

## PROCEEDINGS OF THE LOCAL BRANCHES

"All papers presented to the Association and Branches shall become the property of the Association with the understanding that they are not to be published in any other publication prior to their publication in those of the Association, except with the consent of the Council."—Part of Chapter VI, Article VI of the By-Laws.

ARTICLE III of Chapter VII reads: "The objects and aims of local branches of this Association shall be the same as set forth in ARTICLE I of the Constitution of this body, and the acts of local branches shall in no way commit or bind this Association, and can only serve as recommendations to it. And no local branch shall enact any article of Constitution or By-Law to conflict with the Constitution or By-Laws of this Association."

ARTICLE IV of Chapter VII reads: "Each local branch having not less than 50 dues-paid members of the Association, holding not less than six meetings annually with an attendance of not less than 9 members at each meeting, and the proceedings of which shall have been submitted to the JOURNAL for publication, may elect one representative to the House of Delegates."

Reports of the meeting of the Local Branches shall be mailed to the Editor on the day following the meeting, if possible. Minutes should be typewritten with wide spaces between the lines. Care should be taken to give proper names correctly and manuscript should be signed by the reporter.

### BALTIMORE.

The members of the Baltimore Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION were guests at the Faculty of Pharmacy of the University of Maryland at their recent meeting held April 20, 1932.

Dr. E. V. McCollum, professor of Biochemistry at the School of Hygiene and Public Health, Johns Hopkins University, and international authority on the Sciences of Nutrition and Dietetics, addressed the Branch, and had for his subject.

#### "OUR PRESENT KNOWLEDGE OF NUTRITION."

Dr. McCollum began with the early researches of Magendie, Liebig, Pettenkofer, Voigt and others, whose work showed that the five fundamental constituents of all foods were proteins, carbohydrates, fats, water and mineral ash, and who demonstrated the necessity of each as a constituent of the diet. Although this work is of inestimable value in that it laid the foundation for the chemical analysis of foods, it also developed the erroneous idea that these components constituted a complete diet and that if one were to eat a sufficient quantity of them he would of a certainty be well nourished.

This idea was definitely disproved by Dr. McCollum in his early researches at the University of Wisconsin, where he fed animals on different experimental diets containing the five components and found that many developed pathologic symptoms and that some died, apparently from inanition. Then began a long and systematic study of foods, having for its

purpose the discovery and isolation of any unknown constituents that might be shown to be a necessary factor in the diet. The results of this work, which was begun by Dr. McCollum and is being carried on to-day by a host of workers both here and abroad, have proved fruitful beyond all expectations, and have demonstrated the existence of no less than thirty-seven accessory food factors. Eighteen of these are amino-acids, eleven are chemical elements, one is a carbohydrate, one a fat and six are vitamins. All but the last six are so widely dispersed that if one eats a moderately varied diet he is almost certain to obtain a sufficient quantity of them for bodily needs.

The vitamins differ from other food factors in several respects: they show a definite and relatively limited dispersion among foodstuffs; they occur in extremely small amounts; their absence in the diet proves characteristic pathologic symptoms which are, in most cases, relieved by administration of the appropriate vitamins. It is interesting to note that vitamins, which are necessary to a rugged and vigorous health are found to be most plentiful in raw and natural foods, and in foods that furnish bulk and roughage, rather than those which have been highly purified. Thus leafy vegetables and citrus fruits have a higher vitamin content than fleshy legumes, or potatoes, while polished rice and highly milled flour contain but traces, and sugar, the purest food product known, is utterly devoid of vitamins.

The researches of Dr. McCollum and co-

workers have produced knowledge that is of inestimable value to the health, and therefore to the happiness and prosperity of humanity. Rickets, scurvy and pellagra have fallen before the patient and persistent efforts of the biochemist. Much light has been thrown upon the problems of sterility, dental caries and multiple neuritis. Such contributions transcend a materialistic evaluation; they stand out as beacon lights along the road of human progress.

