station could be kept up. The hectic session of the Legislature brought out coöperation among the druggists that had not obtained before.

**Rhode Island.**—W. Henry Rivard stated that no drastic legislation was passed in Rhode Island. No sales tax was passed and the law regarding assistant pharmacists was strengthened. Provision permitted assistant pharmacists to become fully registered, which after considerable difficulty was vetoed. Such a measure is apt to come up again. An effort is being made to increase the membership of the State association.

John P. Jelinek said that in Minnesota an effort was made to register pahrmacists without examination. The Board of Pharmacy had a conference with the committees of both houses and compromised. It was agreed that a special examination would be held and those passed would be registered pharmacists under the Act. Two examinations were held and about 140 were passed.

W. H. Rivard said that under the law of Rhode Island there can be no further registration of assistant pharmacists. Provision has been made for students in the three-year course until 1936 and for professional men who have been in business since July 1931, to become registered until 1936. Anyone who has been in the drug business for ten years as assistant pharmacist may become a fully registered pharmacist without examination.

South Carolina.—J. M. Plaxco stated that in South Carolina all the nuisance taxes had been proposed. The legislative committee spent the entire session killing two general sales taxes and one other was to give physicians the right to fill prescriptions on their own premises.

Mrs. Fayetta Philip said that many bills were introduced in California relating to pharmacy.

R. L. Swain made a motion that this conference of the Section on Education and Legislation, the Conference of Law Enforcement Officials, and Pharmaceutical Secretaries be continued at future meetings. This was seconded and unanimously carried.

Secretary Kelly expressed his thanks to the officers and those who had prepared the program and his regret, because he had not been able to attend the entire meeting.

On motion duly seconded and carried the meeting was adjourned.

## REPORT OF THE 11TH ANNUAL MEETING OF THE PLANT SCIENCE SEMINAR.

## BY F. J. BACON, SECRETARY-TREASURER.

The Plant Science Seminar held its 11th annual meeting in Madison, Wisconsin, at the Chi Omega House from August 21 to August 25, 1933. Chairman William B. Day presided at the regular sessions. According to the usual custom the program was divided into scientific sessions, field trips and special lectures on subjects of interest to pharmacognosists.

After registration and a short business session the Seminar visited the University of Wisconsin Medicinal Plant Garden. Dr. W. O. Richtmann conducted the group over the garden and explained the development of the garden from the very modest beginning on the University campus to the present location on University Drive. The plants cultivated and the methods of cultivation employed by the Garden were explained in detail.

At eight o'clock Dr. M. E. Diemer, Director of the Diemer Photographic Laboratories, gave a lecture on Wisconsin wild medicinal plants illustrated with colored lantern slides. The specimens were photographed with color plates in their native habitats and the slides prepared in true color. This beautiful presentation of familiar plants was greatly appreciated by the Seminar people.

Mr. Leroy D. Edwards, of Western Reserve University, School of Pharmacy, presented a paper on "A Study of *Cimicifuga racemosa* (L.) Nutt." The author discussed the methods employed in the treatment of the drug and the results obtained. Sucrose was isolated from the drug. No alkaloid was obtained.

Dr. Heber W. Youngken presented the results of his latest work on Psyllium Seed. Specimens of many varieties of Psyllium were discussed, and the histology and identification of the so-called "Adex Psyllium" as the fruits of *Lallemantia royeleana* Benth. Dr. Youngken illustrated his talk with specimens and drawings and pointed out the danger of using the Lallemantia fruits as a substitute for Psyllium Seed.

Dr. B. V. Christensen, of the University of Florida College of Pharmacy, presented an illustrated lecture on the "Planning and Development of a Medicinal Plant Garden." Dr.

Christensen showed pictures of many tropical and subtropical medicinal plants cultivated in Florida, and discussed their cultivation.

Dr. Ralph Bienfang, of the University of Oklahoma School of Pharmacy, discussed the system of arrangement of drugs taken up in their courses in Pharmacognosy.

The Seminar visited the Forest Products Laboratory Tuesday afternoon. Small groups were formed and conducted through the Laboratory by competent guides. The various projects of the Laboratory were explained. In the evening Mr. J. A. Hall, Biochemist of Forest Products Laboratory, talked to us on "Biogenetics in the Terpene Series."

The Wednesday morning session was held in the Pharmacognosy Department of the University of Wisconsin. Dr. W. O. Richtmann, Professor of Pharmacognosy, explained to us the results of many years' work on the "Sources of Information on Crude Drugs."

Dr. A. H. Uhl, of the University of Wisconsin Course in Pharmacy, presented a paper on the "Phytochemistry of Digger Pine."

Professor C. J. Zufall, Purdue University, presented the results of his work on Cardamom and suggested a method of assay for the seed.

The afternoon was devoted to a boat ride on Lake Mendota. A stop was made to inspect the garden of Dr. and Mrs. Diemer.

Dr. Karl Paul Link, Professor of Biochemistry of the University of Wisconsin, lectured to the Seminar on "Recent Research on the Chemistry of Gums and Pectin." Dr. Link presented to the Seminar an extremely interesting and instructive talk on the structure and chemistry of the gums so widely used in Pharmacy.

The Seminar spent all day Thursday in the field, visiting Blue Mounds, Tower Hill State Park and Taliesin Art Center directed by Frank Lloyd Wright. Lunch, furnished by Eta Chapter of Rho Chi Society, was served at Tower Hill at one o'clock. Many specimens of Wisconsin medicinal plants were collected in the Wisconsin river valley. Dr. Denniston, of the Botany Department of the University, acted as guide.

