

## SESSIONS OF CONGRESS AS A WHOLE

Three evening sessions of the Congress as a whole were arranged, the first, the formal opening, August 16, being addressed by the President of the Congress, Liberty Hyde Bailey (see Vol. 1, Introduction), and by President Livingston Farrand, who graciously extended the hospitality of Cornell to its guests. At this meeting an invitation from the British Botanists to hold the next International Botanical Congress at London in 1930 was presented by Dr. A. B. Rendle for the committee, composed of himself, Dr. A. W. Hill, and Dr. E. J. Butler (see second paragraph below).

On the occasion of the second and third sessions of the Congress, August 18 and August 20, respectively, invitation addresses were delivered by Prof. F. A. F. C. Went (Vol. 1 pp. 1-12), and by Dr. Erwin F. Smith (Vol. 1 pp. 13-45).

Two business sessions were held August 19 and 20. At the first session a letter of invitation from the British Botanists, as below, was presented for action:—

Linnean Society, Burlington House, London, W. I.

March 10, 1926.

At a representative meeting of British Botanists held in the rooms of the Linnean Society on March 19th, 1926, it was unanimously decided to invite the botanists assembled in Ithaca at the Conference of Plant Sciences in August next, to meet in London in 1930 for the Fifth International Botanical Congress.

Dr. A. W. Hill and Dr. E. J. Butler with the Chairman of the meeting, Dr. A. B. Rendle, were asked to convey the invitation.

A. B. Rendle, Chairman.

After a general expression of interest and anticipation the invitation was, on motion, accepted by acclamation. Following this action a formal vote of thanks was extended to Cornell University and to all those giving time and thought to the work and organization of the Congress. At the second business session all further items of business requiring attention were disposed of. (1) Professor Went reported on the question of the International Union and the steps being taken to promote this organization. He hopes for the adherence of all countries believing that the organization referred to and the International Research Council would tend to extend and perpetuate the common interest of botanists throughout the world. He felt that some division of the organization effected would naturally take over certain duties of the International Association of Botanists. The proposition was discussed but no action was taken, in harmony with the avowed principles of this Congress to enact no legislation in any way committing or tending to regulate the interests of botanists generally. (2) The secretary of the section for Taxonomy, on behalf of the section, presented the following:

"It is the sense of the Fourth International Botanical Congress that the proper maintenance, increase, accessibility and utilization of the great herbaria of the world are matters of international concern not merely to botanical science, but to the nations which benefit through the contributions therefrom to the advancement of civilization."

## SPECIAL ACTIVITIES

The limitations of space preclude the presentation of an adequate account of various meetings, both official and unofficial, which provided additional opportunities for contacts both social and scientific, including general entertainments, group meetings and dinners, memorial and complimentary occasions, and sectional or combined excursions. Field trips constituted important aspects of most programs, and in addition to local field trips in the phytogeographically and otherwise interesting environs of Ithaca, longer trips were arranged for the close of the week and later. These included a visit to the Agricultural Experiment Station at Geneva, N.Y., a Niagara Falls excursion, a tour in eastern Canada, and an extended field trip to the Western United States, the latter especially requiring brief mention.

*Western Field Trip, August 23 to September 15.*—Immediately following the scientific sessions of the Congress a botanical and sight-seeing trip to Yellowstone National Park, Wyo-

ming, was conducted under the leadership of Dr. George D. Fuller, of the University of Chicago, Chicago, Illinois. It occupied about three weeks and provided opportunity for seeing two of the finest national parks in the United States; also other places of historical, botanical and general interest.

*Exhibits.* Laboratory exhibitions and demonstrations of methods, materials, apparatus, and preparations, representing phases of investigations in process were participated in by about ten of the sections, including about fifty individual exhibits—most of these being referred to in the printed programs distributed at the time. Field exhibits were also arranged by the Cornell representatives of several sections.

*Association of Official Seed Analysts of North America.* Meetings of this association were held in conjunction with the Congress, with a full program for the four days of regular sessions. The papers presented are not included in these Proceedings. The officers of this Association were as follows:— President: W. H. Wright, Seed Branch, Dept. of Agriculture, Toronto, Canada. Vice-president: Elizabeth F. Hopkins, N. Y. Agricultural Experiment Station, Geneva, N.Y. Secretary-Treasurer: A. L. Stone, University of Wisconsin, Madison, Wisconsin.