WM. F. REINDOLLAR,  
*Secretary-Treasurer.*

#### DETROIT.

The April meeting of the Detroit Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held April 21, 1932, in the Y. M. C. A. Building. The meeting was preceded by a dinner.

L. A. Seltzer, the father of the student night idea, was asked to preside. The minutes of the previous meeting were read and approved. Chairman R. T. Lakey of the Program Committee, outlined the extensive and interesting program arranged by Dean Edward H. Kraus and the University of Michigan for the May meeting and urged a large attendance in Ann Arbor, May 12th.

The students presented a most interesting group of papers as follow

From Detroit College of Pharmacy:

1. Kalman Bator—"Have You Looked at the Label?"
2. Frederick Arnold—"Haliver Oil with Viosterol."
3. Arno Wheeler—"Some Facts about Iodine."
4. James Koich—"Dispensing of Prescriptions."
5. Maurice Kime—"Glass Industry in Pharmacy."
6. Harold Redshaw—"Crystallography."
7. Michael Kovalcik—"Future of Pharmacy."
8. Henry F. Tyszka—"The Fields of Pharmacy."
9. Alfred Lavelli—"Advertising."

From College of the City of Detroit:

1. Miss Eugenia Lemke—"The Early Pharmacist of Detroit."
2. William Briggs—"Apprenticeship and Professional Pharmacy."
3. Ray Poliat—"Beauté de Diable."

Mr. Ingram complimented the students for the splendid papers presented and urged that they be published in the JOURNAL. The outstanding paper was one presented by Miss Eugenia Lemke on "The Early Pharmacist of Detroit." Dean Lakey said much credit is due Miss Lemke for her untiring search through the various libraries in gathering the data for her paper.

Mr. Seltzer said if there was any doubt in the minds of the members as to the wisdom of inviting the pharmacy students into the Detroit Branch, the papers presented by them removed any trace of doubt.

Mr. Seltzer appointed Dean R. T. Lakey of the College of the City of Detroit, Dean Edward H. Kraus of the University of Michigan and Dean E. P. Stout of the Detroit Institute of Technology—to serve on the Committee of Nominations and report at the May meeting, Dean Kraus to act as chairman.

BERNARD A. BIALK, *Secretary.*

#### UNIVERSITY OF FLORIDA STUDENT BRANCH.

The third meeting of the University of Florida Student Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held in the Chemistry-Pharmacy Building on the evening of February 24th. J. E. Katsch presided.

Chairman H. F. Lynch, of the Program Committee, announced several interesting programs which have been planned for future meetings of the year.

The speaker of the evening was Dean C. E. Mollett of the College of Pharmacy, University of Montana. Dean Mollett is pursuing graduate work under Dr. B. V. Christensen at the University of Florida, and presented a paper on the plant *Coptis occidentalis* with which he did some work this year.

*Coptis occidentalis*—family Ranunculaceæ (Salisbury) grows abundantly in the mountainous regions of Montana, Oregon and Washington. It is very similar to the official *Coptis trifolia* (N. F. V.), but is larger, has long petioled leaves and is 3-flowered.

Dean Mollett showed photographs of the plant and pointed out its botanical relationship to other species of the *Coptis* genus.

The analysis of the plant showed: Coptine—0.31%, berberine—4.6%, resins, traces of starch and total ash—5.3%.

Since this plant is larger, more easily collected, and contains a higher per cent of all the active constituents of the official *Coptis*, Dean

Mollet feels that it will be recognized by the next National Formulary.

The principle use of Coptis is as a simple bitter, but it has been used extensively for various eye-inflammations and as a fluid-glycerite for healing apthous sores of the mouth.

A large number of the students and faculty of the Pharmacy College were present.

#### APRIL.

The April meeting of the University of Florida Student Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held in the Chemistry-Pharmacy Building, Monday night, April 27th. James E. Katsch presided.

