

SCIENCE

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CONTENTS

<i>The American Association for the Advancement of Science:—</i>	
<i>The New York Meeting</i>	41
<i>Report of the General Secretary: DR. JOHN F. HAYFORD</i>	46
<i>Proceedings of the Opening Session: DR. C. M. WOODWARD, PRESIDENT NICHOLAS MURRAY BUTLER, DR. WILLIAM H. WELCH.</i>	50
<i>The Policy of the Carnegie Institution: PRESIDENT R. S. WOODWARD</i>	56
<i>Scientific Books:—</i>	
<i>Reid's Principles of Heredity: PROFESSOR WILLIAM A. LOOY. Postelsia: PROFESSOR CHARLES E. BESSEY</i>	60
<i>Societies and Academies:—</i>	
<i>The Biological Society of Washington: DR. M. C. MARSH. The Northeastern Section of the American Chemical Society: PROFESSOR FRANK H. THORP</i>	63
<i>Discussion and Correspondence:—</i>	
<i>Gastroliths: DR. G. R. WIELAND. Deafness in Wild Animals: LOYE HOLMES MILLER. Interrogatory Labels for Certain Kinds of Museums: HARLAN I. SMITH</i>	66

<i>Special Articles:—</i>	
<i>Note on the Composition of Limulus Blood Ash: DR. HUGH MCGUIGAN</i>	68
<i>Quotations:—</i>	
<i>The Great Men of France</i>	69
<i>Current Notes on Land Forms:—</i>	
<i>Westland, New Zealand: I. B. River Terraces in Vermont: D. W. J. Fault Blocks in the Sierra Nevada: W. M. D. Technique of Physiographic Descriptions: W. M. D.</i>	70
<i>Report of the Geological Expedition of the Hon. Charles H. Morrill: PROFESSOR ERWIN H. BARBOUR</i>	73
<i>The National Geographic Society</i>	74
<i>Medical Lectures at the Harvard Medical School</i>	75
<i>The U. S. Geological Survey</i>	76
<i>Scientific Notes and News</i>	76
<i>University and Educational News</i>	80

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THE NEW YORK MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE meetings of the American Association for the Advancement of Science and of the national scientific societies affiliated with it, held during convocation week, demonstrate a further advance in the organization of science in this country. The number of scientific men gathered together was larger than ever before in America or in any country except Germany, and still more significant is the fact that there were manifest on all sides devotion to high ideals of scientific research and a spirit of sincere cooperation. It is a fine thing that in a country and period supposed to be concerned chiefly with material success there should come together more than two thousand scientific men and women, nearly all of whom have chosen and now pursue their life work from love of science and of truth, who are devoting themselves to the increase of knowledge and the application of this knowledge to human welfare.

There are, of course, difficulties as well as advantages in a meeting of such magni-

tude. At the first of the convocation-week meetings, held in Washington four years ago, there was some conflict of interests; for example, three sessions devoted to the reading of botanical papers were held simultaneously. At the second large meeting, held in Philadelphia two years ago, the friction was slight, but questions as to the advisability of such joint meetings and of the usefulness of the American Association were occasionally raised. At the present meeting the general spirit of harmony and good fellowship was obvious. There are, of course, many open questions and many differences of opinion—it would be a sign of atrophy rather than of growth if such did not exist—but everywhere appeared a willingness to solve the questions and compromise the differences by the use of kindness and common sense.

It was indeed a cause of regret that it was possible to attend only one of the simultaneous meetings and to talk at leisure with only a small part of those present, but this is a drawback which evidently would not be overcome if the societies met simultaneously in a dozen different places. The specialization demanded by the increase of knowledge and the limits of the capacity of a single man does not set sharp boundaries between the sciences, but rather tends to obliterate them. A society of physiological chemists can not meet apart from physiologists and chemists, or a society of vertebrate paleontologists apart from geologists and zoologists. There were held in New York joint meetings of special interest of botanists and zoologists, of mathematicians and astronomers, of philos-

ophers and psychologists, and of other groups. The opportunity was also taken for the meetings of many committees and boards, on which men of science working in different directions are represented.

There was in no case any conflict between a section of the association and a special society; in all cases joint programs were arranged. It was indeed suggested in the council that the officers of the sections and the sections themselves are superfluous, but this probably represents the opinion of a small minority. The special societies are far more competent than the sections to arrange special programs and to elect their members. The association has acknowledged this, its council having passed resolutions empowering the sectional committees to turn over special papers to the special societies and instructing the permanent secretary to nominate as fellows members of the affiliated societies having the same standards as the association. But the sections still have important functions. They give an organization which provides for representation in the council and for reference from the council of special questions. The sections, as a rule, embrace a group of sciences, and thus serve as centers of affiliation and organization. They are also the best means of keeping the association and the sciences in touch with the wider public. A program such as that of the section of physiology and experimental medicine appears to be in every way satisfactory. It had a vice-presidential address of general interest and a discussion on a subject common to the sciences concerned, but left all special papers to the societies meeting in affiliation.

The wide dispersal of American men of science and the time of meeting are more serious difficulties than the unification of interests at the meetings. The solution will probably be found in meetings at more than one time in the year and at more than one place. The association held this summer a most pleasant and profitable meeting at Ithaca; it has authorized those sections which so desire to hold meetings during the summer of 1907, and plans a general summer meeting in some New England town in the summer of 1908. Two meetings a year will partly solve the difficulties of travel, for one of them would naturally be held near the Atlantic seaboard and one farther to the west. Still, the time will probably come when it will be desirable to hold two or more meetings simultaneously in different regions, having perhaps a general congress of scientific men once in three or five years.

The association should be competent to make the arrangements whenever and wherever meetings of scientific men are needed. There are many details, such as railway transportation, which can be most economically arranged at a central office, and there should be in each center academies, societies or committees which stand in relation to the association. The Smithsonian Institution or the Carnegie Institution should provide a central office for the association, and if neither of these institutions appreciates the privilege of doing this, funds should be secured for a building. The council at New York passed an important resolution instructing the committee on policy to report means by which "the efficiency of the organization of the

association may be increased and the office of the permanent secretary made more important." There is every reason to believe that the secretary of the association should and will occupy an office at least equal in usefulness, dignity and salary to the secretaryship of the Smithsonian Institution. In this age and country it is a higher honor to be directly responsible to the organized body of American men of science than to be subject to a board of regents or trustees, the majority of whom have but a vague conception of the methods and ideals of science.

The general secretary, in his report of the meeting printed below, estimates the attendance at *not less than* 1,500. This is a safe estimate, for he tells us that while 106 members of Section C registered, the attendance of chemists was estimated at 300. In so far as similar conditions hold for other sections, this would indicate a total attendance of about 2,700 scientific men and women, and this figure would not include the large number of local members who attended some of the functions or sessions without registering or the ladies who accompanied members. This may be an overestimate, but certainly the lecture rooms of Columbia University were as a rule crowded. Thus on Friday afternoon people were standing and turned away from the discussion before the naturalists on 'The Biological Significance and Control of Sex' and the address by Professor William James on 'Surplus Stores of Energy.' Yet each of the lecture rooms holds about 300, and there were many other meetings at the same time. There were about 2,000 people at the exercises at

the American Museum of Natural History on Saturday.

To ascertain the exact attendance at the meetings is not in itself a matter of importance. A great many members of the association do not register because there is no reason to do so except as a matter of record. It is, however, unfortunate that such a large proportion of scientific men attending the meetings are not members of the association. There has indeed been a great improvement in recent years, the membership having increased about three-fold since the preceding New York meeting of 1900. At that time the official membership was 1,721, whereas on December 1 it was 4,498, and over 400 new members were added at the meeting. This increase is largely due to the fact that at the preceding New York meeting arrangements were made by which this journal is sent free of charge to members without any advance in the membership fee. For the sum of three dollars an American scientific man may be a member of the association and receive the weekly issues of *SCIENCE*, whereas in Great Britain it costs \$12.50 to belong to the British Association and to receive *Nature*. Yet the purchasing power of money is greater there than here. A committee on increase of membership was established by the council, and it is to be hoped that this committee will bring to the attention of all men of science the privilege and the duty of allying themselves with their fellow workers in our national scientific organization.

The most unsatisfactory aspect of recent meetings of the association has been the lack of adequate recognition and apprecia-

tion by the general public. In a democracy, science, literature and art should not depend on patrons and privileged classes for support and recruits, but on the whole people. The American Association is now accomplishing more than the British Association in its work as a body of scientific men, but it falls far behind it in a function nearly as important, namely, the diffusion of science and the promotion of general appreciation of scientific work. At the annual meetings of the British Association from one to two thousand associates and ladies, the leading people of the community, join the association, subscribing to its funds and attending its meetings. The *London Times* and other newspapers devote daily pages to accurate reports. At and before the New York meeting about 500 leading citizens of New York City joined the association, including our greatest living man of letters, many of the prominent editors, lawyers, physicians and clergymen of the city, and a number of those prominent in the commercial development of the city and the county. This is a distinct advantage both for them and for the association, and similar and increased efforts in this direction should be made at subsequent meetings.

On the other hand, the reports in the press were simply scandalous, in spite of the fact that the editor of each of the leading papers consented at the request of a personal acquaintance to arrange for adequate reports. Because one of the speakers mentioned the name of Mr. John D. Rockefeller, three fourths of the space given to the whole meeting on that day with its two or three hundred important papers, was

devoted to him. The *Sun* reported in detail the alleged discovery of a method to do away with old age and death, cabled from France, while almost ignoring the scientific discoveries and advances of the meeting. A newspaper which would discharge an editor for making a 'break' in literature or art will expose its scientific nakedness without shame. But it must be remembered that it is our scientific men and our scientific organizations, rather than the newspapers themselves, on which the ultimate responsibility rests.

The principal events of the meeting are briefly recorded in the report of the general secretary, which follows, and accounts of the scientific sessions will be printed in subsequent issues. Probably the most important action taken was the establishment of a section on education. An amendment to the constitution to this effect had been proposed at the New Orleans meeting and was supported by a petition signed by 171 of those interested, including many leading educators. Such a section will have two somewhat distinct functions. It will be concerned, on the one hand, with education as a science and, on the other, with the teaching of the sciences. In both cases the alliance with the association is fortunate. Those who are aiming to make education a science can profit by association with those who are following sciences that are more exact, while a majority of the fellows of the association are engaged in teaching. There are also important questions of educational administration which can properly be brought before the section. Lastly, it is desirable on both sides that those who are engaged in the

teaching of the sciences in the schools and colleges should be brought in contact with those who are carrying on research work. It may further be noted that steps were taken at the New York meeting to form a federation of the local societies of teachers of the mathematical and natural sciences. The constitution of the association was also amended so that psychology should be officially recognized in its scope. The Psychological Association, one of the strongest of our special societies, has long been affiliated with the association, and to it will doubtless be left the psychological program of the section of anthropology and psychology.

New committees were formed on seismology, on the bibliography of science and on the celebration of the fiftieth anniversary of the publication of the 'Origin of Species' in 1909. In that year the British Association will meet in Canada, and a cordial invitation was presented to take part in that meeting. A letter was read announcing that the Walter Reed memorial fund, the movement for which originated at the Washington meeting, now amounts to over \$24,000, and toward completing the fund of \$25,000, the sum of \$100 was appropriated from funds in the hands of the permanent secretary, as a mark of appreciation by the association of Reed's great services in the suppression of yellow fever. A resolution was passed urging the passage of bills creating forest reserves in the Appalachians and the White Mountains.

Space permits no reference here to the scientific meetings, before which about 800 papers were presented, but these will be subsequently reported. A few words

should be said of the general functions and arrangements. It was recognized by all that Columbia University offered admirable headquarters. Earl Hall not only supplied good facilities for registration, but also provided excellent offices and rooms for writing, conversation and smoking. These were increased by the opening of the adjacent Faculty Club, where two smokers were held. The restaurant charges in the university commons were low and the service as good as could be expected for such large numbers. The rooms for the special meetings were often taxed to their full capacity, but were usually adequate, and there was practically no confusion or conflict. Equally satisfactory were the arrangements at the College of Physicians and Surgeons, which is the medical school of Columbia University, the University and Bellevue Hospital Medical College, which is the medical school of New York University, the Rockefeller Institute, the New York Botanical Garden and the American Museum of Natural History.

Especially to be noted as bringing together large groups of members were the reception given by the president of Columbia University in Earl Hall following the address of the retiring president of the association; the luncheon at the City College, preceded by timely addresses and followed by an inspection of the beautiful and well-arranged new buildings; the extremely interesting ceremonies connected with the unveiling of ten busts of pioneers of American science, presented to the American Museum by Mr. Morris K. Jesup, and the reception at the museum in the evening, given jointly by the mu-

seum and the New York Academy of Sciences, with an admirable exhibit of scientific progress arranged by the academy. Nearly every society and group of scientific men had their own smokers and diners, so that in spite of the large numbers present, there was opportunity for each one to see those who work in his own field. The arrangements of the meeting prove that while the winter may not be so convenient as the summer in giving opportunities for informal meetings and social intercourse, much can be accomplished in this direction.

The long line of great men who have filled the presidency of the association was at the New York meeting continued by a president who in rare degree unites dignity, tact and good sense, whose ideas and fit words come directly from broad sympathies and noble achievement. He is able to hand on the office to one eminent in his science, a leader in all movements to advance science and to promote the objects of the association from within and from without. The place of meeting is also fortunate. It will have been forty years since the association last met at Chicago, and in that period the city and the state have become notable for scientific activity. Chicago is nearer to the center of scientific population than New York, and there is every reason to believe that the meeting next year in that city will rival or excel the great New York meeting.

REPORT OF THE GENERAL SECRETARY

THE fifty-seventh meeting of the American Association for the Advancement of Science was held at Columbia University,