## SECTIONS OF THE CONGRESS: MINUTES

### SECTION A—AGRONOMY. *Roy B. Wiggins, Secretary*

The Section held two morning program sessions of invitation papers, exclusively agronomic, and one session in which the Section for Genetics cooperated. On Aug. 20, jointly with the Section for Horticulture, agronomists cooperated with the Section for Physiology. A round table discussion, "The place of statistics in the interpretation of experimental data," led by H. H. Love, continued the program of Tuesday Aug. 17, the Sections for Genetics, Horticulture, and Physiology participating.

Fourteen formal papers were presented by the following: N. M. Tulaikov, O. Arrhenius, H. H. Love, Carlo Cappelletti, D. N. Borodin, T. A. Kiesselbach, L. J. Stadler, A. T. Kirssanoff, H. K. Hayes, C. E. Leighty, J. R. Holbert and J. D. Dickson, N. I. Vavilov (2 papers), D. F. Jones, and D. N. Borodin. These all appear in Volume 1 (pp. 53-173) with the exception of the paper "Dependent segregation" by D. F. Jones, Connecticut Agricultural Experiment Station, for which other publication arrangements were made. Besides the more general botanical excursions, special arrangements were made to visit local experimental field plots, and on Aug. 21 agronomists united with those interested, especially the Sections for Genetics and Horticulture, to inspect the New York Agricultural Experiment Station at Geneva.

### SECTION B—BACTERIOLOGY. *James M. Sherman, Secretary*

The morning session of Thursday Aug. 19 was devoted to formal papers concerned with "Morphological and physiological variations in bacteria", Robert S. Breed, Vice-Chairman, presiding. The speakers were: Hilding Bergstrand, Felix Löhnis, Ralph Mellon, and Arthur T. Henrici. On Friday, Aug. 19, papers were presented by Robert E. Buchanan, Selman A. Waksman, B. Issatchenko, and B. Issatchenko and A. Salimowska. The Section for Physiology cooperated in a joint discussion of oxidation and reduction phenomena, with a formal paper by Wm. Mansfield Clark. The papers mentioned appear in Volume 1 (pp. 175-242) with the exception of "The relation of bacterial variability to their life cycles with special reference to a sexual cycle" by Ralph T. Mellon, Highland Hospital, Rochester, N.Y., the major aspects of which had been published in advance. The bacteriologists arranged as a part of their program cooperation with the Sections for Physiology, Pathology, Mycology, and Taxonomy.

The following resolutions relating to nomenclature were adopted by the section:—

That the International Interim Committee, or some other competent committee—

1. Be asked to draft an amendment to the International Botanical Code which will indicate clearly the nomenclatural status and disposition of names of organisms transferred from the animal kingdom to the plant kingdom, such amendment to be presented to the next international botanical congress.

2. Be requested to draft an amendment to the International Botanical Code which will clearly and definitely exclude bacteriological nomenclature from the requirement of a latin diagnosis of new forms described, such amendment to be presented to the next international botanical congress.

3. Be informed that in the opinion of this Section there is no sufficient reason for the establishment of a point of departure for the nomenclature of the bacteria subsequent to 1753, and that this Section suggests that this date be incorporated into the International Botanical Code.

4. Be informed of the suggestion of this section that greater emphasis should be placed in the International Code upon the so-called "type concept," but with the request that no provision be incorporated which will make necessary the designation of a "type or standard specimen", in the ordinary botanical sense, for bacteria.

5. Be requested to select a special international and representative committee of bacteriologists, which committee may have as its particular function the coordination of the particular nomenclatural interests of bacteriologists with those of other botanists, such committee to report its findings and recommendations through the regular channels in preparation for the next international botanical congress.

6. Be requested to prepare for submission to the next international botanical congress an amendment to the International Rules of Botanical Nomenclature which will provide for the appointment of a permanent International Commission on Botanical Nomenclature which shall have duties and responsibilities similar to those of the International Commission in Zoological Nomenclature.

