SCIENCE

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FRIDAY, JULY 6, 1900.

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MSS. intended for publication and books, etc., intended for review should be sent to the responsible editor, Professor J. McKeen Cattell, Garrison-on-Hudson, N. Y.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FROM the point of view of scientific work the New York meeting of the Association was the most successful in its history, with the possible exception of the anniversary meeting held two years ago at Boston. It was not expected that New York City would be a favorable place to awaken local enthusiasm or altogether suitable for social gatherings, but even in these respects there were no grounds for complaint. The attendance—a registration of about 450—was not as large as had been hoped for. It included, however, an unusually large proportion of fellows, and there were perhaps three hundred members of the affiliated Societies present who did not register as members of the Association. The assembly of scientific men was therefore about as large as it ever has been, and considerably larger than since 1884, with the exception of the anniversary meeting.

The general conduct of the meeting met with the approval of nearly all the members, though a few regretted the lack of eleemosynary entertainments and excursions. The members were welcomed to Columbia University by President Low and to the American Museum of Natural History by President Jesup. The address of the presi-

dent, Professor Woodward, who presided with admirable dignity and tact, is printed below, while last week we were able to publish the address of Mr. Gilbert, the retiring president, which was a model of what such an address should be. Scientific excursions were made to the Botanical Gardens, to the Zoological Park, to the American Museum, to the Marine Laboratory at Coldspring Harbor and elsewhere, but the special feature of the meeting was the number and importance of the papers presented before the sections and affiliated societies.

The scientific pre-eminence of the meeting was due to these special scientific societies holding sessions in conjunction with the Association. The American Chemical Society always has a large attendance and crowded program. It was the first society to become definitely affiliated with the Association, and the result has been to make chemistry the leading science at the meetings. The Botanical Society of America, The Society for the Promotion of Agricultural Science and the American Forestry Association have given botany a place next to chemistry. But this year, for the first time since the beginning of the movement toward special societies, chemistry and botany were rivalled by the work of sections A and B. The American Mathematical Society and the Astronomical and Astrophysical Society of America met with the section for mathematics and astronomy and the American Physical Society with the section for physics, and these sections held meetings of unusual importance. The Geological Society of America strengthens Section E, but unfortunately for the Association the most active geologists are likely to be in the field at the time of the meeting. The work of the Zoological section was unusually good this year. The Association of Economic Entomologists and the American Microscopical Society met with the Association, but the American Morphological Society and the American Ornithologists Union have not hitherto co-operated. Anthropology was strengthened, though only to a limited extent, by the American Psychological Association and the American Folk-lore Society. There were no special societies meeting in conjunction with Section D, Mechanical Science and Engineering, or with Section I, Social and Economic Science, and these are the two weakest sections of the Association. The Society for the Promotion of Engineering Education, which met after the adjournment of the Association, should join with Section D, and every effort should be made to secure the co-operation of the great engineering societies. In like manner the national societies devoted to social and economic science should be persuaded to meet with Section I, and perhaps special societies should be formed relating to the scientific aspects of commerce and education. There is no question that the special societies are strengthening the Association, the only drawback being that many of the members do not join the parent body. As they take advantage of the reduced railway rates and other arrangements for the meetings there is every reason for them to defray their share of the cost. Indeed it is obviously the duty of all men of science to support the historic and general association, whose influence is proportionate to its membership.

Although the annual dues are very moderate — only $3, while they are $5 in the British and French Associations—many members of other scientific societies think that they do not receive an adequate return for membership. It is a fact that owing to the wide dispersion of men of science in America and the difficulties of long journeys in mid-summer fewer than one fourth of the members attend the meetings. There is consequently hesitation in joining the Association and a tendency to let member-

ship lapse. The Association, however, took action at the recent meeting that will give even to those who are unable to attend the meetings a definite and adequate return for membership. The Council unanimously decided to send SCIENCE free of charge to all members of the Association next year and to publish in it official notices and proceedings. This action will increase the membership of the Association and the interest of the members in its work, while at the same time extending the influence of this JOURNAL, and promoting the cause to which both the Association and the JOURNAL are devoted—the advancement and diffusion of science.

The Association took another important step in establishing a section of physiology and experimental medicine. Since the foundation of the Association and even since the division into sections eighteen years ago a group of sciences has developed with remarkable activity. Physiology, experimental psychology, anatomy, embryology, histology, morphology, pathology, bacteriology and their applications have hitherto been ignored by the Association. Yet they represent one-half of the work of the German Association. An increase in membership and a new impetus will undoubtedly follow the recognition of sciences whose great advances and beneficent influences are seen on all sides.

The lengthening of the term of service of the treasurer to five years was the only other amendment made to the constitution. This was an obvious improvement, the treasurer being as a matter of fact a permanent officer, though he has hitherto been elected from year to year. Several important recommendations were made by the Council, an account of which will be found in the report of the general secretary published below.

