

## SCIENTIFIC SECTION, AMERICAN PHARMACEUTICAL ASSOCIATION.

ABSTRACT OF THE MINUTES OF THE SESSIONS HELD IN CHICAGO, ILL., AUGUST 14,  
15 AND 16.\*

Owing to the absence of the officers, the first session of the Scientific Section, A. Ph. A., was called to order by A. H. Clark of Chicago, Wednesday, August 14, at 9:30 A.M. Nominations for temporary Chairman and Secretary were called for; there being only one nominee for each office, Edward Kremers of Madison, Wis., and A. G. DuMez of Washington, D. C., were respectively elected Chairman and Secretary of the Sessions.

Address of Chairman W. W. Stockberger:

TO THE SCIENTIFIC SECTION, A. PH. A., CHICAGO MEETING, 1918:

Your Chairman regrets exceedingly that active duties in Washington render it impossible for him to attend the meeting of the Scientific Section and to discharge in person the responsibility with which he has been honored by you. The program is crowded with the titles of papers by members who are present with the expectation of reading them before you, and under the circumstances it seems quite inappropriate for the Chairman to submit a formal address to be read through the courtesy of some member of the Section. However, there is one important matter which your Chairman wishes to lay before you, and that is the desirability of taking definite steps to stimulate to the utmost, research on botanic drugs. In the case of several plant drugs it has recently been shown that the traditional methods for their collection and preparation do not produce a drug of the highest therapeutic value. Upon thorough investigation it is highly probable that the number of plant drugs for which the same is true will prove to be surprisingly large. The conditions arising as a result of the war have greatly stimulated drug growing in this country and no good reason exists for the failure to insist upon suitable control measures in connection therewith in order that the drugs produced may be of standard quality. However, further research is necessary to establish the most desirable methods to use in collecting and preparing the product for the manufacturer.

The shortage in American botanicals has developed another phase of this question. Quite recently a crude drug firm has circularized every State Department of Agriculture in the country, requesting that publicity be given to the desirability of collecting indigenous drug plants. This may result in the collection of a vast amount of material by persons who have no accurate information regarding proper methods of collection and preparation, and perhaps none at all regarding the effect of wrong treatment upon the value of the material itself. The labor situation, also, is causing additional changes in the personnel of the collectors, and the need is therefore great for definite information on all phases of drug collection, compiled in simple form and made available for wide distribution. This unusual opportunity to improve the standard of quality of our native crude drugs should not be overlooked.

Although a vast amount of labor would be required, it is believed that the determination of all the factors which favorably or unfavorably affect the intrinsic value of the more important botanicals, would yield results of great significance. The logical place to carry on the line of research here indicated would seem to be in our colleges of pharmacy. Already about twenty of these institutions have established drug gardens which will afford much of the necessary material. In addition many native botanicals are within easy reach of almost every one of these colleges. Quite apart from its general scientific value, the type of research under discussion would enrich and facilitate the educational work of the colleges and bring to them recognition as centers of specific and reliable information regarding botanic drugs cultivated or collected in the region where they are located.

These suggestions which especially relate to the highly important vegetable *materia medica* are respectfully submitted for your consideration.

W. W. STOCKBERGER,  
*Chairman.*

Washington, August 9, 1918.

On motion the Chairman's address was received for publication in the minutes of the Section.

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\* Papers with discussions will be printed apart from the minutes

Reports of Committees were called for: Chairman Frank R. Eldred of the Committee on Ebert Prize, asked for further time, which was granted; the report of the Committee on the Quality of Medicinal Products was received. (The introductory of the report is printed on p. 817, September issue, JOURNAL A. PH. A.) The report of the Committee on Drug Cultivation follows:

#### REPORT OF COMMITTEE ON DRUG CULTIVATION.

At the meeting of this Association held in 1917, the Scientific Section adopted a motion to appoint a Committee to promote coöperation in matters relative to the cultivation of drugs, and to encourage the dissemination of uniform information concerning this subject. Dr. W. W. Stockberger was appointed Chairman of this Committee, and authorized to select four additional members of the Committee. Upon request, Dr. F. J. Wulling, Dr. Edw. Kremers, Dr. F. B. Kilmer, and Prof. A. W. Linton consented to serve.