#### SECTION C—CYTOLOGY. *Lester W. Sharp, Secretary*

The sessions were opened with a brief introductory address by the chairman, George Tischler, University of Kiel, Germany. In his address the chairman stressed some of the peaceful accomplishments of scientific work and the importance of internationalism in science. Five regular sessions of the Section were held, two of these being arranged jointly with the Section for Genetics. Round table discussion periods occupied two afternoons, one conducted jointly with the Section for Genetics on the topic "The cytology of hybrid plants," led by T. H. Goodspeed; in the other period the Section for Cytology cooperated with the section for Physiology in the discussion of "The physical chemistry of protoplasm," led by B. M. Duggar. A joint session with the Sections for Genetics and Taxonomy was arranged as a symposium, "The significance of taxonomic units and their natural basis," the participants in this discussion being mentioned under Taxonomy. At the regular sessions papers were read by B. Nemeč, W. Seifriz, Nils Svedelius, W. R. Taylor, M. Levine, Kathleen B. Blackburn, Otto Heilborn, R. A. Harper, R. E. Cleland, C. E. Allen, and Karl Sax (Volume 1, pp. 243-350). In the absence of the authors, abstracts were read by the chairman of papers by M. Nawaschin and T. Sakamura and I. Stow. Members of the Section participated in field excursions and in visits to the experimental plots of various departments of the New York State College of Agriculture.

#### SECTION D—MORPHOLOGY, HISTOLOGY AND PALEOBOTANY. *Duncan S. Johnson, Secretary*

The work of the section was introduced with an address disclosing the broad field of opportunity in research, especially in the borderlands between morphology and the newer divisions of experimental botany, by the chairman, Robert Chodat, University of Geneva, Switzerland. The section held regular scientific sessions on four forenoons, in one of which the Section for Taxonomy cooperated, the topic being "The phylogeny of the angiosperms." Formal papers were presented by F. A. F. C. Went, John T. Bucholz, W. D. Hoyt, Rudolf Florin, J. Hutchinson, Arthur J. Eames, G. R. Wieland, Nils Svedelius, Charles J. Chamberlain, R. B. Thompson, and Robert Chodat. An exhibition of anatomical and paleobotanical materials was held, and suitable excursions were arranged.

SECTION E—ECOLOGY. *H. L. Shantz, Secretary*

In opening the program of sectional meetings Chairman Eduard Rübel, in a short introductory address, outlined the correlation of this Congress with previous congresses and stressed the continuity of purpose in ecological gatherings. In the regular program 19 papers were presented. Of these 16 are printed in Volume 1 (pp. 479-691), by Karel Domin, C. Conzati, Amelio del Villiar, Carl Skottsberg, J. W. Toumey, Alvar Palmgren, G. E. Du Rietz (two papers), H. A. Gleason, G. E. Nichols, W. Szafer, A. Borza, Rutger Sernander, W. H. Pearsall, A. G. Tansley, H. C. Cowles. W. S. Cooper, University of Minnesota, presented a paper, "The fundamentals of vegetational change," for which previous arrangements for printing had been made. Two additional papers were submitted by abstract, those of W. Szafer and W. H. Brown. The section also took part in a joint discussion with the Sections for Horticulture and Physiology on the subject of "Photoperiodism." Special excursions were arranged, and at the close of the Congress several of the ecologists took part in an extended trip, including the Yellowstone National Park.

At a business session the Section appointed the following *ad interim* committee on Phytogeography to form a link between the present Congress and the proposed international botanical congress of 1930, the representatives being as follows: Rübel (Switzerland), Cowles (U. S. A.), Diels (Germany), Du Rietz (Sweden), Pavillard (France), Szafer (Poland), Tansley (Great Britain).

SECTION F—FORESTRY. *Ralph S. Hosmer, Secretary*

In opening the program of the Section on Aug. 17, the chairman, Tor Jonson, Stockholm, Sweden, briefly welcomed the members and emphasized the value of international contacts in forestry. Four morning sessions were held for the presentation of invitation papers, one of these being arranged jointly with the Section of Ecology. The following presented papers on topics pertaining primarily to forestry: Arrigo Serpieri and E. Aldo Pavari, C. D. Howe, J. W. Toumey, Tor Jonson, Raphael Zon, A. Rodger, E. N. Munns, A. J. Cajander, and Sven Petrini. Afternoon sessions included a symposium on "International forest bibliography" and a round-table discussion of "Reorganization of the international Association of Forest Experiment Stations." Other activities of the section included excursions to points of interest and an evening devoted to an exhibition of reels of motion pictures illustrating the work of the Forest Service, U. S. Department of Agriculture.

In business session the Section expressed the need of an International forestry bibliography. Accordingly a resolution prevailed approving the organization of an International Forest Bibliographic Commission and inviting those nations having a forestry organization to establish a National Forestry Commission, the chairman of which shall be a member of the International Forest Bibliographic Commission. Further, resolving, that the International Forest Bibliographic Commission have an executive committee of five members, the duty of which shall be to decide what organization shall issue a bibliography and to devise means for carrying on the work. The desirability of encouraging publication of international forest dictionaries was clearly presented. The round-table discussion of the "Reorganization of the international union of forest experiment stations" led to the formulation of the following:

Resolved that this meeting expresses its gratification with the plan for the reestablishment of the International Union of Forest Experiment Stations, and expresses the hope that it may be reorganized on a permanent and adequate basis.

SECTION G—GENETICS. *Charles E. Allen, Secretary*

The scheduled program of papers was introduced with a short introductory address by the chairman, Professor Ernst Lehmann of the University of Tübingen. The program included both forenoon and afternoon sessions, also one evening meeting. Two of these sessions were arranged jointly with the Section for Cytology, one with the Sections for Cytology and Taxonomy ("The significance of taxonomic units and their natural basis"), and two in which there was cooperation with the Section for Agronomy. The papers more particularly accredited to this section (Volume 1, pp.: 787-946) include those of Ernst Lehmann, M. J.

Sirks, Giulio Savastano, Georg Tischler, A. F. Blakeslee, Edmund Malinowski, G. H. Shull, E. M. East, H. J. Muller, W. H. Eyster, and M. Demerec. A paper read by L. F. Randolph, Cornell University and the U. S. Department of Agriculture, was not presented for publication. The following papers were read by title: "The constructive moments in the origin of forms" by N. P. Krenke of the Timiriasev Federal Institute of scientific research, Moscow, and "Mutations in fungi," F. Chodat of the University of Geneva. In addition to individual participation in shorter excursions, geneticists as a body joined in the more general excursion to the New York Agricultural Experiment Station, Geneva.

#### SECTION H—HORTICULTURE. *A. J. Heinecke, Secretary*

Under the chairmanship of Fred J. Chittenden, Royal Horticultural Society, London, three sessions were devoted to papers more exclusively horticultural, one of these, however, having the cooperation of the physiologists. In addition, the Section cooperated in two programs arranged respectively by the Section for Agronomy and the Section for Physiology, and, further, held three round-table discussions. The formal papers (Volume 2, pp. 953-1080) were presented by W. T. Macoun, N. E. Hansen, U. P. Hedrick, Felix Kotowski, F. A. Waugh, G. F. Potter and T. G. Phillips, E. L. Overholser, T. Wallace, Lucien Daniel, H. A. Jones, W. W. Garner, E. C. Auchter, A. L. Schrader, and H. D. Hooker. The topics of the round-table discussions arranged primarily by this section were the following: "Interrelation between photoperiod, temperature, and nutrition and the influence on plant behavior, with especial reference to flowering versus vegetation," "Problems of improvement of varieties, stocks, and methods of propagation," and "Problems of harvesting, handling, and cold storage of flowers, fruits, and vegetables." Among particular phases of the topic last mentioned, the discussion centered around factors in the determination of maturity, bitter pit and scald of apple, the proper storage temperature for various fruits, the effects of temperatures below freezing, and humidity and temperature in the keeping of cut flowers.

#### SECTION I—PHYSIOLOGY. *O. F. Curtis, Secretary*

The four forenoon sessions were occupied with the regular program of invitation papers, one period being a joint session arranged by the Section for Horticulture. Papers were presented by A. Ursprung (read by William A. Beck), H. S. Reed, B. E. Livingston, S. Kostytschew (read by abstract), W. W. Lepeschkin, W. J. Robbins, L. Michaelis, J. Stoklasa, George W. Scarth, F. E. Lloyd, N. A. Maximow, T. V. Vouk, M. Popoff, Lewis Knudson, and K. Shibata (see Volume 2, pp. 1081-1193). A paper on "The pigments of photosynthesis" by V. Lubimenko was also read but earlier publication occurred. An exhibition of the activities of the contractile vacuole of *Spirogyra* was presented by F. E. Lloyd as moving pictures, and his paper represents the discussion of this topic. The afternoon sessions consisted of joint sessions with the Sections of Agronomy, Genetics, and Horticulture, Horticulture and Ecology, with the Section for Bacteriology, and the Section for Cytology.