The treasurer acknowledged receipt of thirty dollars (\$30.00) from the AMERICAN PHARMACEUTICAL ASSOCIATION and it was decided that this money be deposited with the Cashier of the University to be withdrawn by the treasurer in such amounts as the Branch will from time to time see fit to use. There was no further business.

President Katsch introduced the Speaker of the evening—Dr. Ouida Davis Abbott, Director of Research, Home Economics Department, University of Florida Experiment Station. Dr. Abbott's talk was on Vitamine "A," with which she has done some work recently.

The term vitamine has been defined as a group name for substances other than fats, carbohydrates, proteins and minerals, which are found in minute quantities in natural foods. They are essential for normal nutrition and for the prevention and cure of various pathological conditions known collectively as "deficiency diseases."

At the present time there are six independent vitamins, whose existence has been definitely proved, and the data are indicating the possibility and probability of at least three more. The known vitamins are vitamins A, B, C, D, E, F and G.

Vitamine A was one of the first vitamins discovered. It is essential for growth and well being of all ages. While it is not the anti-sterility vitamine, it is necessary for reproduction. The absence of this vitamine from the diet produces in experimental animals very definite changes, the most conspicuous of which is condition of the eye known as xerophthalmia, but the most frequent is the abscess at the base of the tongue, and the pus in the sinuses and

ears. When vitamine A is low in the diet over a period of time there is an increased susceptibility to bacterial infection, which is supposed to be due to the weakened condition of the tissues. It has been found that the body has the power to store this vitamine and is able to draw on this supply for future use. An abundant supply of vitamine A in early life seems to safeguard the body against later infections as well as provide protection for the present. As growth proceeds the amount of this vitamine must be increased. During pregnancy and lactation there must be a still further increase in the vitamine content of the diet if it is to meet the added demands of these functions.

The chief sources of vitamine A are eggs, liver, milk and butter, thin-leafed green vegetables and the pigmented ones.

Of the four pigments in chlorophyll, *alpha* and *beta* Chlorophyll, xanthophyll and carotin, carotin seems to be the active one. It is from this pigment that the body is able to synthesize vitamine A. Carotin has the formula  $C_{40}H_{56}$ . Some investigators are of the opinion that there is an enzyme in the kidneys which is able to split carotin, and have proposed the name carotinare for this enzyme.

Slides were shown showing the pathological condition developed in the kidneys, stomach and testes of the rat, resulting from a deficiency of vitamine A.

A. P. McLEAN, *Secretary.*

#### NEW YORK.

The April meeting of the New York Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held at the College of Pharmacy, Columbia University, on Monday, the 11th, the chair being taken by Vice-President E. A. Bilhuber. There were 102 persons present.

The minutes of the last meeting were read and approved.

Chairman R. S. Lehman, of the Committee on Education and Legislation, reported that the New York State Legislature had adjourned without passing any of the bills introduced by the New York State Pharmaceutical Association. He referred to the Pharmacy bills before the New Jersey State Legislature and to the forthcoming National Drug Store Survey. He then called attention to an article appearing in the *N. A. R. D. Journal* regarding the labeling of prescriptions entering into Interstate Commerce; the F. I. D. 57 relating to this reads as follows:

"If a package compounded according to a physician's prescription be shipped, sent or transported from any state or territory or the District of Columbia to another state or territory or the District of Columbia by a compounder, druggist, physician or their agents, by mail, express, freight or otherwise, the label upon such package is required to bear the information called for by Congress. If, however, the patient himself, or a member of his household, or the physician himself carries such package across a state line, and such package is not subject to sale, it is held that such package need not be marked so as to conform with the law, because such a transaction is not considered one of interstate commerce. The package may be marked so as to comply with the act by either stamp, pen and ink or typewriter, provided all such written matter is distinctly legible and on the principal label, as prescribed in Regulation 17."

This was discussed by Messers. Lascoff, Raubenheimer and Seley and the report was accepted with a vote of thanks.