No meetings of the Committee have been held, but the Chairman has kept in touch with the other members by correspondence. On account of the positions held by them, each member of the Committee receives a voluminous correspondence regarding the cultivation of plant drugs, and through this medium it has been possible to enlighten thousands of inquirers who, from statements in the public press and often through agricultural and other societies, had obtained the impression that there was a vast fortune awaiting them in the cultivation of drugs. During the year the Chairman has delivered a number of illustrated lectures on drug growing, and on each occasion has endeavored to inculcate the idea that the cultivation of drugs for profit is a serious business proposition which is subject to even greater difficulties and risks than most agricultural enterprises.

Since our last meeting there have appeared in the pharmaceutical press and elsewhere several articles which parallel the line along which this Committee is working. Some of them are as follows:

Army, L. W., "Is Drug Plant Growing Practical?" *Garden Magazine*, Dec. 1917.

Farwell, O. A., "The Cultivation of Medicinal Plants." *Druggists Circular*, Apr. 1918.

Fuller, H. C., "Shall the Amateur Attempt to Grow Drugs?" *Druggists Circular*, Jan. 1918.

Kraemer, H., "Medicinal Plants—Present and Future Supplies." *Am. Jr. Phar.*, 90. No. 6, 1918.

Stockberger, W. W., "Some Plain Facts about Drug Cultivation." *Druggists Circular*, Mch. 1918.

Stockberger, W. W., "Production of Drug Plant Crops in the United States." Yearbook, U. S. Department of Agriculture, 1917.

Among the numerous individuals who manifest an interest in drug cultivation, several classes may be distinguished:

First, and by far the largest class, those who, without experience, expect an enormous profit with a minimum of effort—they should be disillusioned.

Second, physicians or pharmacists who wish to grow drugs in an experimental way for their own information or recreation—they should be encouraged.

Third, educators in our Colleges of Pharmacy who are interested in increasing their educational facilities—they should have our hearty support.

Fourth, those who are engaged in this work in a large and systematic way on a definite business basis—they should have our active coöperation and assistance.

It should be evident to all that the indiscriminate "boosting" of drug cultivation will ultimately result only in disaster. In our desire to foster drug growing in this country, we should not fall into the error of overestimating its relative importance in comparison with other agricultural enterprises. Notwithstanding the fact that the cultivation of certain valuable drugs now seems desirable and necessary, we must remember that the demand is and will continue to be relatively limited. If this industry is to be developed on a sound commercial basis and be in position to meet the competition which it seems certain may be expected after the war, its limitations must be recognized and the necessary steps taken to insure its continuance along rational lines. The respective interests of the producer, dealer and manufacturer must be much better coördinated if drug cultivation in this country is to progress in the face of changed commercial conditions. Our duty to our country makes it imperative that we forestall any

future situation in our drug supply, such as that which obtained at the beginning of the war in 1914, by giving our individual support to an enterprise which affords a practical means of developing supplies of drugs in national emergencies as well as in times of peace.

Respectfully submitted,

W. W. STOCKBERGER,

*Chairman.*

Washington, D. C., August 8, 1918.

The report was referred for publication in the minutes of the Section.

The following papers were read and referred for publication:

"Effect of the War on Drug Importation" (illustrated), by C. L. Alsberg and C. O. Ewing.

"Couch Grass *vs.* Bermuda Grass" (illustrated), by E. N. Gathercoal.

"Histology of Brazilian Jalap" (illustrated,) by O. A. Farwell.

"Brazilian Jalap," by W. L. Scoville. (See p. 785, September issue of the JOURNAL A. PH. A.)

"*Piptostegia Pisonis*," by C. O. Ewing.

"Fluidextract of Squill," by R. I. Grantham and H. C. Colson, Jr.

"Variations in Cinchona Bark and Its Preparations," by Hugo H. Schaefer.

Nominations were presented by the Nominating Committee.

The following papers were read and referred for publication:

"Research and the U. S. Pharmacopoeia," by A. H. Clark.

"Assay of Hypophosphites," by J. P. Snyder and J. K. Dickerson.

The first session of the Scientific Section was then adjourned.

#### SECOND SESSION.

The second session of the Scientific Section, A. Ph. A., was called to order by Chairman *pro tem* Edward Kremers at 2.00 P.M., Thursday, August 15. The following papers were read and, after discussion, referred for publication:

"Tablets for the Disinfection of Drinking Water," by Bernard Fantus.

"Tethelin, the Growth-Controlling Principle of the Anterior Lobe of the Pituitary Body," by R. P. Fischelis.

A paper by the same author on Bismuth Emetine Iodide was read by title.

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

"Analysis of Tablets of Unknown Composition, an Example," by L. F. Kebler.

"Standardization of Fiftieth Normal Potassium Hydroxide," by W. J. Thompson and J. P. Snyder.

"Commercial Cultures of Bulgarian Bacillus," by E. B. Carter.

The second session of the Scientific Section was then adjourned.

#### THIRD SESSION.

The third session of the Scientific Section, A. Ph. A., was called to order by Chairman *pro tem* Edward Kremers, Friday, August 16, at 9.30 A.M.

Chairman F. R. Eldred of the Committee on Ebert Prize reported that the Committee had decided that none of the papers of last year's meeting met the requirements under which the prize is to be awarded, and therefore no recommendation for award was made. The Section approved of the report.

The following papers were read and, after discussion, referred for publication:

"The Commercial Growing of Some European Drugs," by E. L. Woodhams.

"Description of a Trip through the Drug Raising Area of the South—An Illustrated Lecture," by C. O. Ewing.

"Criticisms and Comments on N. F. IV," by Jacob Diner.

"Nitrogen, a Dominant Factor in the Affairs of Man," by L. F. Kebler.

"The Effect of Alcohol on the Activity of Liquor Hypophysis," by Paul S. Pittenger.

"The Deterioration of Tincture of Digitalis," by Paul S. Pittenger.

"Some Experiments on Rhythmic Precipitation" (illustrated), by Curt P. Wimmer.

The following papers were read by title and referred for publication:

"Problems of the Manufacture of Medicinal Chemicals, Directly Resulting from War Conditions," by B. L. Murray.

"Problems of the Manufacturing Pharmacist, Directly Resulting from War Conditions," by C. H. Briggs.

"An Unusual Oil from *Monarda Punctata*," by Max Phillips.

"The Volatile Oil of Canada Balsam," by Max Phillips.

"Camphene in Hemlock Oil," by E. V. Lynn.

"Ozonides and Peroxides of the Terpenes as Therapeutic Agents," by E. V. Lynn.

"Oleoresin of *Pinus Ponderosa*," by E. R. Miller and E. V. Lynn.

#### ELECTION OF OFFICERS.

The election of officers resulted as follows:

*Chairman*, E. N. Gathercoal, Chicago, Ill.

*Secretary*, Hugo H. Schaefer, New York, N. Y.

*First Vice-Chairman*, C. B. Jordan, Lafayette, Ind.

*Second Vice-Chairman*, C. O. Ewing, Washington, D. C.

The officers were installed and Chairman Edward Kremers thanked the members for their coöperation, and expressed his opinion that the work accomplished and papers presented were eminently satisfactory. Chairman E. N. Gathercoal, in assuming the office, thanked the members for the honor conferred on him by the election. A vote of thanks was tendered the temporary officers, and thereafter the Scientific Section adjourned.

### THE EFFECT OF ALCOHOL ON THE ACTIVITY OF LIQUOR HYPOPHYSIS.\*

BY PAUL S. PITTENGER.

Through the statements of the salesmen of one of the large manufacturers of glandular products the impression has become quite general that traces of alcohol destroy the physiologic action of liquor hypophysis.

In other words, they claim that very often when the physician does not obtain the desired results from an injection of liquor hypophysis, the failure is due to the fact that the physician sterilized the hypodermic syringe with alcohol and that the small amount of alcohol left in the syringe destroyed the action of the extract.

As the above statements are made without the support of experimental data I concluded to carry out a series of experiments in order to determine whether or not small amounts of alcohol would influence in any way the activity of the extract as shown by tests upon the blood pressure and the isolated uterus.

The experiments were carried out in two different ways. In some of the experiments the syringe was first washed out with alcohol after which the extract was drawn up into the syringe, and then immediately injected. In the rest of the experiments a small quantity of alcohol was added to the extract and the solution allowed to stand one-half hour before injecting.

The results of eight experiments upon the isolated uterus and of ten experiments upon the blood pressure show that in every case exactly the same effects

\* Read before the Scientific Section, A. Ph. A., Chicago meeting, 1918.