The Friday morning session was held at the Chi Omega House and Professor E. C. Claus, of the Pittsburgh College of Pharmacy, presented reprints on "Poisonous Plants of Pennsylvania," prepared by Dr. Darbaker.

A classification of our native species of the genus Mentha was given by Dr. F. J. Bacon of Western Reserve University School of Pharmacy.

Dr. Edward Kremers discussed the chemistry of mint oils and brought out the biogenesis of the compounds found in the mint oils.

Professor Canis, of Rutgers University School of Pharmacy, presented a paper on the meaning of Pharmacognosy and discussed the method he uses to present his course.

Chairman Day opened the business session at eleven o'clock and called for the election of officers. The following were elected to conduct the business of the Seminar for 1934: President, F. H. Eby; Vice-President, L. K. Darbaker; Executive Committee, William B. Day, C. E. Mollett; Secretary-Treasurer, F. J. Bacon.

Dr. and Mrs. Kremers invited the Seminar to a picnic supper at their home, "The Highlands." After an excellent lunch served on the lawn we were entertained around the campfire by Dr. C. E. Brown, Curator of the Historical Museum. Dr. Brown told many interesting stories about Wisconsin Indians.

The following members and guests attended the Seminar in Madison:

C. C. Albers, University of Texas, Mrs. C. C. Albers

F. J. Bacon, Western Reserve University, Mrs. F. J. Bacon

Ralph Bienfang, University of Oklahoma

J. B. Burt, University of Nebraska, Mrs. J. B. Burt

F. S. Bukey, University of Nebraska, Mrs. F. S. Bukey

O. P. Canis, Rutgers University

P. D. Carpenter, University of Illinois

B. V. Christensen, University of Florida, Mrs. B. V. Christensen

E. C. Claus, Pittsburgh College of Pharmacy, Mrs. E. C. Claus

R. W. Clark, University of Wisconsin, Mrs. R. W. Clark

William B. Day, University of Illinois, Mrs. William B. Day L. D. Edwards, Western Reserve University W. W. Eggleston, Bureau of Plant Industry F. H. Eby, Temple University, Mrs. F. H. Eby P. A. Foote, University of Florida, Mrs. P. A. Foote E. N. Gathercoal, University of Illinois, Mrs. E. N. Gathercoal Miss Katherine Graham, University of Wisconsin E. J. Ireland, University of Wisconsin R. S. Justice, Ohio State University Edward Kremers, University of Wisconsin, Mrs. Edward Kremers Miss Mary Langevin, University of Nebraska W. O. Richtmann, University of Wisconsin, Mrs. W. O. Richtmann F. J. Slama, University of Maryland, Mrs. F. J. Slama A. H. Uhl, University of Wisconsin Miss Nellie Wakeman, University of Wisconsin E. H. Wirth, University of Illinois H. W. Youngken, Massachusetts College of Pharmacy Sister Mary Francis Xavier, University of Wisconsin C. J. Zufall, Purdue University, Mrs. C. J. Zufall.

## HOURS IN EUROPEAN PHARMACIES.

The International Pharmaceutical Federation has investigated the hours of opening and closing of pharmaceies. The questionnaire was as follows: (a) Are there any regulations relating to the closing of pharmaceies? (b) Are these regulations of general, provincial or local application? (c) Are these regulations issued by some competent authority, or by pharmaceutical organizations?

Among the replies received from twenty-one countries, and published in the Bulletin de la Federation Internationale Pharmaceutique, are the following:

Austria.—There are no official regulations. In Vienna pharmacies close at 7:00 P.M., and this closing hour, with slight variations, is general in Austria. Evening and night duty is undertaken by rota. In Vienna on every second Sunday pharmacies must close from 1:00 P.M. until Monday at 7:00 A.M., without obligation to provide a night service. Service for Sundays and holidays is officially regulated.

Czechoslovakia.—Pharmaceutical service must be given uninterruptedly, and is regulated by a law of 1908, augmented by orders of departmental authorities which are published in cooperation with pharmaceutical organizations. These regulations are based on an eight-hour working day. Pharmacies are open from 8:00 A.M. to 7:00 P.M.—8:00 P.M. In places where there is only one pharmacy the pharmacist has the right (on authorization) to close from 12 M. to 2:00 P.M., and may close on Sunday afternoon if he agrees to supply urgent medicines.

*Esthonia.*—There is a legal obligation for a pharmacist to supply medicines at any hours. This is of general application. In towns with several pharmacies night service is given by districts, the rota being arranged by the Director of Pharmacies. Opening hours are from 8:00 A.M. to 8:00 P.M., and may close on Sunday afternoon if he agrees to supply urgent medicines.

*Finland.*—Closing hours are not regulated by law, but an order stipulates that pharmacies must give a day or night service if required. By Par. 14 of an order of December 17, 1928, the medical authorities can determine the hours of service.

Greece.—By a decree of the Ministry of National Economy and Police, pharmacies are to be open from 8:30 A.M. to 1:00 P.M., and from 3:00 P.M. to 8:30 P.M. to 1:00 P.M. and from 4:00 P.M. to 9:00 P.M. in March, April, October; from 7:30 A.M. to 1:00 P.M. and from 4:00 P.M. to 9:00 P.M. in May, June, July, August, September. These regulations apply only to towns. On Sundays about a quarter of the pharmacies are open.

*Switzerland.*—Regulations for closing and hours of service vary in different cantons. In the majority of towns there is a regular night service as well as a Sunday service by rota. In Zurich regulations have been drawn up by the pharmacists, and accepted by the sanitary authorities.