Treasurer Currens' report was read and accepted.

Chairman Dr. Miller, of the Membership Committee, submitted the application of Meyer Fineberg for membership in the Branch; the application was approved.

Chairman Schaefer, of the Entertainment Committee for the recent Silver Anniversary Dinner of the Branch to the Delegates of District No. 2, presented a financial report. Treasurer Currens moved that the Secretary be instructed to write letters to the *American Druggist* and the four Colleges of Pharmacy of Greater New York thanking them for their participation in the dinner.

Under the heading of Communications, the Secretary reported that President Fischelis was prevented from being present at this meeting because of legislative matters in New Jersey; the Secretary also stated that he had been asked to announce the meeting of the New York Pharmaceutical Conference at the Hotel Astor on April 19th.

Chairman Ballard,<sup>1</sup> of the Committee on the Progress of Pharmacy, presented an interesting report dealing with many subjects, taken from current pharmaceutical literature; among the topics were: Accident Liability Insurance,

with reference to signs, sidewalks, etc.; Removal of Common Stains; Growing Hair; The Return of Show Globes, with formulas for contents; A Veterinarian Pharmacist, operating a pharmacy exclusively for animals; Preparing more uniform and smoother Ointments with Muller and Slab; The Use of Iodine and Sodium Iodide in Radiography; Inclusion of Biology in Pharmaceutical Education in Great Britain.

Dr. Army then introduced the speaker of the evening, Dr. James C. Munch, director of the Pharmacological Research Laboratories of Sharp & Dohme, and consulting pharmacologist of the U. S. Department of Agriculture. Dr. Army referred to papers published by Dr. Munch on his research work, saying that he marvelled at such an output from one man.

Dr. Munch's subject was "Recent Advances in the Study of Digitalis and Its Allies." As a general introduction the methods of physiological assay prescribed in U. S. P. X or recommended for U. S. P. XI were very briefly presented. The U. S. P. X method of assay of Digitalis, the so-called "One-Hour Frog Method," was then demonstrated with the assistance of Mr. Arnold Quici. This method consists in selection of frogs weighing between 20 and 30 grams, storing them at a temperature of 15° C. or less until used, the holding at 20° C. for several hours, wiping, weighing and injecting a measured quantity of solution into the ventral lymph sac. The frog is returned to 20° C. water for one hour, then the brain and the spinal cord destroyed and the heart exposed. If too small a quantity of material has been administered the heart will be beating at a normal or slightly decreased rate. If a sufficiently large, or too large, quantity of active material has been injected the heart will be stopped in a characteristic condition; the single ventricle will be tightly contracted, while both auricles are widely dilated, but no muscular contractions will be visible in the heart muscles. By using a large number of frogs under proper conditions, it is pointed out that preparations such as tincture of digitalis might be bioassayed with an accuracy of 10 per cent. To allow for the variability of different lots of frogs, under different conditions of storage, climate, temperature, sex and season, each batch of frogs is standardized simultaneously by the administration of a crystalline standard—ouabain. This ouabain is distributed by the Food

<sup>1</sup> Dr. Ballard is now the Secretary of the Section on Education and Legislation, A. Ph. A.

& Drug Administration of the United States Department of Agriculture in accordance with the provisions of the U. S. P. X. Reference was then made to the work being conducted by the Committee on Pharmacology and Bioassay of the AMERICAN PHARMACEUTICAL ASSOCIATION upon the deterioration of tincture of digitalis. For this work approximately 50 gallons of tincture of digitalis were prepared in accordance with the U. S. P. X method. A portion of this was diluted with 70% alcohol to constitute a second tincture. Given code letters these two tinctures were stored in flint, amber and blue bottles under various conditions of storage. They have been re-assayed at approximately three-month intervals since their preparation in 1928. This work is being continued to determine the further effects of various factors upon deterioration of tincture of digitalis.

