

A Short History of AAAS Meetings in Philadelphia

Whenever the American Association for the Advancement of Science meets in Philadelphia (Table 1), it is returning to its birthplace. The Association was formally organized 20 September 1848, in the library of the Academy of Natural Sciences (the Academy, as it happens, is celebrating its sesquicentennial in 1962). The AAAS stemmed directly from the Association of American Geologists and Naturalists, a society that had originally been named the Association of American Geologists, when 18 prominent geologists from seven Eastern states assembled, on 2 April 1840, at Philadelphia's Franklin Institute to found it. The AAGN committee that had drafted a first constitution for the AAAS had been established in 1847.

Earlier Philadelphia Meetings

Philadelphia, founded in 1682, was not only the nation's cradle and first capital but also its first scientific center, so it was appropriate that the birth and first meeting of the Association should have occurred there. The forerunner of the University of Pennsylvania had been established in Philadelphia in 1740; the American Philosophical Society, in 1743 (it was permanently organized in 1769); the Academy of Natural Sciences, in 1812; and the Franklin Institute, in 1824. During this period the city's population had grown from 93,665 to about 115,000.

When the Association of American Geologists and Naturalists met in the library of the Academy of Natural Sciences at noon on 20 September 1848, William Barton Rogers, then of the University of Virginia, called the meeting to order and read the report of the committee on the new constitution. With respect to name and objectives, the recommendation of the committee was as follows.

The Society shall be called "THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE." The objects of the Association are, by periodical and

migratory meetings, to promote intercourse between those who are cultivating science in different parts of the United States; to give a stronger and more general impulse, and a more systematic direction to scientific research in our country; and to procure for the labours of scientific men, increased facilities and a wider usefulness.

Those present then adjourned, to reconvene in the "Hall of the University of Pennsylvania" on 9th Street. At 4 P.M. on the same day, Rogers called to order the newly created AAAS and introduced the Association's first elected president, William C. Redfield of New York. Peter A. Browne of Philadelphia read the first paper. Among the eminent scientists present were Louis Agassiz, Stephen Alexander, Alexander D. Bache, Asa Gray, Joseph Henry, Benjamin Silliman, and John Torrey—names still revered today.

At this first meeting of the Association, which lasted 5 days, Benjamin Peirce read a paper on the general principles of analytical mechanics. He was followed by Louis Agassiz, whose paper was titled, "On the classification of the animal kingdom." About 60 papers were presented. Probably most of the 461 charter members were present.

After this initial meeting there was an interval of 36 years before the Association again met in Philadelphia, in September 1884. During these 36 years there had been impressive advances in science, and the Civil War had been fought. The nation stood at the threshold of a period of profound change, brought about by industrial applications of current inventions and the impact of these applications on the nation's way of life. The Association, which had been incorporated in Massachusetts in 1874, was still of modest size; it had 1981 members, and the number of sections had been increased to nine.

At the time of this second Philadelphia meeting, J. P. Lesley, Philadelphia geologist, was the new president of the Association. The meeting was attended by many members of the British Association for the Advancement of Science.