#### SECTION J—PATHOLOGY. *D. Reddick, Secretary*

The scientific sessions were held under the chairmanship of Dr. E. van Slogteren, Lisse, Holland, and the attendance was often above 150 persons. The program consisted of four morning sessions devoted exclusively to invitation papers, and of afternoon sessions made up of three round-table discussions and one period of "Proposals." In general, the afternoon meetings were utilized for more extended discussion of the topics around which the forenoon papers centered. One entire program was given up to "Biologic considerations of the international movement of plants and plant products." Papers along varied lines were presented by H. Morstatt, H. H. Whetzel, M. Hollrung, H. M. Quanjer and Paul Murphy, C. L. Shear, D. Reddick, B. M. Duggar, H. Klebahn, L. O. Kunkel, Ernst Küster, J. C. Walker, Ruth F. Allen, Marie P. Löhns, L. R. Jones, F. Beauverie, Z. Zweigbaumowna, H. T. Güssow, E. van Slogteren, E. J. Butler, and a paper of Et. Foex was read by abstract in the absence of the author. Round-table discussions were led by James Johnson and H. B. Humphrey. Demonstrations and exhibits gave opportunity for much informal discussion, and special plant inspection trips were arranged.

The following resolutions were adopted by the Section:

1. That, in mycological nomenclature, particularly in reference to parasitic fungi, we follow the internationally established rules of botanical nomenclature, recognizing in this branch of botany definite *nomina conservanda*.

2. That we endorse the proposal made by D. Reddick, that greater facilities be provided for the production and exchange of disease-resistant varieties of plants; and that the chairman of the Section appoint a committee to devise ways and means of putting the proposal into effect.

3. That we favor the holding of international phytopathological conferences at the same time and place as the meetings of the International Institute of Agriculture are held, with the understanding that we continue to meet also, as heretofore, with the International Botanical Congress.

4. That we urge international cooperation in the study of a biological basis for plant quarantine as a guide to future action, and that the chairman appoint a committee to promote the objects of this resolution.

5. That it is the sense of this Section that there is urgent need among plant pathologists for a more universal recognition of the symptoms of virus diseases of potatoes and of similar diseases of other plants, and need of greater uniformity in the naming of these diseases. We urge, therefore, that more accurate descriptions be made, and especially that they be supported by adequate illustrations. Also, the chairman was authorized to appoint a committee to urge interested countries to send delegates to the proposed International Conference of Phytopathology scheduled to be held in Prague in 1927.

SECTION K—PHARMACOGNOSY AND PHARMACEUTICAL BOTANY. *H. W. Youngken, Secretary*

The first session was opened with a paper by the chairman, Henry H. Rusby, Columbia University (see Volume 2, pp. 1356-1360). Invitation papers were continued throughout the four morning sessions, with adequate time for profitable discussion. The following presented or sent papers (Volume 2, pp. 1361-1412): Heinrich Zörnig, W. Brandt, Zdenek F. Klan and Oliver A. Farwell, Henry H. Rusby, R. Wasicky, Charles C. Plitt, T. J. Starker, A. J. Schwarz, George D. Beal, Fanchon Hart, Carl Mez, and C. W. Ballard. Three of the papers constituted a part of a symposium on *cascara sagrada*. A round-table discussion on "digitalis" was led by Arno Viehoveer. Associated with the work of the Section was that of the Plant Science Laboratory Seminar, presided over by E. L. Newcomb. The Section also participated in the round-table discussion of nomenclature, arranged by the Section for Taxonomy, also in scheduled excursions.

SECTION L—TAXONOMY. *K. M. Wiegand, Secretary*

Four regular sessions for the presentation of formal invitation papers were held, the speakers being E. de Wildeman (by proxy), T. A. Sprague, L. H. Bailey, A. S. Hitchcock, John Briquet, H. M. Hall, S. Illichevsky (2 papers), K. M. Wiegand, Arthur W. Hill, M. L. Fernald, C. H. Ostenfeld, LeRoy Abrams, A. B. Rendle, Aven Nelson, P. A. Rydberg, and Carl Skottsberg. The papers presented appear in Volume 2. "Botanical nomenclature" was the subject of a round-table discussion participated in especially through papers by John Briquet, Marshall A. Howe, M. L. Fernald, and N. L. Britton (Volume 2, pp. 1556-1570).

A joint symposium was arranged with the cooperation of the Sections for Cytology and Genetics. Subject: "The significance of taxonomic units and their natural basis. Various viewpoints were presented by H. M. Hall, Otto Heilborn, G. H. Shull, and N. F. Vavilov, with discussions by K. M. Wiegand, W. R. Taylor, B. M. Davis, and R. A. Harper (Volume 2, pp. 1571-1589). The section also included in its program a symposium on botanical nomenclature arranged by the Section for Mycology; likewise cooperated with the section for Morphology and Paleobotany in a symposium on the "Phylogeny of Angiosperms." Special excursions and informal meetings for discussion were arranged. The following papers, in the absence of the authors, were read by title: "Taxonomy in relation to various evolutionary theories," S. Schonland, Rhodes University College, Grahamstown, Cape Colony, South Africa. "Note on nomenclature," G. C. Druce, Oxford University, Oxford, England; "Beiträge zur Nomenclature

der ostasiatischen *Mertensia* Arten," A. Brand, Sorau, Germany; "Revision du genre *Mazus*. Le genre *Alectra* Thunb. à Madagascar. Decarynthus, a new genus of Scrophulariaceae," G. Bonati, Lure, France.