Current research work upon *Adonis vernalis* was reported, with special reference to investigations by Mercier and Mercier, which suggests that this drug contains two glucosides, one having a diuretic and no cardiac effect, the other cardiac and no diuretic effect. It is reported that the cardiac glucoside is not cumulative in its action. Investigations of authentic samples of the crude drug, as well as commercial lots of fluidextract, have shown that it has the same physiological activity, measured by the U. S. P. X One-Hour Frog Method as does fluidextract of digitalis. Similar investigations on authenticated crude drugs, as well as commercial galenicals, have shown that *Apocynum* is twice as potent and *Convallaria* three times as potent as *Digitalis*. It was accordingly recommended that, if the fluidextract of these products which are now official in N. F. V be recognized in N. F. VI, the following standards be required for bioassay by the One-Hour Frog Method:

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|--|------------------|
| Fluidextract of <i>Digitalis</i> . . . . .   | 0.6 cc. per Kilo |
| Fluidextract of <i>Adonis</i> . . . . .      | 0.6 cc. per Kilo |
| Fluidextract of <i>Apocynum</i> . . . . .    | 0.3 cc. per Kilo |
| Fluidextract of <i>Convallaria</i> . . . . . | 0.2 cc. per Kilo |

Further investigations were then reported by means of the electrocardiograph which had pointed out the differences, as well as the similarity in action, of the various drugs of the digitalis group. Based upon these animal results clinical investigations are now under contemplation to determine the proper conditions for clinical use of these congeners.

Questions concerning the paper were asked by Drs. Lascoff, Raubenheimer, Nyiri and others. Dr. Wimmer said he felt that all present had enjoyed a most interesting and instructive lecture and he proposed a rising vote of thanks to Dr. Munch; this was carried.

HERBERT C. KASSNER, *Secretary*.

#### THE ACADEMY OF PHARMACY AND THE NORTHERN OHIO BRANCH OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

The third regular meeting of the Academy of Pharmacy was held in the Biology Lecture Hall of Western Reserve University at 8:00 P.M., Friday, April 8th.

The meeting was called to order by President Flandermeyer. Dean Spease introduced the speaker, Dr. Louis Klein, Director, Medical Service, Parke, Davis and Company.

Dr. Klein discussed "The Present Status of Research in Endocrinology" and presented the following chart as an outline of his talk:

*I. Pre-Demonstration Phase: a. Thymus; b. Pineal; c. Mammary.*

*II. Demonstration Phase: a. Intestinal hormones—1. Secretin, 2. Cholecystokinin, 3. Duodenal hormone. b. Placental hormone, 1. Ovarian-like hormone, 2. Pituitary-like hormones.*

*III. Concentration Phase: a. Parathyroid, b. Corpus luteum—1. Progestational hormone, 2. Relaxative hormone, c. Anterior Pituitary—1. Growth hormone, 2. Sex hormone, d. Testicular hormone, e. Suprarenal cortex.*

*IV. Isolation and Analysis Phase: a. Pancreas (Insulin), b. Posterior Pituitary—1. Alpha hormone, 2. Beta hormone, c. Ovarian follicular hormone—(Theelin) (Theelol).*

*V. Synthetic Phase: a. Suprarenal medulla (Epinephrine), b. Thyroid (Thyroxin), c. Theelol converted into Theelin.*

Dr. Klein stated that the above chart was a classification of the biochemical problems in endocrinology only from the standpoint of the biochemist. As he explained the chart he pointed out the products which were therapeutically useful and the products that were in the doubtful stages.

The concept of the chart, said Dr. Klein, is rather interesting because from the biochemical standpoint it shows at a glance everything that has been done. The last title is the goal of all

research. Dr. Klein also discussed the compound theelin.

In closing Dr. Klein explained that while he seemed to be a little pessimistic about what had been done in a clinical way in endocrinology, he was very optimistic about what the future will bring out. Within the next few years our notions may be materially changed.

