HISTORY OF PRECEDING GENETICS CONGRESSES

The increasing interest in the production of new forms of plants and the growing appreciation of a need for fuller knowledge of the process of heredity induced the council of the Royal Horticultural Society of England in 1899 to hold an "International Conference on Hybridisation and on the Cross-Breeding of Varieties." The meeting was held July 11 and 12. Special invitations were sent to 125 well-known hybridists and botanists, and all others interested were invited. There is no statement as to the number that attended, although we note that covers for 130 were laid at the banquet. Six addresses were scheduled for the first day and eight for the second. These details and the papers presented and sent to the conference may be found in volume twenty-four of the Journal of the Royal Horticultural Society for 1900, published by the society in London.

In an address entitled "Hybridisation and Cross-Breeding as a Method of Scientific Investigation," presented at this meeting, William Bateson made the following statement:

"Of all the methods which are open to us for investigating the facts of Natural History, there is perhaps none which is more likely to bring forth results of first-rate importance... It is perhaps simpler to follow the beaten track of classification or of comparative anatomy, or to make for the hundredth time collections of the plants and animals belonging to certain orders, or to compete in the production or cultivation of familiar forms of animals or plants. But all these pursuits demand great skill and unflagging attention. Any one of them may well take a man's whole life. If the work which is now being put into these occupations were devoted to the careful carrying out and recording of experiments of the kind we are contemplating, the result, it is not, I think, too much to say, would in some five-and-twenty years make a revolution in our ideas of species, inheritance, variation, and the other phenomena which go to make up the science of Natural History. We should, I believe, see a new Natural History created."

In 1902, an "International Conference on Plant Breeding and Hybridization" was held in New York City under the auspices of the Horticultural Society of New York. Three days, September 30 to October 2, were given to a program dealing mostly with the practical application of hybridization to plant breeding. Seventy-five members were enrolled. Thirty addresses were presented and thirteen papers were read by title. These were published as volume one of the Memoirs of the Horticultural Society of New York by the society in New York City.

Four years later the Royal Horticultural Society again called an "Inter-
national Conference on Hybridisation and Plant Breeding," to be held in London, England, July 30 to August 3, 1906. About 300 were specially invited. There is no record of the number that attended. The president of the congress was William Bateson. In his inaugural address he said:

"Like other new crafts, we have been compelled to adopt a terminology, which, if somewhat deterrent to the novice, is so necessary a tool to the craftsman that it must be endured. But though these attributes of scientific activity are in evidence, the science itself is still nameless, and we can only describe our pursuit by cumbrous and often misleading periphrasis. To meet this difficulty I suggest for the consideration of this congress the term Genetics, which sufficiently indicates that our labours are devoted to the elucidation of the phenomena of heredity and variation: in other words, to the physiology of Descent, with implied bearing on the theoretical problems of the evolutionist and the systematist, and application to the practical problems of breeders, whether of animals or plants. After more or less undirected wanderings we have thus a definite aim in view."

Unlike the two previous conferences the program included animal as well as plant topics for presentation and discussion. About forty papers were listed in the program and forty-six were published in the report of the conference, together with descriptions of twenty-two exhibits, the latter dealing entirely with plants.

Although in the preliminary announcement the meeting was called a "Conference on Hybridisation and Plant Breeding," the supplementary volume of the Journal of the Royal Horticultural Society that contains the addresses and other information was given the title of "Report of the Third International Conference on Genetics." In this way the word, genetics, first proposed during the meeting, was put to immediate use.

The fourth genetics congress, held in Paris, France, in 1911, enrolled 234 members. The actual attendance was not stated. Fifty-eight papers were included in the report, published in 1913 by Masson et Cie., Éditeurs, Libraires de l'Académie de Médecine, Paris.

A feature of this congress was a number of excursions to various places of interest to geneticists, including, among others, L'Institut Pasteur, the experimental plots of the Maison Vilmorin-Andrieux et Cie., l'École Vétérinaire d'Alfort, and the Museum d'Histoire Naturelle de Paris. At many of these places, plant and animal material of genetic interest was exhibited.

After the fourth congress, it was generally understood that the succeeding international genetic gathering should be scheduled for 1916. Circumstances ordained otherwise, and it was not until sixteen years later, in 1927,
that the Fifth International Congress of Genetics met in Berlin, Germany. The rapid growth of the science of genetics was shown by the increase in membership and in the diversity and number of topics discussed. The enrollment reached 966, there were 903 members present, and 35 countries were represented. Excursions were made to many institutions and places of genetic interest.

The proceedings were issued in two volumes, totaling 1646 pages and 14 plates, as a supplement to the Zeitschrift für Induktive Abstammungs-und Vererbungslehre, published by Gebrüder Borntraeger, Leipzig, in 1928. One hundred and forty-eight papers were included in these proceedings.
PREPARATION FOR THE SIXTH CONGRESS

C. B. Davenport

At the Fifth International Congress of Genetics, held in Berlin in 1927, it was voted, at a business meeting held September 17, to hold the next congress in the United States in case the United States presented an invitation. When a permanent international committee to look after the next congress was appointed, this committee suggested that Ithaca would be a desirable meeting place. About December 12, 1927, a letter was written to a dozen geneticists in the United States asking for suggestions as to the best meeting place of the congress in 1932. A number of places were suggested, with a concentration on Ithaca and New Haven.

At the Nashville meeting of the American Association for the Advancement of Science, held in December, 1927, a committee to make arrangements for the place of the next congress was elected. Suggestions having been made to the committee that suitable places for the meeting would be at Ithaca or New Haven, inquiries were made of Cornell University and Yale University and cordial and generous invitations were received from each of these universities to hold there the congress of 1932.

In March, 1928, a three-page mimeographed letter, signed by the committee appointed at Nashville, was sent to the geneticists of the United States, setting forth the advantages that each of the two places offered and asking a vote of preference. Of 153 persons who returned ballots 106 voted in favor of Ithaca and 47 favored New Haven. Thus by vote of the geneticists of the country Ithaca was decided upon as the place of meeting. This decision was approved by the international committee.

On April 30, 1929, there was held at Washington a meeting of the organizing committee. Thomas Hunt Morgan was unanimously elected president of the sixth genetics congress and R. A. Emerson chairman of the local committee; C. C. Little was unanimously nominated as secretary general. C. B. Davenport, as chairman of the organizing committee, was authorized to get the full vote of the organizing committee as to vice presidents. As a result of letters sent out to members of the organizing committee a list of preferences for vice presidents from each country was drawn up.

The organizing committee meanwhile drew up a list of leading geneticists to constitute a general committee of the congress. This group was called the committee of one hundred.

At a meeting at Woods Hole, August 19, 1929, C. C. Little was elected secretary general, and preliminary lists of persons were drawn up for the following committees: finance, transportation, exhibits, program and publi-
cation. The chairmen of these committees and that of the local committee together with the secretary general and treasurer constituted the executive council. The functions of the organizing committee were turned over to this executive council in March, 1930.

The financing of the sixth congress was, from the outset, recognized as a matter of prime importance. With the progress of the ever-increasing depression its work became still more difficult and complicated. R. C. Cook, editor of the Journal of Heredity, was selected as treasurer of the congress. The finance committee consisted of Charles McAlpin Pyle as chairman with eleven additional members. In March, 1931, owing to the resignation of C. M. Pyle, C. B. Davenport was elected chairman of the finance committee. The finance committee drew up a plan for raising the necessary funds: (1) by listing all geneticists and soliciting a ten dollar membership fee from each; (2) by correspondence with each member of the committee of one hundred to induce him to become responsible for a certain quota of contributions; (3) by preparing a list for solicitation of practical breeders; (4) by drawing up a list of possible donors with suggestions for handling each case; (5) by formation of subcommittees to solicit contributions from industries related to genetics. Some 30 subcommittees, called contact committees, were thus drawn up and these had the double function of interesting the industries and the breeders in the coming congress and soliciting contributions from them for the success of the congress.

Especial mention must be made of the following contributions: from the Carnegie Corporation of New York, through the Carnegie Institution of Washington, $5,000; Carnegie Institution of Washington, indirectly through the Department of Genetics, about $1,000; from the Carnegie Endowment for International Peace, through L. C. Dunn, $1,352.31; and from Columbia University the sum of $1,500. The following is a summary of the receipts of other amounts: E. P. Prentice, $750; E. C. MacDowell, $300; and sustaining and institutional memberships or patrons of $100 each from the following: Mrs. Wortham James, James F. Porter, Harvard University, Columbia University, Johns Hopkins University, Bucknell University, Cornell University, Dartmouth College, Brown University, Carleton College (1931), University of Missouri, Texas Agricultural Experiment Station (1931), Smithsonian Institution; also the General Electric Company; American Fruit Growers' Association; Hawaiian Pineapple Canners; Institute of Forest Genetics; Russell-Miller Milling Company, Minnesota; General Mills, Incorporated, Minnesota; Hawaiian Sugar Planters' Association, Honolulu; Armour and Com-
pany, Chicago; Pillsbury Flour Mills Company, Minnesota; Minnesota Crop Improvement Association; American Guernsey Cattle Club; Gallatin Valley Seed Company, Montana; Tri-state Soft Wheat Improvement Association, Ohio.

ORGANIZATION OF THE SIXTH CONGRESS

C. C. Little

The organization of the Sixth International Congress of Genetics was carried out by the executive council. Due to the unique financial situation during the years 1930-1932 inclusive, certain complications were encountered which it is hoped will not occur in future congresses.

The original plans for the congress were distinctly de luxe. They included a budget of approximately $100,000, of which expenses of foreign delegates and the exhibits were to consume a large part. As economic conditions became worse rather than better simplification of the program and downward revision of the budget naturally followed. This was aided very considerably by the coöperation and understanding of the heads of the various committees of the council.

On the program committee, E. M. East developed a comprehensive but simple plan which cut travel expenses of invited participants to a minimum consistent with adequate representation of the various foreign countries. On the exhibits committee, M. Demerec, who succeeded E. C. MacDowell as chairman, showed remarkable skill and industry in arranging an exhibit that proved to be in the minds of many the chief feature of the congress. This was done at less than one-sixth the cost of the original estimate of exhibits; R. A. Emerson and other members of the Department of Plant Breeding at Cornell University helped greatly. On the publication committee, D. F. Jones with the coöperation of C. S. Gager and the Brooklyn Botanic Garden made a most economical and advantageous arrangement for the publication of the Proceedings. The local committee, under the chairmanship of R. A. Emerson, carried out the detailed organization of the congress most effectively and economically. Treasurer R. C. Cook used much ingenuity in saving expense to the congress in many ways. L. C. Dunn, in charge of transportation, performed a difficult and constantly changing duty in the organization of steamship and railway facilities. C. B. Davenport, taking over the chairmanship of the finance committee in place of C. M. Pyle, organized a large number of subcommittees which adequately covered the various applied phases of genetics. An account of this type should, I believe, be brief, making no effort to cover the myriad details which must of necessity differ in some degree in each succeeding congress.

In general the chief weakness of the kind of organization that prepared the Sixth International Congress of Genetics is its geographical distribution. The need for constant conference is so great that it is the writer's belief that the council of future congresses should be a body the membership of which
is chosen entirely from the locality or localities at which the congress will be held.

Various devices can be employed to enlist a wide interest under the direction of the council. The detailed problems are, however, so definitely local that the working body should be closely knit. Advice can be obtained as desired from many people at more or less distant points. The experience of the Sixth International Congress of Genetics has shown that the great preponderance of successful experimental geneticists are or can become successful organizers. No outstanding executive or organizer as such appears to be needed. A reasonable amount of high grade clerical help is an essential. With it the organization of a congress becomes readily the part-time activity of several scientists rather than the full-time work of a few. Organization of a congress, in my opinion, should start not less than two full years in advance but need not be begun sooner.

In closing I wish to thank especially Miss Margaret Cameron, who for eighteen months acted as full-time secretary to the office of the Secretary General, and Miss Mary E. Russell, who gave considerable time to the work before Miss Cameron’s appointment.

PERMANENT INTERNATIONAL COMMITTEE APPOINTED BY THE FIFTH INTERNATIONAL CONGRESS OF GENETICS

Austria: E. von Tschermak-Sey-senegg
Belgium: V. Lathouwers
Denmark: W. Johannsen
France: L. Blaringhem
Germany: E. Baur
Great Britain: R. C. Punnett
Italy: P. Enriques
Japan: S. Ikeno
Netherlands: J. P. Lotsy
Norway: K. Bonnevie
Russia: N. Koltzoff
Sweden: H. Nilsson-Ehle
Switzerland: A. Ernst
United States of America: T. H. Morgan, C. B. Davenport

COMMITTEE ON ARRANGEMENTS

This committee was appointed by the Joint Genetics Sections of the Botanical Society of America and the American Society of Zoologists to arrange for the place of holding the Sixth International Congress of Genetics.

C. B. Davenport, Chairman
E. B. Babcock
W. E. Castle
L. J. Cole
R. A. Emerson
D. F. Jones
T. H. Morgan
G. H. Shull
ORGANIZATION COMMITTEE FOR THE SIXTH INTERNATIONAL CONGRESS OF GENETICS

This committee was appointed by C. B. Davenport and T. H. Morgan, representatives from the United States on the permanent international committee, to select the president, vice presidents and the executive council.

C. B. Davenport, Chairman
L. J. Cole
E. M. East
R. A. Emerson

H. S. Jennings
T. H. Morgan
G. H. Shull

OFFICERS

President

T. H. Morgan, California Institute of Technology, Pasadena, California, U.S.A.

Vice Presidents

E. von Tschermak-Seysenegg, Austria
V. Grégoire, Belgium
A. H. R. Buller, Canada
Ö. Winge, Denmark
H. Federley, Finland
L. Cuénot, France
C. Correns, Germany
J. B. S. Haldane, Great Britain
P. Enriques, Italy

Y. Tanaka, Japan
L. Cockayne, New Zealand
O. L. Mohr, Norway
E. Malinowski, Poland
N. Vavilov, Russia
A. Zulueta, Spain
H. Nilsson-Ehle, Sweden
A. Ernst, Switzerland

EXECUTIVE COUNCIL

C. C. Little, chairman and general secretary of the congress
R. C. Cook, treasurer
C. B. Davenport, chairman finance committee
M. Demerec, chairman exhibits committee
L. C. Dunn, chairman of the transportation committee and secretary of the council
E. M. East, chairman program committee
R. A. Emerson, chairman local committee
D. F. Jones, chairman publication committee

FINANCE COMMITTEE

C. B. Davenport, Chairman
L. C. Dunn

D. Fairchild
J. W. Gowen
H. H. Laughlin
F. Osborn
E. P. Prentice
F. D. Richey

C. R. Stockard
E. N. Wentworth
F. A. Woods

EXHIBITS COMMITTEE

M. Demerec, Chairman
Oakes Ames
E. B. Babcock
R. E. Cleland
C. H. Danforth
L. C. Dunn
David Fairchild
H. H. Laughlin

Frank E. Lutz
E. C. MacDowell
L. F. Randolph
Marcus M. Rhoades
F. D. Richey
Sophia Satina
Sewall Wright

TRANSPORTATION COMMITTEE

L. C. Dunn, Chairman
M. Demerec
Walter Landauer

C. H. Myers
E. W. Sinnott

Foreign Advisory Members

J. Krizenecky, Brno
H. Nachtsheim, Berlin
M. Pease, Cambridge
I. F. Phipps, Adelaide

A. S. Serebrovsky, Moscow
T. H. Shen, Nanking
T. Tanaka, Miyazaki

PROGRAM COMMITTEE

E. M. East, Chairman
W. E. Castle
R. E. Cleland
H. D. King
H. H. Laughlin

G. H. Shull
A. H. Sturtevant
E. N. Wentworth
Sewall Wright

LOCAL COMMITTEE

General chairman: R. A. Emerson
Bulletins and daily news sheet: A. C. Fraser
Decorations: E. A. White
Entertainment of women and children: Mrs. R. A. Emerson, Mrs. C. H. Myers
Excursions: R. G. Wiggans
Geneva Session: Richard Wellington
Housing, dormitories, camp sites: R. A. Emerson
Information service and guides: J. R. Livermore
Lecture room and exhibit assignments: R. A. Emerson, M. Demerec
Lecture room facilities: W. D. Swope
Music: P. J. Weaver
Photographs: M. Gordon
Picnic: L. H. McDaniels
Press service: Bristow Adams, L. C. Boochever
Reception: R. A. Emerson
Signs: H. S. Perry
Sports: R. G. Wiggans
Stenographic service: F. Feehan
Transportation, train and automobile: C. H. Myers

PUBLICATION COMMITTEE

D. F. Jones, Chairman               E. M. East
C. E. Allen                          H. D. King

COMMITTEE OF ONE HUNDRED

C. E. Allen, University of Wisconsin, Madison, Wisconsin
W. S. Anderson, University of Kentucky, Lexington, Kentucky
E. B. Babcock, University of California, Berkeley, California
A. M. Banta, Brown University, Providence, Rhode Island
H. H. Bartlett, University of Michigan, Ann Arbor, Michigan
John Belling, University of California, Berkeley, California
C. G. Bowers, Maine, New York
C. B. Bridges, California Institute of Technology, Pasadena, California
R. A. Brink, University of Wisconsin, Madison, Wisconsin
J. T. Buchholz, University of Illinois, Urbana, Illinois
E. Eleanor Carothers, University of Pennsylvania, Philadelphia, Pennsylvania
W. E. Castle, Bussey Institution, Harvard University, Forest Hills, Boston, Massachusetts
R. E. Clausen, University of California, Berkeley, California
R. E. Cleland, Goucher College, Baltimore, Maryland
L. J. Cole, University of Wisconsin, Madison, Wisconsin
J. L. Collins, University of Hawaii, Honolulu, Hawaii
E. G. Conklin, Princeton University, Princeton, New Jersey
H. E. Crampton, Barnard College, Columbia University, New York, New York
C. H. Danforth, Stanford University, Stanford University, California
B. M. Davis, University of Michigan, Ann Arbor, Michigan
L. C. Dunn, Columbia University, New York, New York
E. M. East, Bussey Institution, Harvard University, Forest Hills, Boston, Massachusetts
R. A. Emerson, Cornell University, Ithaca, New York
W. H. Eyster, Bucknell University, Lewisburg, Pennsylvania
David Fairchild, United States Department of Agriculture, Washington, District of Columbia
A. C. Fraser, Cornell University, Ithaca, New York
H. B. Frost, Citrus Experiment Station, Riverside, California
W. H. Gates, Louisiana State University, Baton Rouge, Louisiana
J. M. Gerould, Dartmouth College, Hanover, New Hampshire
H. D. Goodale, 257 W. Main Street, Williamstown, Massachusetts
H. B. Goodrich, Wesleyan University, Middletown, Connecticut
T. H. Goodspeed, University of California, Berkeley, California
J. W. Gowen, The Rockefeller Institute, Princeton, New Jersey
M. F. Guyer, University of Wisconsin, Madison, Wisconsin
F. B. Hanson, Washington University, St. Louis, Missouri
H. K. Hayes, University of Minnesota, University Farm, St. Paul, Minnesota
S. J. Holmes, University of California, Berkeley, California
H. R. Hunt, Michigan State College, East Lansing, Michigan
C. L. Huskins, McGill University, Montreal, Canada
H. L. Ibsen, Kansas State College, Manhattan, Kansas
H. S. Jennings, Johns Hopkins University, Baltimore, Maryland
D. F. Jones, Connecticut Agricultural Experiment Station, New Haven, Connecticut
Vernon Kellogg, National Research Council, Washington, District of Columbia
Helen D. King, Wistar Institute, Philadelphia, Pennsylvania
D. E. Lancefield, Columbia University, New York, New York
WALTER LANDAUER, STORRS AGRICULTURAL EXPERIMENT STATION, Storrs, Connecticut
H. H. LAUGHLIN, CARNEGIE INSTITUTION OF WASHINGTON, Cold Spring Harbor, New York
J. W. LESLEY, CITRUS EXPERIMENT STATION, Riverside, California
F. R. LILLIE, UNIVERSITY OF CHICAGO, Chicago, Illinois
E. W. LINDSTROM, IOWA STATE COLLEGE, Ames, Iowa
C. C. LITTLE, ROSCOE B. JACKSON MEMORIAL LABORATORY, Bar Harbor, Maine
H. H. LOVE, CORNELL UNIVERSITY, Ithaca, New York
C. E. MCCLUNG, UNIVERSITY OF PENNSYLVANIA, Philadelphia, Pennsylvania
E. C. MACDOWELL, CARNEGIE INSTITUTION OF WASHINGTON, Cold Spring Harbor, New York
MADGE MACKLIN, UNIVERSITY OF WESTERN ONTARIO, London, Ontario, Canada
P. C. MANGELSDORF, TEXAS AGRICULTURAL EXPERIMENT STATION, College Station, Texas
J. W. MAVOR, UNION COLLEGE, Schenectady, New York
C. W. METZ, CARNEGIE INSTITUTION OF WASHINGTON, Cold Spring Harbor, New York
A. R. MIDDLETON, UNIVERSITY OF LOUISVILLE, Louisville, Kentucky
T. H. MORGAN, CALIFORNIA INSTITUTE OF TECHNOLOGY, Pasadena, California
H. J. MULLER, UNIVERSITY OF TEXAS, Austin, Texas
C. H. MYERS, NEW YORK STATE COLLEGE OF AGRICULTURE, Ithaca, New York
R. K. NABOURS, KANSAS STATE COLLEGE, Manhattan, Kansas
H. H. NEWMAN, UNIVERSITY OF CHICAGO, Chicago, Illinois
J. H. PARKER, KANSAS STATE COLLEGE, Manhattan, Kansas
RAYMOND PEARL, JOHNS HOPKINS UNIVERSITY, Baltimore, Maryland
J. C. PHILLIPS, WENHAM, Massachusetts
H. H. PLOUGH, AMHERST COLLEGE, Amherst, Massachusetts
P. POPFNOE, THE HUMAN BETTERMENT FOUNDATION, Pasadena, California
L. F. RANDOLPH, CORNELL UNIVERSITY, Ithaca, New York
F. D. RICHEY, UNITED STATES DEPARTMENT OF AGRICULTURE, Washington, District of Columbia
O. RIDDLE, CARNEGIE INSTITUTION OF WASHINGTON, Cold Spring Harbor, New York
ELMER ROBERTS, Agricultural College, University of Illinois, Urbana, Illinois
KARL SAX, Bussey Institution, Harvard University, Forest Hills, Boston, Massachusetts
J. H. SCHAEFFNER, Ohio State University, Columbus, Ohio
A. F. SHULL, University of Michigan, Ann Arbor, Michigan
G. H. SHULL, Princeton University, Princeton, New Jersey
E. W. SINFELT, Barnard College, Columbia University, New York, New York
L. H. SNYDER, Ohio State University, Columbus, Ohio
L. J. STADLER, University of Missouri, Columbia, Missouri
C. R. STOCKARD, Cornell University Medical College, New York, New York
A. H. STURTEVANT, California Institute of Technology, Pasadena, California
F. B. SUMNER, Scripps Institute of Oceanography, La Jolla, California
W. T. SWINGLE, United States Department of Agriculture, Washington, District of Columbia
W. P. THOMPSON, University of Saskatchewan, Saskatoon, Canada
R. B. THOMSON, University of Toronto, Toronto, Ontario, Canada
A. WEINSTEIN, Johns Hopkins University, Baltimore, Maryland
RICHARD WELLINGTON, New York Agricultural Experiment Station, Geneva, New York
E. N. WENTWORTH, Armour and Company, Chicago, Illinois
O. E. WHITE, University of Virginia, Charlottesville, Virginia
P. W. WHITING, University of Pittsburgh, Pittsburgh, Pennsylvania
D. D. WHITNEY, University of Nebraska, Lincoln, Nebraska
R. G. WIGGINS, New York State College of Agriculture, Ithaca, New York
F. A. WOODS, Brookline, Massachusetts
SEWALL WRIGHT, University of Chicago, Chicago, Illinois
C. ZELENY, University of Illinois, Urbana, Illinois