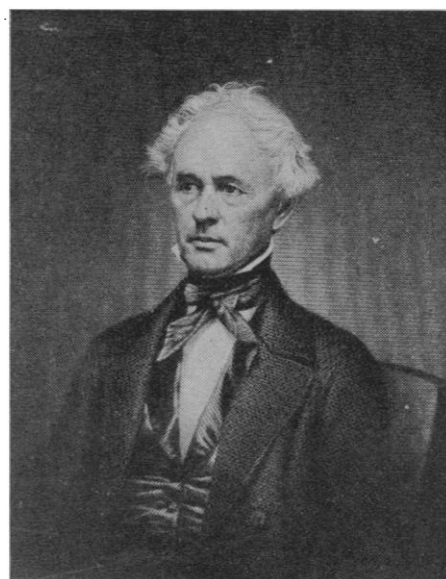
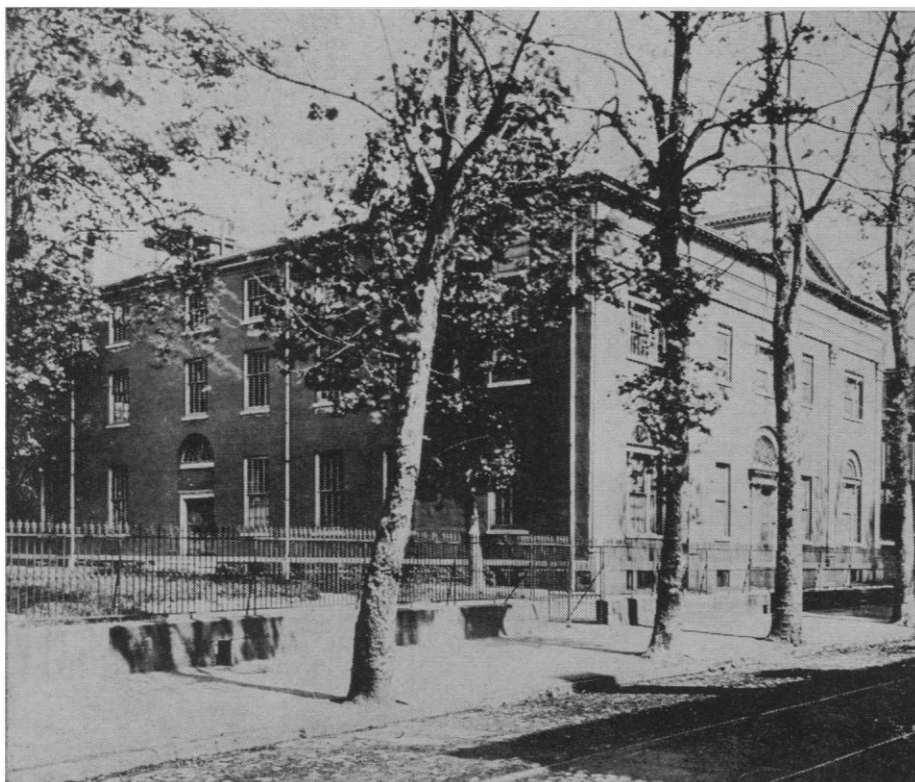
The British Association had just met in Montreal, and many of the participants arranged to attend the AAAS meeting before returning home. Of the 1261 registrants at the AAAS meeting, 303, or about one-fourth, were members of the British Association; there were nine other delegates from abroad. The 949 American registrants came from 37 of the then 38 states of the Union.

The sessions were held in downtown Philadelphia in the Academy of Music, the Horticultural Hall, the Episcopal Academy, and buildings of the Union League, the College of Physicians, and the Historical Society. After speeches of welcome by the governor and the mayor, the retiring president, Charles A. Young of Princeton, delivered his address, "Pending problems in astronomy." In it he observed: "[Since the 1848 meeting] the telegraph and dynamo-machine have not more changed the conditions of business and industry than the speculations of Darwin and Helmholtz and their contemporaries have affected those of philosophy and science."

At this second Philadelphia meeting there were excursions to Atlantic City and Cape May, to the Pine Barrens, and to the anthracite coal fields. There was a special excursion to Long Branch, New Jersey, to the summer home of Isaac Lea, 93, former president of the AAAS, who, himself unable to attend the sessions, had invited all the participants to a reception.

Philadelphia gave the delegates an enthusiastic welcome. The Century Club, the University Club, and the Union League all offered guest privileges, and nearly every important industry of the city arranged tours and receptions. "Through the liberality of the Western Union Telegraph Company, social telegrams for members of the British and American Associations . . . [were] sent during the meeting from Philadelphia to all parts of the United States and Canada free of charge," and for the British, cables also were sent gratis. The participants were allowed to send certain parcels by express without charge, and the postmaster of Philadelphia agreed to "so organize his department as to offer the greatest facilities to visitors." Three hundred and five papers were presented at the meeting; at the Zoological Gardens, Edward Muybridge demonstrated "the instantaneous photographing of animals in motion."

The third Philadelphia meeting was held from 27 to 31 December 1904,



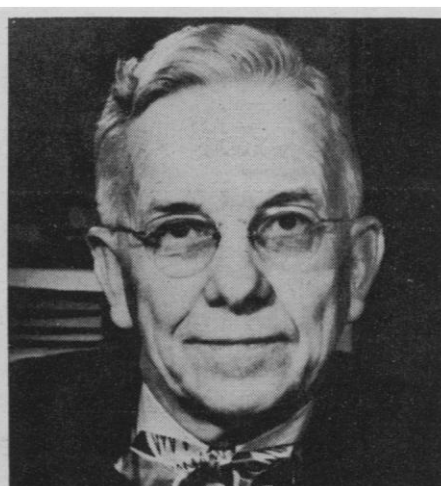
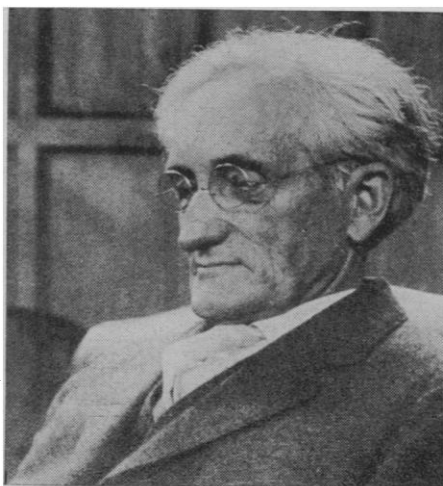
William C. Redfield, first president of AAAS who presided at the first meeting of the association in Philadelphia (1848).

(Left) College Hall, University of Pennsylvania, site of the first meeting of the AAAS.

after an interval of 20 years. There had been marked scientific developments. Genetics was rapidly becoming a separate science; the Spanish-American War had been won; the machine age was fast becoming a reality. The AAAS now had 4041 members, and in 1900, *Science*, owned and edited by J. McKeen Cattell, had become its official organ, greatly increasing the effectiveness of the Association. At the time of this 54th meeting, William G. Farlow, botanist of Harvard, served as president. The general chairman, Charles C.

Harrison, provost of the University of Pennsylvania, referred in his address of welcome to the great men of science who had lived in Philadelphia—men such as Priestley, Franklin, Rittenhouse, Rush, Cope, Hare, Leidy, Bache, Bartram, Wistar, Brinton, and John Ryder—and congratulated the AAAS on the fact that representatives of so many learned societies could “assemble together without fear of jealousy, or rivalry.” The Association’s retiring president, Carroll D. Wright, U.S. Commissioner of Labor, spoke on sci-

ence and economics. It was at this meeting that the AAAS discontinued the practice of printing a daily program and supplementary lists of registrants and planned a “visible directory” of the type now used. Another innovation was the appointment of a press secretary to insure more than local coverage of the meeting. At this meeting most of the sessions were held in the halls and laboratories of the University of Pennsylvania (which has been located at its present site since 1872), and the university generously furnished



(Left) Liberty H. Bailey, (center) Albert F. Blakeslee, (right) Kirtley F. Mather, presidents of the AAAS during meetings held for the fifth (1926), sixth (1940), and seventh (1951) times, respectively, in Philadelphia.



Paul M. Gross, president of AAAS who will preside at the meetings to be held for the eighth time in the Quaker city.



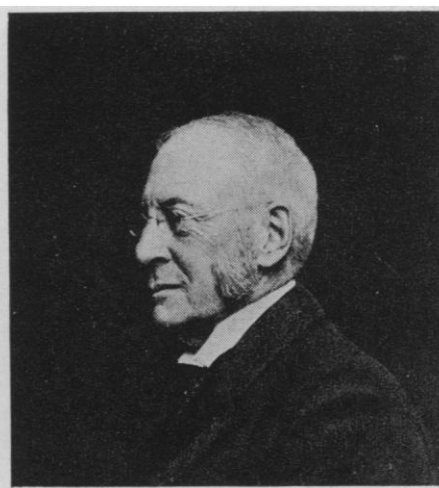
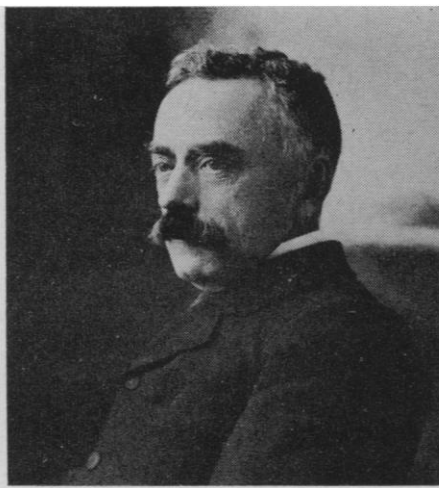
(Right) Sheraton Hotel, headquarters of the 129th meeting, is in sharp contrast to the first meeting place.

lunch each day for all the participants. Communication among scientists and indexing of the expanding literature of science were already problems 58 years ago: The Committee on Indexing Chemical Literature, which had been in existence since 1882, presented its 22nd annual report.

The fourth Philadelphia meeting (the Association's 66th) was held from 28 December 1914 to 2 January 1915. World War I had begun, but the United States was as yet scarcely affected. A public lecture by William H. Nichols,

"The War and the chemical industry," was the only major reference to this great conflict. At this time Charles W. Eliot, emeritus president of Harvard, was the new president of the Association. Nearly all the sessions were held on the campus of the University of Pennsylvania, and the university again provided luncheon each day in the gymnasium. The General Headquarters was Houston Hall. The retiring president, Edmund B. Wilson, gave an address entitled "Some aspects of progress in modern zoology."

The fifth Philadelphia meeting (the Association's 83rd), held from 27 December 1926 to 1 January 1927, with 3181 registrants from 46 states, was the second largest of the AAAS annual meetings held up to that time (the largest had been the Washington meeting of 1924). There were 222 scientific sessions, mainly in rooms of the University of Pennsylvania but also in other institutions and in hotels, and 1449 papers were read. The decade that followed the conclusion of World War I was one of great expansion in



(Left) J. P. Lesley, (center) William G. Farlow, and (right) Charles W. Eliot, presidents of the AAAS during meetings held for the second (1884), third (1904), and fourth (1914) times, respectively, in Philadelphia.

Table 1. Data on earlier Philadelphia meetings of the AAAS.

AAAS meeting	Date	President	Papers read (No.)	Participants (No.)
1st	20-24 Sept. 1848	William C. Redfield	60	About 400
33rd	4-11 Sept. 1884	J. P. Lesley	305	1261
54th	27-31 Dec. 1904	William G. Farlow	224	692
66th	28 Dec. 1914 to 2 Jan. 1915	Charles W. Eliot	774	1086
83rd	27 Dec. 1926 to 1 Jan. 1927	Liberty Hyde Bailey	1449	3181
107th	27 Dec. 1940 to 2 Jan. 1941	Albert F. Blakeslee	2164	3339
118th	26-31 Dec. 1951	Kirtley F. Mather	1286	3702

science, and the membership of the Association had nearly doubled since 1915, having reached 14,355. At the annual meeting of 1919-20 the Association had adopted a new constitution, which provided for 15 sections.

At the time of the fifth Philadelphia meeting the eminent horticulturalist Liberty Hyde Bailey presided as president and Michael I. Pupin, the retiring president, delivered his address, "Fifty years' progress in electrical communications," before a large audience in Drexel Hall. It was followed by a reception in the new Palestra of the University of Pennsylvania. Other public lectures included the annual Sigma Xi lecture, "The nation and science," delivered by Herbert Hoover. The Annual Science Exposition—the third to be held on an organized basis—was housed in Weightman Hall, the University gymnasium, and was "the largest and most satisfactory display of this sort" yet to be held. Some of the firms who exhibited in 1927 will also be represented in 1962. They include the American Optical Company, the Blakiston Division of McGraw-Hill, Denoyer-Geppert Company, General Biological Supply House, Leeds and Northrup, E. Leitz, Inc., and D. Van Nostrand Company.

The sixth Philadelphia meeting (the Association's 107th) was held from 27 December 1940 to 2 January 1941, after the beginning of World War II but before the United States had become involved. The membership of the AAAS now stood at 21,067. This was the largest of the Philadelphia meetings held up to that time. The *General Program* (with directory material that now is printed separately) was a book of 320 pages. The late Albert F. Blakeslee, geneticist, was president of the Association. The retiring president,

Walter B. Cannon, spoke on "The body physiologic and the body politic." The Bellevue Stratford was headquarters hotel, but the exhibits were at Convention Hall. Other downtown hotels and buildings of the University of Pennsylvania were also used. The sixth annual address of the United Chapters of Phi Beta Kappa was given by Walter Lippmann, and A. J. Carlson gave the 19th annual lecture of the Society of the Sigma Xi.

The winners of the 18th Newcomb Cleveland prize were Dennis R. Hoagland and Daniel I. Arnon. Their paper, "Availability of nutrients with special reference to physiological aspects," was read before a joint session of the Botanical Society of America, the American Society for Horticultural Science, and the American Society of Plant Physiologists.

The seventh Philadelphia meeting (the Association's 118th) was held from 26 to 31 December 1951 [*Science* **115**, 178 (1952)]. With 3702 registrants, from every state except Nevada, it was larger than the sixth Philadelphia meeting, even though many of the biological societies were not participating. As in 1940, the Bellevue Stratford was AAAS headquarters, the Annual Exposition of Science and Industry and many sessions were housed in Convention Hall (2 miles away), and the other sessions were held in buildings of the University of Pennsylvania and in other downtown hotels. (By contrast, at this year's meeting the exhibits will be housed in the Sheraton Hotel and all sessions will be held either in the Sheraton or in two other hotels no more than a few blocks away.)

In 1951 Kirtley Mather was AAAS president. The retiring president, Roger Adams, spoke on "Man's synthetic future," and he predicted great con-

tributions from the nation's chemical laboratories. Other speakers, and the titles of their papers, were as follows: S. Dillon Ripley, "An ornithological expedition to Nepal"; Arthur H. Compton, "Science and man's destiny"; Cornelius W. de Kiewiet, "Our human resources of skill and wisdom"; E. W. Engstrom, "The human element in industrial research"; and E. Newton Harvey, "Animal light." The 24th Newcomb Cleveland prize was won by J. Laurence Kulp, who spoke on "Natural radiocarbon measurements," in a program cosponsored by Section E and the Geological Society of America.

There was a two-session symposium on Soviet science and a three-session symposium entitled "Operation Knowledge." The latter, jointly sponsored by seven AAAS sections and by the American Library Association, the Chemical Literature Division of the American Chemical Society, and the Special Libraries Association, was a predecessor of the Conference on Scientific Communication and of the recently organized Section on Information and Communication.

At this meeting, Section P (Industrial Science) was activated and the Alaska Division of the AAAS was established.

The Association's first meeting, of 1848, and its 129th meeting, of 1962, afford an interesting contrast in many respects, yet, fundamentally, the objectives have not changed. During the 114 years that separate these two meetings the membership of the AAAS has increased nearly 200-fold—from 461 charter members to the present membership of some 72,000 men and women of science. Originally the Association had two sections—"Natural History, Geology, etc." and "General Physics, etc."; now it has 20, and no fewer than 298 affiliated and associated societies and academies of science with a total membership probably in excess of 7 million. With this growth in membership and in the number of its affiliates, the Association's capacity for serving science and the nation has been correspondingly increased.

It is more and more apparent that the large and distinguished AAAS meeting serves an essential function, for nowhere else, on such a scale, can specialists in different fields of science meet and consult with one another on the problems that confront them all as scientists.

RAYMOND L. TAYLOR
Associate Administrative Secretary