The meeting adjourned after the discussion period.

*Bulletin 7* discusses ephedrine solutions regarding dispensing and preservation. *Bulletin 8* relates to Iron preparations.

#### PHILADELPHIA.

The April meeting of the Philadelphia Branch of the AMERICAN PHARMACEUTICAL ASSOCIATION was held at the Philadelphia College of Pharmacy and Science, on Tuesday evening, April 12, 1932. President Stoneback called the meeting to order.

The minutes of the March meeting were read and approved. Chairman Slothower then proposed the following for membership in the local branch, subject to approval: T. H. Wenke, F. J. Osborne, George Bartholomew, 3d, R. Beresford and J. E. Kramer.

President Stoneback announced the committee appointments for 1932-33, as follows:

*Committee on Practical Pharmacy:* John Walton, *Chairman*; J. K. Thum, and S. H. Kerlin.

*Committee on Professional Relations:* W. L. Cliffe, *Chairman*; Dr. Wilmer Krusen, and Dr. John Minehart.

*Committee on Membership:* Harvey P. Frank, *Chairman*; L. L. Miller, F. R. Firebaugh, Robert Schrey, Alfred Barol, C. G. Bliss and Dr. Frank Eby.

*Committee on Entertainment:* J. W. E. Harrison, *Chairman*; Adley B. Nichols, and Raymond Hendrickson.

Because of recent local interest, the drug Cannabis was chosen as the subject for the evening's discussion. President Stoneback introduced the speakers in the following order: Dr. M. S. Dunn, who discussed the Botany and Pharmacognosy of the drug; Dr. C. H. LaWall, who offered interesting information regarding the chemistry and history of Cannabis; Dr. P. S. Pittenger, who described the bio-assay, and related personal experiences pertaining to the early attempts at standardization; Dr. J. C. Doane, who presented his observations of persons addicted to Cannabis and other narcotic drugs; and, Mr. Morgan Toehill, who

related startling experiences encountered while investigating the misuses of Cannabis.

A general discussion followed, the participants being Messrs. Harrison, Munch, Dunn, Pittenger and LaWall.

A vote of appreciation was tendered the speakers by the sixty-five members of the audience.

E. H. MACLAUGHLIN, *Secretary*.

Just before closing forms we are advised of the death of Dr. John R. Minehart, Philadelphia, and of H. L. Meredith, Fort Pierce, Fla., further notice will be given in next issue of the JOURNAL.

To the unprecedented developments of the last half century the medical sciences have contributed their share, and the intense activities of chemists, physicists and bacteriologists in health promotion are reflected in both medicine and pharmacy. In this constant search for facts we naturally see two trends. One of these is the discrediting and disuse of some of the older remedies and methods. The other is the discovery and introduction of the new. This situation is revolutionizing pharmaceutical service in everyone of its phases, but it is not destroying pharmacy itself, for many with ability and understanding have foreseen and are meeting the developments as they arise.—  
*From an address by E. Fullerton Cook.*

#### ACTIONS IN CONGRESS ON HEAD-QUARTERS BUILDING SITE.

Several favorable actions by the District of Columbia on the A. PH. A. Headquarters Building site and the U. S. Senate (Res. No. 50) were taken sometime ago and on May 9th the House acted favorably, which now authorizes Commissioners of the District of Columbia to close upper Water Street between 22nd and 23rd Streets. The Director of Public Buildings and Public Parks of the National Capital is authorized to transfer to the AMERICAN PHARMACEUTICAL ASSOCIATION such an area adjacent to the land owned by the said ASSOCIATION, etc. The further action provides that the design of the said ASSOCIATION'S building shall be such as to be approved by the National Commission of Fine Arts and designates its use. On May 10th the message applying was read in the Senate and communicated to the House. The speaker announced his signature to the Joint Resolution. This, it is reasonable to assume, brings the time near when building operations on the American Institute of Pharmacy can be commenced.