Resolutions adopted by the Imperial Botanical Congress, London, 1924 (see Report of Proceedings, pp. 301-307), and by the Committee on Australian Botanical Nomenclature, 1925, and a list prepared by Miss M. L. Green to exemplify the standard species idea were presented on behalf of the Imperial Congress and of the Australian Committee by T. A. Sprague.

Resolutions from the Botanical Society of America were presented by A. S. Hitchcock. These related to the appointment of an International Interim Committee and to the modification of the International Rules.

Discussion on these resolutions was deferred. On motion it was voted that a temporary committee of five be appointed by the chairman to nominate a standing *ad interim* committee to consider the subject of plant nomenclature and to make such recommendations as might seem desirable to the next botanical congress, at London in 1930. It was stipulated that one member of the committee should be the chairman of the round-table, two others should be John Briquet and A. B. Rendle, and that the remaining two members should have special knowledge of cryptogams. The chairman appointed A. S. Hitchcock, John Briquet (chairman), A. B. Rendle, J. C. Arthur, and C. H. Ostenfeld.

This nominating committee later reported the names of the following persons to constitute the *ad interim* committee, and on vote of the section assembled in round-table these persons nominated were elected: J. H. Barnhart (U.S.A.), G. Bitter (Germany), Black (Australia), J. Briquet (Switzerland), A. von Degen (Hungary), E. de Wildeman (Belgium), E. Diels (Germany), K. Domin (Czechoslovakia), B. Fedtschenko (U.S.S.R.), H. Harms (Germany), A. S. Hitchcock (U.S.A.), A. de Jacewski (U.S.S.R.), E. Janchen (Austria), H. Lecomte (France), H. Lindberg (Norway), E. Maire (Algiers), L. A. Mangin (France), C. E. Moss (South Africa), S. Murbeck (Sweden), T. Nakai (Japan), C. H. Ostenfeld (Denmark), J. Ramsbottom (England), A. B. Rendle (England), B. L. Robinson (U.S.A.), H. Schinz (Switzerland), C. L. Shear (U.S.A.), T. A. Sprague (England), A. Trotter (Italy), T. Valetton (Holland).

This action of the section was reported to the Congress in general business session and was approved by the Congress.

It was moved by A. B. Rendle that John Briquet and H. Harms occupy positions on this committee similar to those occupied by them on the Permanent Nomenclature Commission of the Brussels Congress, namely, John Briquet chairman, and H. Harms vice-chairman. The motion was unanimously carried.

It was voted to take no action on the resolutions prepared at the Ithaca Congress but to refer them to the above committee. Similar disposal was made of the resolutions on nomenclature prepared by the Section for Bacteriology (see p. 1777) and presented by R. S. Breed.

#### SECTION M—MYCOLOGY. *H. M. Fitzpatrick, Secretary*

Four sessions of the invitation program were arranged for the forenoons of those days devoted to this purpose, the first program being opened with a paper by the chairman, E. J. Butler, followed by E. A. Burt and C. A. Kauffman. The remaining programs consisted of papers by H. W. Wollenweber, C. L. Shear, A. H. R. Buller, W. B. Brierley, K. Wize, E. M. Wakefield, J. Ramsbottom, L. O. Overholts, G. H. Cunningham, J. C. Arthur, H. Klebahn, J. H. Faull, and Carlton Rea. An afternoon symposium on nomenclature included discussion papers by C. L. Shear, J. Ramsbottom, J. C. Arthur, and C. H. Kauffman, while a second symposium gave consideration to the topic "Evolutionary and cytological problems in rusts," with papers submitted by H. S. Jackson, J. Ramsbottom, B. O. Dodge, E. B. Mains, and E. C. Stakman. Papers received by the secretary, authors not in attendance, were those of P. Dietel, Zwickau, Germany, "Betrachtungen über die geographische Verbreitung der Uredineen," and of W. Siemaszko, College of Agriculture, Skierniewice, Poland, "Studies of the Polyporaceae in Poland." Other papers announced but not presented were read by title. Special excursions were arranged.