of the State and National Associations have made provisions for taking care of books, apparatus and historical material and will be glad to have a repository for them in the Headquarters. This will speak for the collection of such items in all of the states and contribute to the upbuilding of the Headquarters library and museum, and serves as a suggestion to these

organizations—that they have a part in these projects, that their contributions represent an active participation in the institution which they have made possible—reflecting credit to themselves and American pharmacy.

Dr. F. B. Kilmer has contributed a paper to the program of this Section on "The Birth of the Scientific Journal." The paper is based upon an early scientific journal, which was published in France in the 17th Century under the title of *Journal des Scavans*. Dr. Kilmer will present a bound volume of the issues of this Journal for the year 1678 to the Association.

Chairman Scoville has given to the Association a full set of proof sheets, etc., of the A. Ph. A. Recipe Book, and has set aside for later delivery, the Circular Letters and other matter connected with the revision of the National Formulary.

Quite a number of historical papers have been printed in the JOURNAL since the last meeting and have added to the interest and value of the publication.

We are meeting here in a rather new section of the country where we can compare the present with the past, not only as far as developments in the industries and agriculture are concerned, but also in professional life. We can here view the up-to-date pharmacy and hear of, if not see, the primitive drug stores in which some of our members were engaged. They labored with a purpose to advance pharmacy and we know how well they have succeeded; they endured the hardships of an undeveloped country and brought about conditions which compare very favorably with those of other states. A number of pharmacists of South Dakota have had a part in our Association work and we have as our presiding officer one of the foremost retail pharmacists of South Dakota and the United States.

The Historian called attention to a gift made to the Section by President D. F. Jones of an old scale used on a whaler many years ago, and also a siphon for drawing off cod liver oil. He also received from Dean G. L. Curry a book formerly of the library of Emil Scheffer, by Frederich Mohr on "Chemical-Analytical Titration Methods." He desired to thank the donors.

Prof. E. Perrot has sent pictures of the museum in the Paris School of Pharmacy. These pictures are interesting because the Headquarters will have a museum. The Historian also exhibited a photograph on an old show globe from the Apothecaries' Hall at New Haven. He also referred again to the Mercer Apothecary shop which has been restored; many items of the Revolutionary period have been donated to the Association having in charge the restoration of historical buildings in Fredericksburg. The Historian also exhibited a photograph of the John Wesley Chapel in Bristol, England, and called attention to the fact that John Wesley had compiled a Formulary which went through a number of editions. He also exhibited a photograph of Dr. Dragendorff who was largely responsible for the Hanbury Medal.

William B. Day remarked that he did not know John Wesley had written a Formulary but referred to the statement of Oliver Wendell Holmes that "John Wesley believed in sulphur and salvation."

Chairman Kebler appointed a Committee on Nominations as follows: William B. Day, L. L. Walton and W. O. Richtmann.

The reading of papers followed:

"Physics in Pharmacy. Part II," by John Uri Lloyd, Wolfgang Ostwald and Walter Haller. (It is printed in the September Journal on pages 862 to 875.)

"Writing Pharmaceutical Biography and History," by Edward Kremers. (It is printed on pages 1032–1037 of the October Journal.) Appreciation of the paper was expressed by Secretary Beal, Chairman Kebler, E. G. Eberle, E. L. Newcomb and others.

Dr. Kremers also contributed a paper on "Tom, the Doctor's Apprentice." He also presented a paper on "LaMort's Pharmacia" which, as far as he was able to learn, is the first text-book on pharmacy that is so designated. He also donated four cuts from this book. The thanks of the Section were extended to Dr. Kremers. He presented another paper "Flueckigeriana, IV: Lloyd's Conference with Flueckiger in New York."

A paper on "The Birth of the Scientific Journal," by Fred B. Kilmer was read by title. The Historian remarked that Dr. Kilmer intended to present a volume of the Journal to the Association. Dr. Kremers said that there were older Journals in the library of the University of Wisconsin. He contended that chemists prided themselves in being modern scientists. In his

¹ Since then, through the courtesy of Editor Ivor Griffiths, copy and proof sheets, which were on display at Rapid City, have been presented to the Association.

opinion, the frequent statement, that chemistry became a science in 1887, is unfortunate. When we say that experimental science was introduced in the 17th century we forget Archimedes' experimentation. He said that one of the best things teachers can do is to have their students repeat this experiment as nearly as it can be duplicated. He said we are prone to think that all science worth while is of comparatively recent date.

"History of Sharp & Dohme, 1845-1929," by Alfred R. L. Dohme, and "Reminiscences of Early Pharmacy in Baltimore," by David M. R. Culbreth, were read by title.

The First Session of the Section on Historical Pharmacy was then adjourned.

SECOND SESSION.

The Second Session of the Section on Historical Pharmacy was convened by Chairman Lyman F. Kebler at 9:00 A.M., August 29th.

The first number of the program was an illustrated lecture on "Kava-Kava (Piper methysticum) Its Ceremonial Uses in the Samoan Islands" (illustrated by lantern slides) by J. T. Lloyd, A vote of thanks was given to Dr. Lloyd.

"History of the Illinois Pharmaceutical Association," by William B. Day.

Charles H. Avery stated that he had been identified with Illinois Pharmaceutical Association for many years and he appreciated the pains which Secretary Day had taken in writing this comprehensive history.

Frederick J. Wulling said that other states should follow Secretary Day's example in writing history of their respective associations.

Chairman Kebler called attention to the value of such contributions for those who search for information relative to legislation. He is now engaged in compiling food and drug legislation.

The next paper was by H. C. Christensen on "Reciprocity in Pharmaceutical Licensure." It was read by title.

"Pharmacy in West Virginia," was the subject of a paper by Roy B. Cook. The author stated that it was too lengthy for reading at this meeting and he presented it as a record.

The next paper was by Robert J. Ruth on "Pharmaceutical History Is Being Made." (Discussion.)

The next paper of the program was "Garth's Dispensary," presented by Frederick J. Wulling for his son, who is the author of the paper. The Dean presented an abstract of the contribution.

The report of the Committee on Nominations presented the following as nominees:

Chairman, George D. Beal, Secretary, John Thomas Lloyd, Delegate to the House of Delegates, Lyman F. Kebler. The nominees were elected in regular order.

The reading of papers was continued:

"Medical and Pharmaceutical Knowledge by Balzac," by L. E. Warren. (Abstract.)

Secretary Beal gave brief abstracts of the following papers:

"Garcia da Orta and the First Description of Asiatic Plant Drugs," by a European, by Louis H. Roddis.

The following papers were presented by title by Lyman F. Kebler: "Drug Legislation" and "George Thorndike Angell, the Fearless Pioneer for Pure Food and Drugs, and the Friend of Those Who Could Not Speak for Themselves."

The Final Session of the Section on Historical Pharmacy was then adjourned.

Appointment of Japanese Pharmacist General.—The highest rank of pharmacist in the Japanese Army and Navy has been equal to that of the major general. In the Army, however, further improvement has been recently made. (See article in October Journal, A. Ph. A., page 1046.) After due revisions have been made in the regulations concerning the status of pharmacists in the Army, Dr. Matajiro Watanabe, head of the Army Health Material Arsenal, has become the first Pharmacist General (whose rank is equal to that of lieutenant general under date of September 17th.—Japanese Weekly Druggist.

Dr. David I. Macht has been elected to full regular membership in the Optical Society of America in recognition of his original contributions to the physiological, pharmacological and therapeutic effects of ultraviolet and other forms of light.