Association Affairs

AAAS Washington Meetings, 1854–1958

When the Association of American Geologists and Naturalists was reorganized to become the American Association for the Advancement of Science, 110 years ago this month, a primary object was "by periodical and migratory meetings, to promote intercourse between those who are cultivating science in different parts of the United States." The Association's annual meeting, though it continues to change, remains a major activity.

At this year's meeting, in Washington, D.C., the AAAS general symposium, "Moving Frontiers of Science III," and the programs of the 18 AAAS sections will cover the principal fields of science. For the most part, these will be symposia of two to four sessions, with speakers from all parts of the nation and abroad, but eight sections will also sponsor sessions for contributed papers. In addition, some 45 organizations will have their own sessions. Included are 15 national meetings—notably those of the American Astronautical Society, American Meteorological Society, American Society of Naturalists, American Society of Zoologists, Society of Systematic Zoology, History of Science Society, and science teaching societies—and the special or regional meetings of 31 societies. Among this latter group are societies not previously represented, such as the American Society of Photogrammetry, the Instrument Society of America, and the Washington Academy of Sciences. Typical of such special programs are the American Psychiatric Association's projected four-session symposium on hallucinations and the American Physiological Society's symposium on space medicine. Many of the more than 300 sessions will be cosponsored by an additional 40 or more societies.

Particularly important new research findings are often announced at AAAS meetings and new laboratory supplies and instruments and the latest scientific books are displayed in the Annual Exposition of Science and Industry. At this year's meeting a new, much-improved system of closed-circuit, large-screen, color television, lent by Ciba Pharmaceutical Products, Inc., will be demonstrated in a series of special sectional programs. The program of Section B (Physics) is being arranged by a committee headed by Deane B. Judd, of the National Bureau of Standards; those of Section F (Zoological Sciences) and of Section G (Botanical Sciences), by an appropriate committee of the American Institute of Biological Sciences. The program committee of Section N's four-session symposium on congenital heart disease plans sessions that will include models, pathologic specimens, differential diagnostic work-up, and an actual heart operation.

In recent years, the Association has increasingly recognized its responsibility to inform the general public on scientific developments and its obligation to assist all organizations concerned in the encouragement of qualified young people to prepare for, and enter, careers in science. The activities of the AAAS Pressroom and of the local Committee on Public Information, the broadcast coverage of the meeting, and the 12th annual Junior Scientists Assembly—a special program for a large number of selected high-school students, at a site apart from the technical sessions—reflect these objectives.

Meeting Sites

A cholera outbreak, in 1852, and three great wars have interrupted the continuity of the AAAS annual meetings, while a number of additional summer meetings (principally from 1931 to 1941) have also been held. Consequently, this year's large gathering of scientists, teachers, and administrators in Washington will be the 125th, rather than the 111th, annual meeting. It will also be the 7th Washington meeting.

The previous occasions when the AAAS met in the nation's capital were in 1854, 1891, 1902, 1911, 1924, and the centennial year, 1948. Thus the Washington meetings have spanned more than a century. In no city has the Association met more often, and in only three other cities—Boston, where the AAAS was conceived, Philadelphia, where it was founded, and New York—has it met as many as seven times. Meetings have not been more frequent in any one city because the Association has consistently sought, where feasible, to meet in different sections of the nation and Canada and thus serve the convenience of its members.

The physical facilities available, the number and size of the participating societies in any particular year, and the number and variety of local scientific institutions are all major factors in the selection of meeting sites. In this last respect, Washington stands first, when its public and private scientific organizations are considered. There are six large universities and branches of several others in the metropolitan area. Its unique concentration of scientific research and administrative agencies in all the major disciplines make Washington a great national science center. Such large and ramified governmental establishments as the Agricultural Research Center, Army Medical Center, Atomic Energy Commission, Library of Congress, National Academy of Sciences, National Bureau of Standards, National Institutes of Health, National Science Foundation, Naval Medical Center, Naval Observatory, Office of Education, Office of Naval Research, Smithsonian Institution (with its subdivision, the U.S. National Museum), the U.S. Geological Survey, and Weather Bureau employ many thousands of scientists and attract scores of thousands of visiting scientists throughout the year.

Among the private organizations, the Brookings Institution and the Carnegie Institution of Washington, including its Geophysical Laboratory and its Department of Terrestrial Magnetism, also receive many visitors, as do the many scientific, educational, and learned societies that maintain national headquarters in Washington. A complete list of these is too extensive to be provided here, but included are the American Chemical Society, American Institute of Biological Sciences, American Geological Institute, American Geophysical Union, American Psychological Association, Entomological Society of America, Federation of American Societies for Experimental Biology, National Education Association, and National Geographic Society—and the AAAS.

Originally, the offices of the Association were "wherever the secretary hung his hat"; from 1907 to 1946 the Smithsonian Institution generously provided space; then the new headquarters building at 1515 Massachusetts Avenue become a reality. It has been occupied since May 1956. It is anticipated that many members attending this year's AAAS meeting will visit the building, which belongs to all of them. From the hotel reservations already made it is ap-

parent that a high percentage of wives will accompany their husbands to this year's meeting, as they have accompanied them to the six other Washington meetings. For this 1958 meeting, a Committee on Women's Events, headed by Mrs. Alan T. Waterman, is making appropriate plans for tours, a luncheon, and a special visit to the White House.

Earlier Washington Meetings

Some notes on the earlier AAAS meetings in Washington and the scientific personalities of the times and sidelights on such venerable associates in science as the Smithsonian Institution, the National Academy of Sciences, and the National Geographic Society may enhance the pleasure of participants in this year's meeting. The development of the city, of the nation, and of science is indicated in the programs and proceedings of these conventions of the past.

The first Washington meeting, 26 Apr.–3 May 1854, came early in the Association's history. This was only the eighth meeting but, in six years, AAAS membership had grown from 461 charter members to 1004. All activities and sessions were centered at the Smithsonian Institution—in the original castle-like brownstone structure, begun in 1847 and completed in 1855, which still is a serviceable and much-used building. An AAAS office was set up, and the names of the 168 who registered were entered in the book of the Association's permanent secretary, who was Joseph Lovering, professor of physics at Harvard, subsequently to become the Association's 23rd president. Information on "Lodgings, &c." was available at the bookstore of Taylor and Maury, on Pennsylvania Avenue between 9th and 10th streets. The principal hotels used were the old Willard and the National.

At that time there were but two sections. Section A (Mathematics and Physics) was administered by William C. Redfield, the eminent geologist and first elected president of the Association. Section B (Chemistry, Natural History, and Geology) was headed by the celebrated botanist, John Torrey. No less than 110 papers were presented at this meeting, but not all were printed in the proceedings because "some were thought unworthy of publication, and, in other cases, copies were not furnished by their authors." Among the papers were the following: "On Gulf Stream temperatures," by A. D. Bache, Superintendent of the Coast Survey; a chart of recent hurricanes, by William C. Redfield; and "On the relations of the American patent system to the progress of science," by L. D. Gale of the U.S. Patent Office.

In 1854 the president of the Association was Yale's James Dwight Dana, a notable American mineralogist and a son-in-law of Benjamin Silliman. The retiring president was Benjamin Peirce of Harvard, described by F. R. Moulton as the foremost mathematician of his time. In a humorous introduction to his address, "Geometry, the key of the sciences," Peirce made a point of what he described as the already established AAAS custom of "calling out . . . the actor upon the stage after the night of the performance, when the blood is no longer warm." He surveyed the many sciences where mathematics was indispensable. Though this was said to be his first formal speech, he did not grope for words. The address was abundantly filled with the mythological allusions and literary figures of speech so characteristic of a century ago. In eulogizing the satisfying exactness and form of geometry, he said: "The rash system of philosophy which, despising the science it cannot comprehend, presumes to soar capriciously above the well-established theories of inductive demonstration, must melt its ill-cemented pinions as it approaches the source of truth, and sink, like Icarus, into deserved ridicule and contempt."

In commenting favorably on government support of science, the well-established Coast and Geodetic Survey, the National Observatory, the Military and Naval academies, and scientific expeditions, he said: "The time is ripe for some important improvement in the public condition of science and its relations to government."

During the meeting, "the members of the Association were elegantly entertained, on different evenings," by Franklin Pierce, President of the United States, Jefferson Davis, Secretary of War, James Guthrie, Secretary of the Treasury, and William W. Corcoran. Invitations to social occasions were so numerous that the delegates were unable to accept all of them. The delegates did enjoy, however, a steamer excursion to Mount Vernon which the local committee, headed by the Hon. J. W. Maury, had arranged. The local committee included Joseph Henry, first secretary of the Smithsonian Institution and second elected president (1849) of the Association.

Thirty-seven years passed before the second Washington meeting, of 19–26 Aug. 1891. In this interval, the War between the States had caused the lapse of meetings in the years 1861–65 and had seriously affected AAAS membership. It was not until 1879 that the roll of members returned to the 1854 level. By 1891, however, at the time of the 40th meeting, the Association had 2054 members, or twice as many as at the time of the first Washington meeting. About 500 were residents of the Washington area—a figure which indicated the continuing growth of the governmental agencies employing scientists.

Albert B. Prescott, distinguished chemist of the University of Michigan, was president of the AAAS at this time. In the opening session he replied to the welcoming speeches of Edwin Willits, Assistant Secretary of Agriculture, and J. C. Welling, president of Columbian (now George Washington) University, where most of the sessions were held. In his reply Prescott referred to such past presidents and charter members of the Association as A. D. Bache, who took charge of the Coast Survey in 1834 and served for 24 years, and Joseph Henry, first secretary of the Smithsonian Institution, from 1846 until his death in 1878. Spencer F. Baird, naturalist of the Smithsonian, had died in 1887. In comment, Prescott said: "There is no greater need in this land—unless it be the exclusive need of righteousness itself—than the advancement of science. Let this be understood by all, if America is not to fall short in the nurture of manhood, in the reach of mind and in the arts of peace, if she is not to fall short altogether, she must advance in science and must cherish her writers in scientific research."

The number of AAAS sections had increased to eight by 1891, and each vice president gave an address. Among these were the following: Section B (Physics), "The ether," by Francis E. Nipher, of Washington University; F (Biology), "The future of systematic botany," by John M. Coulter, president of Indiana University; I (Social and Economic Sciences), "The farmer and taxation," by Edmund J. Jones, of the University of Pennsylvania.

The AAAS retiring presidential address, "Useful plants of the future," was given by George Lincoln Goodale, well-known botanist of Harvard. In outlining some of the potentialities of economic botany Goodale did not foresee the synthetic fibers of today. John M. Macfarlane of Edinburgh gave a lecture at the National Museum on "Illustrations of heredity in plant hybrids."

The second Washington meeting was elaborately organized through the coordinated work of the permanent secretary, F. W. Putnam, Harvard anthropologist, who had assumed the AAAS office in 1873, and the local committees, that represented a joint commission of five scientific societies in Washington. Colonel Garrick Mallery (U.S. Army), assigned to the Bureau of Ethnology, served as general chairman, and Marcus Baker (U.S. Geological Survey), as secretary. Some of the other members included F. W. Clarke, Henry Gaumet, C. Brown Goode, Everett Hayden, L. O. Howard, Gardiner G. Hubbard, S.

P. Langley, T. C. Mendenhall, C. Hart Merriam, Simon Newcomb, Richard Rathbun, Harvey W. Wiley (AAAS general secretary), and Edwin Willits. The committee members wore identifying ribbons of different colors, a 32-page guidebook was specially printed and distributed, the "programme" had 192 pages, and the convention badges had numbers instead of names (the numbers could be checked against names in the AAAS office). A cumulative list of the names and addresses of the 653 registrants was printed each day. The registrants came from 37 states, the District of Columbia, and ten foreign countries.

Among the 227 papers read were papers on color photography, artificial rain, uses of fermentation tubes in bacteriology (by Theobald Smith), what our fundamental units should be, atomic theory, and "mechanical methods used in computing data of the 11th U.S. Census" (by John S. Billings, surgeon, U.S. Army). Apparently the use of punch cards had been suggested by Billings as early as 1880; subsequently they were improved by Herman Hollerith of the Census Bureau. C. Brown Goode (director, U.S. National Museum) gave an address on the first scientific congress held in Washington in 1844.

The headquarters hotel was the Arlington, at Vermont Avenue between H and I Streets, one block from Columbian University. Other nearby hotels which housed delegates were the Arno, Ebbitt House, Randall, and Fredonia. Coaches pulled by two, four, or six horses, with capacities for 12, 20, or 32 persons, respectively, were available at $10 to $20 per day for excursions to Glen Echo, Mount Vernon, and Luray Caverns. President Benjamin Harrison was out of town, but the private part of the White House grounds, by his order, was made available for a reception, at which the Marine Band played nine selections, including the William Tell overture and, in conclusion, Hail Columbia. The souvenir program had silken cords and tassels. There was a reception at the Arlington Hotel, sponsored by the Board of Trade, as well as an entomologists' reception at the home of C. V. Riley, and numerous smaller parties. Alice C. Fletcher, chairman of the Ladies Reception Committee (composed of members of the Women's Anthropological Society of America) made arrangements for visiting women.

Among the items of business passed by the AAAS Council were the appointment of a committee on standards of astronomical and physical units, including S. P. Langley and others; continuation of the Committee on Indexing Chemical Literature; support of greater uniformity in biological nomenclature; advice to the U.S. Department of Agriculture on national water management; a request to Congress to establish a national arboretum; and an endorsement of the principle of federal support, each year, of an American table at the Naples Marine Biological Station. The AAAS had contributed $100 for this purpose in 1891—a substantial sum in view of its income of $7443.08 for that year.

Christmas Meetings

The Association's 52nd meeting—the third Washington meeting—was the first AAAS meeting to be held in December. The period 29 Dec. 1902–3 Jan. 1903 was selected as an experiment to accommodate a growing number of affiliated societies which wished to meet with the then ten sections of the Association. The American Society of Naturalists and many of the biological societies had already changed to a December date. The underlying reason for the change for these groups and for the AAAS was the rapid increase in academic summer sessions, in which faculty members taught, which would conflict with meetings held in August. The Christmas holiday period was the one time in the year when virtually all academic institutions suspended classes. Incidentally, more than 50 universities cooperated by reopening a day or two later than usual, in view of the 3 January closing date of the meeting. With 989 registrants, plus 363 additional registrations among the 23 participating societies, the third Washington meeting was one of the largest held up to that time and was considered a decided success.

Thus began the "traditional Christmas meetings of the AAAS." Except for the special war-year meetings—the meeting held in Cleveland in September 1944 and the "1945" meeting, delayed until March 1946, and held in St. Louis—and the centennial celebration, the AAAS annual meeting has since been held in the last week in December.

In 1902 the AAAS president was Ira Remsen, also president of the American Chemical Society and of Johns Hopkins University. At the opening session in St. Matthews Church, 15th and H Streets, Remsen gracefully responded to addresses of welcome from paleontologist Charles D. Walcott, director of the U.S. Geological Survey, representing the Washington Academy of Sciences; from Henry B. F. MacFarland, president of the District of Columbia Board of Commissioners, for the District; and from David J. Hill, Assistant Secretary of State, for the national government. Hill said, "In the United States there is and can be—and it is something to be thankful for—no such thing as official science." Charles W. Needham, president of Columbian University, where most of the sessions were held, gave the concluding speech of welcome for all of the universities of the area.

After a luncheon at the Arlington Hotel, tendered by the local committee, two series of concurrent vice-presidential addresses were given. Among these, W. S. Franklin, of Section B (Physics), in his "Popular science," took issue with Woodrow Wilson, the new president of Princeton, who had said that he found the methods of science too prevalent. Charles C. Nutting, of Section F (Zoological Sciences), in "The perplexities of a systematist," pointed out that "there will always be need for the men who perform the hard and often thankless task of the systematist." William H. Welch (Johns Hopkins) spoke on "The origin and aims of the new section on physiology and experimental medicine." In the evening of this first day, Asaph Hall (U.S. Navy) gave his retiring AAAS presidential address, "The science of astronomy."

Among the 360 papers read were "The theory of non-spherical surfaces in the construction of telescope objectives," by F. R. Moulton; "On the velocity of light as affected by motion through the ether," by Edward W. Morley and Dayton C. Miller; "The magnetic and electric deviation of the easily absorbed rays from radium," by E. Rutherford; "The metric system," by J. Burkitt Webb; "The drainage problems of irrigation," by C. G. Elliott; "Mount Pelée—the eruptions of August 24 and 30, 1902," by Angelo Heilprin; and "Some recent cytological investigations and their bearing on Mendel's principles of heredity," E. B. Wilson. A particularly important program was the discussion sponsored by the American Society of Naturalists, "How can endowments be used most effectively for scientific research?" The discussants were T. C. Chamberlin, William H. Welch, Franz Boas, W. M. Wheeler, Conway MacMillan, and Hugo Münsterberg.

Members of the local committees were distinguished and able. President Theodore Roosevelt was honorary general chairman, and Charles D. Walcott, who became AAAS president in 1923, was the active general chairman. Gilbert H. Grosvenor of the National Geographic Society was a member of the executive committee and chairman of the transportation committee. At this time, L. O. Howard, renowned entomologist, was permanent secretary of the Association, the membership of which had by now reached 3474. This increase was partly due to the fact that *Science*, owned and published by J. McKeen Cattell, had, in 1900, become the official journal of the AAAS and was sent to all members.

Again the Arlington was headquarters hotel, but the New Willard, Raleigh, Shoreham (then at 15th and H Streets),

Hamilton, Colonial, and others were also used for housing. Not only were cabs and victorias, drawn by one or two horses, in plentiful supply, but automobiles could be hired. Preliminary announcements explained that, in Washington, "The Avenues, named after the States, cross the Streets diagonally but will give little trouble to the visitor." Social events and public lectures were numerous. The trustees of the Corcoran Gallery of Art and the local committee sponsored a reception, and some 500 delegates were received at the White House by President Roosevelt.

The AAAS Council transacted a considerable amount of business: There was one resolution on the death of Walter Reed in recognition of his successful studies on yellow fever and another stipulating that one member of the Isthmian Canal Commission should be a properly qualified medical man. The terms of section secretaries and committeemen-at-large were fixed at five years, for better continuity.

The pattern of the 63rd, and fourth Washington, meeting, 27–30 Dec. 1911, was essentially similar to that of the meeting held nine years earlier, but science was becoming increasingly specialized and scientists were more numerous. There were 1306 registrants and an estimated 1500 others who attended. Fortunately, a new advance registration system combined with dues payment in advance had been inaugurated, and, although members had to exchange cards for programs and badges, waiting time was eliminated. Besides the eleven sections, 31 affiliates and other societies had programs; 860 papers were read. In the preceding nine years the Association's membership had almost tripled, and it now stood at 8041.

The new Willard was headquarters hotel; twelve other hotels were required to house the out-of-town delegates. Rates, for single rooms without meals, were $1 to $2.50 without private bath; $2 to $3.50 with bath. The 163 sessions, necessarily, were held in a variety of sites: the Willard, Raleigh, and Ebbitt hotels; Business and McKinley high schools; the U.S. National Museum and the Bureau of Standards; Hubbard Memorial Hall of the National Geographic Society; the Carnegie Institution; the Cosmos Club; St. John's parish hall; the Public Library; Georgetown University Law School; and George Washington University Medical School.

On the first night, AAAS president Charles E. Bessey (University of Nebraska), noted botanist, presided at the welcoming speech of President William Howard Taft, who compared the scientists' search for truth with the approach of judges hearing cases. His remarks were followed by the AAAS retiring presidential address of A. A. Michelson (University of Chicago), Nobel prize winner in physics, who spoke on "Recent progress in spectroscopic methods." The Honorary Reception Committee, headed by President Taft, included Alexander Graham Bell, Herbert Putnam, Elihu Root (a member of the AAAS), A. Lisner, and Chief Justice White.

Honorary chairman of the fourth Washington meeting was Robert S. Woodward, president of the Carnegie Institution; the general chairman was Frank Wigglesworth Clarke, president of the Washington Academy of Sciences. Charles D. Walcott, who had become secretary of the Smithsonian Institution, was chairman of the Finance Committee. Mrs. R. S. Woodward was chairman of the Ladies Reception Committee. L. O. Howard was still permanent secretary of the Association; F. S. Hazard of the staff was responsible for the details of the meeting.

Organized tours were a feature, a special exhibition cavalry drill at Fort Myer was arranged, and a reception was held at the Corcoran art gallery. A number of the government agencies and several private institutions had special exhibits and open houses or receptions, and the larger local scientific societies held smokers in the hotels. Among the vice-presidential addresses were the following: A. L. Rotch of Section D (Mechanical Science and Engineering) spoke on "Aerial engineering"; R. A. Harper of Section G (Botanical Sciences), on "Some current conceptions of the germ plasm"; and U.S. Senator from Ohio Theodore E. Burton of Section I (Social and Economic Sciences), on "The cause of high prices."

The AAAS Council recommended the passage of a national quarantine and inspection law against the introduction of injurious insects and plant diseases and the creation of a Bureau of Astronomy, and reaffirmed its previous approval of a national department of public health.

The 79th, or fifth Washington, meeting, held 29 Dec. 1924–3 Jan. 1925, with a registration of 4206, not only was the largest AAAS meeting up to that time but is still exceeded in attendance only by such recent meetings as the New York meetings of 1949 and 1956 (with 7014 and 5327 registrants, respectively) and the Chicago meeting of 1947. The Association had adopted a plan of holding a particularly comprehensive convention of the affiliated societies every four years in a major city. Among the 49 participating organizations were such large groups as the mathematicians, the American Physical Society, the Washington section of the American Chemical Society, the biological societies (including the phytopathologists and the Entomological Society of America), the American Anthropological Association, the American Psychological Association, the Society of American Bacteriologists, most of the societies now constituting the Federation of American Societies for Experimental Biology, and the agricultural societies. The memberships of all these groups have now expanded to the point where it would be physically impossible for the larger societies to meet together in any one city.

Commensurate with the size and complexity of the 1924 meeting were the arrangements for it. Under the general direction of the permanent secretary, Burton E. Livingston (Johns Hopkins), Sam Woodley was in charge of the physical arrangements; Sam F. Trelease, University of Louisville, edited the 248-page "General Program," in which the same key symbols used today were employed; Austin H. Clark (U.S. National Museum), assisted by his colleagues W. N. Mann and W. P. True, were in charge of all press-room arrangements, including radio—used for the first time as an integral part of the meeting.

Though there had been a few commercial exhibits for some years, the Annual Exposition of Science and Industry was set up on an organized professional basis for the first time. Charles A. Shull (University of Chicago) issued the invitations to prospective exhibitors, and W. J. Showalter (National Geographic Society) allotted booth space and made all local arrangements. The main Exposition was placed in the George Washington University gymnasium. There were supplementary nonprofit exhibits, notably in medicine, that were adjuncts to the session rooms.

William Mather Lewis, president of George Washington University, was general chairman of a local committee that included C. G. Abbott (Smithsonian Institution), Gilbert H. Grosvenor (National Geographic Society), Vernon Kellogg (National Research Council), John C. Merriam (Carnegie Institute of Washington), and David White (National Academy of Sciences). There were six subcommittees, and each of the 15 sections had local representatives. Among the latter were Lyman J. Briggs, Paul D. Bartsch, and R. F. Griggs.

J. McKeen Cattell, president of the Association, presided at the opening session in Memorial Centennial Hall on 17th Street, when Charles Evans Hughes, Secretary of State, gave an address on "Some aspects of international cooperation." The address of retiring AAAS president Charles D. Walcott was on "Science and service." The reception which followed, in the new National Museum, was sponsored by 600 local members of the AAAS. Later in the meeting period, at the White House, President Calvin

Coolidge received members and guests and gave an address of welcome. Among seven other afternoon or evening addresses was the third annual Sigma Xi address, given by Frederick Fuller Russell, general director of the International Health Board. There were 1781 papers and 12 vice-presidential addresses.

The second Newcomb Cleveland Prize was divided between L. R. Cleveland, for two papers on the symbiosis of termites and their intestinal flagellate protozoa, and Edwin P. Hubble, for his paper "Cepheids in spiral nebulae."

Again the Willard was AAAS headquarters, and many other hotels were used. Sessions were as widely scattered as in 1911, with the Brookings Institution, the National Academy of Sciences, the Weather Bureau, U.S. Department of the Interior, and the city high schools pressed into service. (At the last, a "no smoking" rule was enforced.) Trolley tokens had risen from six for a quarter to six for 40 cents since the previous meeting. Social events were numerous. The Biologists' Smoker was jointly sponsored by the AAAS and the Union of Biological Societies; the Columbian Women of George Washington University gave a reception and dance; the National Geographic Society entertained visiting geographers, and the American Association of University Women and College Women's Club had "at homes."

Some of the actions taken by the AAAS Council were approval of any improvement in the calendar that would adjust it to modern conditions for scientific work; endorsement of the Navy program for oceanographic study; and approval of the proposed national arboretum. The sum of $500 was voted to the Union of Biological Societies to assist in the founding of *Biological Abstracts*.

A few of the authors of papers at the 1924 meeting who are expected to attend the 1958 meeting are F. O. Rice, now chairman of Section C, whose paper then was on "Catalysis in homogeneous systems"; H. H. Plough, now chairman of Section F, who discussed "A self-fertile strain of *Drosophila* which is partially sterile in outcrosses"; and A. Irving Hallowell, now chairman of Section H, who discussed "Some observations and measurements of the Indians of Labrador."

Centenary

The sixth Washington meeting, held 13–17 Sept. 1948—the 115th national meeting of an association celebrating its centenary—is too recent to require a detailed account. It was an exceptional meeting date for an exceptional occasion—the centennial of the founding of the AAAS in Philadelphia, in September 1848.

The meeting was exceptional in other respects. There were no sectional pro-

grams as such, though the principal disciplines were included. Completely absent were the scores of sessions for contributed papers of the participating societies—because there were no participating societies. To make possible this one special meeting, the societies had been asked to arrange separate sessions —preferably, immediately preceding the AAAS centenary. In cooperation, the biological societies met in Washington 10–13 September.

The five-day AAAS meeting, as arranged by the program committee, headed by retiring president Harlow Shapley, was devoted to 14 important symposia in the mornings; to an extensive series of afternoon tours to the area's scientific institutions, public and private; and to 17 illustrated lectures and addresses in the evenings.

The Annual Exposition of Science and Industry was not held at this meeting, but there were special exhibits on display at many of the governmental agencies visited during the tours.

The theme of the meeting was "One world of science." The keynote paper, with this title, written by AAAS president Edmund W. Sinnott, explained that the emphasis of the celebration was not on the origins of the AAAS but on the current status of science—and of man. The theme, he wrote, carried "no thought of speed or power, no threat of destruction or promise of paradise. On the contrary it [implied] that science is the same everywhere throughout the world, and . . . that the universe is orderly."

Each symposium had three papers and several discussants, and there was an opportunity for selected written questions from the audience to be considered. Most of the symposia centered on the world's resources of minerals, food, and energy and on the health and future of mankind. Necessarily, the symposia were in concurrent groups of three or four. The proceedings of all but one of these symposia were subsequently published in an attractive quarto volume, *Centennial,* a few copies of which are still available.

On the first evening, in Constitution Hall, President Harry S. Truman gave an appropriate address of welcome and commentary on the state of science, at which most of the 2734 registrants were present. Harlow Shapley's AAAS presidential address, "One world of stars," came next. The reception that followed was held in the Pan American Union. There were refreshments and music by the U.S. Air Force Band.

The lectures and addresses on the remaining evenings were also in concurrent groups of four or five and, like the symposia, were held in the headquarters hotel, the Statler, and in the larger auditoriums in downtown Washington.

The tours, arranged by a committee

chaired by Raymund L. Zwemer, proved deservedly popular.

The general chairman of the sixth Washington meeting was F. R. Moulton, completing his last year as AAAS administrative secretary, before retirement. The assistant administrative secretary was John M. Hutzel, who was also soon to leave the Association. A meeting of this exceptional pattern would have been impossible without the personal services and interest of the many scientists who served on the local committees or who were on the staffs of the more than 40 local scientific organizations and institutions. Historical vignettes of the cooperating agencies were published in *Science,* and an excellent survey of science in Washington was written for the gold-lettered, green-covered souvenir program by Paul H. Oehser. Included were sketches on the beginnings of the Smithsonian Institution, the National Academy of Sciences, the U.S. Department of Agriculture, the U.S. Geological Survey, and other agencies.

Not only was the centennial meeting (under the chairmanship of the late Austin H. Clark, assisted by Sidney S. Negus, Watson Davis, and Gorda Hubble) well reported in the press but there were network programs on radio and television. In retrospect, the 1948 meeting stands out as an earnest attempt to survey the impact of science and man's future.

During the centennial year there was an elaborate and successful campaign to increase the Association's membership. Over 200 committees throughout the country worked hard and effectively. The membership figures for the beginning and end of 1948 were 33,442 and 42,545, respectively—a net gain of more than 9000 members.

The growth of the Association continues. At the end of 1957, the Association's membership stood at 55,727. By the end of this 110th year, it is hoped that it will at least reach 60,000. In the past ten years the number of affiliated societies has increased from 207 to 279. The AAAS sections now number 18, with the activation of Section P (Industrial Science) in 1951 and the assumption of full sectional status by Nd (Dentistry) and Np (Pharmacy) in 1954. In the past few years, the AAAS has undertaken a variety of important new activities, and others are in prospect.

The seventh Washington meeting, of 26–31 Dec. 1958, will be a significant and memorable addition to the earlier meetings held in the nation's capital.

RAYMOND L. TAYLOR
American Association for the Advancement of Science

Pan American Sanitary Conference

More than 200 public health projects will be examined and a comprehensive program and budget for 1959 adopted at the fifteenth Pan American Sanitary Conference that is to meet 21 September through 6 October in San Juan, Puerto Rico. It will be attended by public health ministers and leading health authorities of the Western Hemisphere.

The conference, which is held every 4 years, is the supreme governing body of the Pan American Sanitary Organization—the regional organization in the Americas of the World Health Organization. The conference will elect the director of the Pan American Sanitary Bureau, executive organ of the PASO, to a term of 4 years commencing 1 February 1959. The present incumbent, Fred L. