## SCIENCE

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## CONTENTS

ment of Science:—	
The Chicago Meeting	1.
Some Economic Phases of Botany: Professor L. H. Pammel	: <b>4</b>
Scientific Events:—	
The Bowdoin Medical School; The Directorship of the Bureau of Mines; International	
Eugenic Congress; The American Engineering Council	15
Scientific Notes and News	17
University and Educational News	20
Discussion and Correspondence:—	
Anthropometric Measurements: Dr. Harris Hawthorne Wilder. A New Dike near Ithaca, N. Y.: Pearl Sheldon. The Hawaiian Olona: William T. Brigham	20
Quotations:—	
Professor Michelson on the Application of Interference Methods to Astronomical Meas- urements	21
Climatic Oscillations in Prehistoric Time: CHESTER A. REEDS	*
Special Articles:—	
The Accumulation of Carbon Dioxide from Strawberries in Refrigerator Cars: H. F. BERGMAN	23
The American Chemical Society: Dr. Charles	.95

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## THE CHICAGO MEETING

THE seventy-third meeting of the American Association for the Advancement of Science, held in Chicago from December 27 to January 1, was the second of the greater convocation week meetings of the association and of the national scientific societies associated with it, convened once in four years successively in New York, Chicago and Washington. The remarkable scientific activity of the central west and of the reconstruction period following the war were adequately reflected by the attendance and programs at Chicago, which have probably not been surpassed by any previous gathering of scientific men in this or any other country. In addition to fourteen sections of the association, forty-one national scientific societies met in Chicago and the official program of 112 pages exhibited the scientific productivity of the nation in the whole range of the natural and exact sciences.

The association has been fortunate in its presidents. The address of the retiring president, Dr. Simon Flexner, director of the laboratories of the Rockefeller Institute for Medical Research, on "Twenty-five years of bacteriology," printed in the last issue of Science, was an admirably clear presentation of a subject unsurpassed in its importance to human welfare, described by one who has led in the work. Dr. L. O. Howard, chief of the Bureau of Entomology, presided with dignity, skill and tact. He has played a large part in a subject in which science has demonstrated its service in the economic development of the nation and has been the chief executive officer of the association during the twenty-two years which have witnessed such an extraordinary development of the scientific work of the country, paralleled by the growth of the association from some 1,200 to over 10,000 members.

Professor E. H. Moore, of the University of Chicago, who will preside at Toronto and give his address at Boston is the acknowledged leader of American mathematicians. It is now many years since that science which is fundamental to all others has supplied a president to the association, and it is fortunate that a representative could be selected with the unanimous approval of all mathematicians.

Dr. D. T. MacDougal, director of the department of Botanical Research of the Carnegie Institution, who has been active in the organization of the work of the association, more specially in the Pacific and Southwestern Division, was elected general secretary to succeed Professor E. L. Nichols, of Cornell University. By the constitution the general secretary is entrusted with the important task of promoting the organization of the association especially in its relation to the affiliated societies. Another step that will promote the efficiency of the work of the association was the authorization of the appointment of an assistant secretary who will assist the permanent secretary in the scientific work of the association, as he is now assisted in the work of the office by the efficient executive assistant, Mr. Sam Woodley.

The sessions were held mainly in buildings of the University of Chicago, which furnished excellent facilities. The University Baptist Church provided for the sessions of Section K, Political and Economic Sciences, and the Quadrangle Club (Faculty Club) was also made available for some meetings, dinners, etc. At the Chicago Art Institute was held the reception of the Wild Flower Preservation Society, at which was exhibited a collection of flower portraits, etc. The exhibit of working models on wireless telephony, set up through the cooperation of the National Research Council, was also in the Art Institute. The local arrangements for the meeting

J. Paul Goode, General Chairman Gilbert A. Bliss, Publicity Henry C. Cowles, Membership Henry G. Gale, Meeting places

were in charge of the local committee:

Frank R. Lillie, Finance William D. McMillan, Hotel Accommodations

To the efficient and tireless efforts of Professor Goode and the other members of the local committee is due, in very great measure, the success of the Chicago meeting.

The arrangement by which admission to the three general sessions was by ticket perhaps caused a small amount of unavoidable difficulty, but it made possible an analysis of the attendance. This rule is in exact accord with the provisions of the by-laws. Tickets were given out only to registered persons, this applying to guests as well as to members.

The total registration for the Chicago meeting was 2,412. This is the largest registration ever recorded for the association, but it must be remembered that many persons in attendance at the meeting failed to register, so that the corrected number was much larger. Of those registering 1,383 were members of the association or delegates from institutions, 377 were members of associated societies not members of the association, 237 were invited guests, students of the University of Chicago, and 415 were other guests.

The geographical distribution of the attendance is shown below:

United States	Totai	United States	Total
Alabama	4	North Carolina	7
Arkansas	5	Oregon	3
Arizona	7	Oklahoma	15
California	27	Ohio	121
Colorado	22	Pennsylvania	57
Connecticut	21	Rhode Island	5
Delaware	1	South Dakota	8
Dist. of Columbia.	81	South Carolina	3
Florida	4	Tennessee	19
Georgia	6	Texas	16
Idaho	1	Utah	1
Illinois	856	Virginia	8
Indiana	98	West Virginia	11
Iowa	90	Vermont	2
Kansas	63	Wyoming	4
Kentucky	17	Washington	5
Louisiana	5	Wisconsin	181
Maine	0	Other Countries	Total
Massachusetts	50	Philippines	10
Maryland	15	Australia	1
Missouri	70	Argentina	1

Mississippi	10	Porto Rico	1
Michigan	125	India	1
Minnesota	72	Switzerland	1
Montana	5	France	1
Nebraska	29	Japan	1
New Hampshire	9	China	20
New Jersey	16	Germany	1
New Mexico	2	Canada	48
Nevada	0	England	2
New York	132	Czecho-Slovakia	1
North Dakota	12	Grand Total2,4	12

Two general evening sessions of popular interest, were held. At one of these was given an illustrated lecture by Dr. R. F. Griggs, on the region of Mt. Katmai, Alaska, and the "Valley of Ten Thousand Smokes." The other general interest lecture was by Professor R. W. Wood, on high power fluorescence and phosphorescence, in connection with which he performed numerous very ingenious experiments and demonstrations dealing with the study of these phenomena and of ultraviolet light.

The opening session, Monday evening, and the two general interest sessions were held in Mandel Hall. Attendance on these three evenings was as follows:

·	Members of A. A. S. and Delegates	Guests, Members of Associated Soci- eties Not Mem- bers of A. A. S.	Guests, University Students	Special Guests Not in Other Groups	Total Attendance		
Opening session, Mon- day evening, opening ad- dresses and address of retiring president, Dr.							
Simon Flexner Second general session,	401	94	76	142	713		
Lecture by Dr. Robert F. Griggs Third general session,	279	78	86	76	519		
W. Wood	380	101	76	153	710		

Several new or unusual features characterized this meeting. The visible directory of those registering, kept currently corrected by several typists and attendants, proved very valuable. The panels bearing the directory slips were hung along one side of the registra-

tion room, the north room on the first floor of Reynolds Club.

The increase of scientific knowledge and interest among the general public is one of the most important functions of the association and the one which it has been most difficult to accomplish. The reports in the press vary from year to year, and at Chicago represented a fair average. Several of the more important papers, such as that of Professor Michelson on the application of interference methods to astronomical measurements, were fully report, not only in Chicago but also in New York and other cities. The Science Service definitely organized at Chicago for the wide-spread diffusion of current scientific information will hereafter make possible adequate reports of scientific meetings.

The minutes of the proceedings of the Council, and reports of sections and affiliated societies will be printed in later issues of SCIENCE. Among the matters of general interest transacted at the meetings of the Council are the following:

It was decided that the next meeting of the American Association will be at Toronto, on Tuesday, December 27 to Saturday, December 31, 1921, inclusive. The opening session will be on Tuesday evening. The meeting for 1922–1923 will be held in Boston, and that for 1923–24 will be held in Cincinnati. Then will follow the stated convocation meeting in Washington.

Dr. Burton E. Livingston was reelected permanent secretary and Dr. R. S. Woodward was reelected treasurer, each for a term of four years. Dr. L. O. Howard and Professor Herbert Osborn were elected members of the executive committee.

The Academies of Science of Michigan and of Oklahoma were affiliated with the association.

The collection of portraits and autograph letters of all presidents of the association made by Dr. Marcus Benjamin of the Smithsonian Institution will be purchased under conditions representing a partial gift to the association.

The sum of \$5,000 was appropriated for

the Grants Committee to distribute during the year 1921.

On the Jane M. Smith fund the following were appointed with power to act during 1921: L. O. Howard, W. J. Humphreys and B. E. Livingston.

Among the resolutions adopted by the Council are the following:

Be it resolved: That the American Association for the Advancement of Science would welcome the organization of Mexican men of science, and their affiliation with this Association.

Resolved: That a committee of seven be appointed to cooperate with such organization as Mexican men of science may form.

The following were appointed on this committee: L. O. Howard, *Chairman*, A. E. Douglas, E. L. Hewitt, D. S. Hill, W. J. Humphreys, D. T. MacDougal and W. Lindgren.

WHEREAS the American Association for the Advancement of Science includes sections on Physiology, Experimental Medicine and Zoology, and

WHEREAS advancement of knowledge in these sciences, which is dependent upon intensive study of living tissue, is inevitably followed not only by amelioration of human suffering, but also by a lessening of animal disease and by substantial economic gain and by conservation of the food supply, and

WHEREAS this association is convinced that the rights of animals are adequately safeguarded by existing laws, by the general character of the institutions which authorize animal experimentation and by the general character of the individuals engaged therein,

Therefore be it resolved, that this association agrees fully with the fundamental aim of those whose efforts are devoted to the safeguarding of the rights of animals but deprecates unwise attempts to limit or prevent the conduct of animal experimentation such as have recently been defeated in California and Oregon, for the reason that such efforts retard advance in methods of prevention, control and treatment of disease and injury of both man and animals and threaten serious economic loss, and be it further

Resolved, that a copy of these resolutions be included in the official records of this Association, and that copies be sent to the national congress, to the legislatures of each state in the union and to each member of the Association.

WHEREAS, clean culture of roadsides and the drainage of marshes in the United States is imperiling the existence of the wild-life of our country not now included in special preserves, and

Whereas, the preservation of this wild-life not in preserves is felt to be of great national importance not only to students and lovers of nature, but to human welfare in general, therefore,

Be it resolved, by the council of the American Association for the Advancement of Science, that it appreciates the importance of preserving this wild-life not in preserves, and that it lends its moral support to the effort to combine all interested organizations in a cooperative investigation and conservation program for the preservation of our unprotected wild-life.

WHEREAS, in recognition of the unique character and value of our National Parks and Monuments to present and future generations, twenty-four successive Congresses have wisely resisted attempts to commercialize them and have preserved them inviolate for nearly half a century,

WHEREAS, certain private interests are now seeking to secure special privileges in these areas, which if granted will seriously interfere with their true purpose and undoubtedly result in the entire commercialization of these unique national museums.

Therefore, be it resolved, that the American Association for the Advancement of Science request members of Congress first to amend the Water Power Act so that it shall not apply to National Parks and Monuments and that their full control be restored to Congress, and second, to reject all present and future measures which propose to surrender any part of these National Parks and Monuments to private control or to divert them in any way from their original and exclusive purpose, the preservation for all future generations of unique representations of natural conditions such as exist in no other part of the world.

## SOME ECONOMIC PHASES OF BOTANY<sup>1</sup>

It is an old custom for the retiring vicepresident of this section to deliver an address.

1 Address of the vice-president and chairman of Section G, botany, American Association for the Advancement of Science, Chicago, 1920.