It is a cause for congratulation that the permanent funds of the Association were increased last year by over forty per cent. Mr. Emerson McMillin's qualification as a patron provided $1000, and the permanent secretary was able to hand over to the treasurer $1500, of which $500 resulted from the falling in of the dues of life members, and $1000 represented savings due chiefly to the efficiency of the permanent secretary. He was able to add a further sum of $1000 at the present meeting. In spite of this increase, certainly great when recorded as a percentage of the accumulation of many years, the permanent funds are lamentably small. Only when 100 patrons, each contributing $1000, have been secured will the Association be able to make appropriations for research equal to those of the British and French Associations.

The small amount available, the interest on the permanent funds amounting to $233, was used in the way most likely to produce valuable results and strengthen the Association. It was divided among four committees, to be spent under their auspices in special researches. The committees are: on anthropometry; on the quantitative study of biological variations; on the cave fauna of North America, and on the relation of plants to climate. When it is generally known that the small sum of $50 a year will provide for a research under the auspices of a committee of the Association it seems certain that the money needed will be forthcoming.

In accordance with a good departure the general committee at Columbus, in selecting New York as the place of meeting for the present year, recommended Denver for next year, and this recommendation was unanimously adopted. Invitations of great cordiality were presented, and it was the general opinion that an 'American' Association should meet farther to the west than hitherto. A good meeting at Denver is certain, while at the same time the influence of the Association will be exerted in a region

where educational and scientific institutions are making extraordinary advances. Pittsburg was recommended as the place of meeting in 1902. The president was elected by a unanimous vote of the general committee. It was the opinion of all that no one so well deserved this honor as Professor Charles Sedgwick Minot, of the Harvard Medical School, eminent in the great group of sciences now first recognized by the Association, as well as in his labors on behalf of the Association.

PROCEEDINGS OF THE ASSOCIATION.

THE forty-ninth annual meeting of the American Association for the Advancement of Science began with the meeting of the Council at the Hotel Majestic at noon on Saturday, June 23d, and the first general session of the members was held at Columbia University at 11 o'clock on Monday, June 25th. The meeting was called to order by the retiring president, Mr. G. K. Gilbert, of the U. S. Geological Survey, who introduced the president-elect, Professor R. S. Woodward, of Columbia University. President Low welcomed the Association to New York City and to Columbia University and Professor Woodward replied. These addresses are published in this number of SCIENCE. Governor Roosevelt having telegraphed that he was unable to be present owing to important engagements, the Hon. James Wilson, Secretary of Agriculture, was called upon, and made an address emphasizing the importance of applied science, to which the Department of Agriculture is contributing so much.

On the adjournment of the general session, the sections organized and in the afternoon the addresses of the vice-presidents were given. There were only five of these, the addresses by Mr. J. A. Brashear, Professor C. B. Davenport, Mr. A. W. Butler and Professor C. M. Woodward having been postponed until next year in accordance with the plan that will hereafter be followed of having the addresses given by the retiring, instead of by the incoming vice-presidents. The addresses given at New York, now in course of publication in this JOURNAL, are as follows:

Section of Mathematics and Astronomy: 'The Teaching of Astronomy in the United States,' by Professor Asaph Hall, Jr.

Section of Physics: 'The Kathode Rays and some related Phenomena,' by Professor Ernest Merritt.

Section of Chemistry: 'The Eighth Group of the Periodic System and some of its Problems,' by Professor Jas. Lewis Howe.

Section of Botany: 'Some Twentieth Century Problems,' by Professor William Trelease.

Section of Geology: 'Precambrian Sediments in the Adirondacks,' by Professor J. F. Kemp.

On Tuesday evening the members of the Association were welcomed to the American Museum of Natural History by President Jesup, and Mr. Gilbert gave the address on 'Rhythms and Geologic Time' published in the last number of this JOURNAL.

The scientific work of the meeting was presented before the nine sections of the Association and the fifteen affiliated societies meeting with it, and will be reported fully in subsequent issues of this JOURNAL.

The number of members and fellows in attendance at the time of the last general session was 447, which during the day was probably increased to slightly over 450. Different sections of the country were represented as follows: New York by 184 members; District of Columbia, 47; Massachusetts, 46; Pennsylvania, 32; Ohio, 22; New Jersey, 17; Indiana, 13; Connecticut, 12; Wisconsin, 10; Michigan, 9; Illinois, 8; Rhode Island, 7; Maryland, 6; New Hampshire, 5; Virginia, 4; three each from Canada, Missouri and North Carolina; two each from Iowa, Kentucky, West Virginia, Maine, Mississippi, Florida, Minnesota and Colorado; one each from Alabama, Tennessee, Kansas, Louisiana, South Dakota, California, Texas, Nebraska, Delaware and South Carolina.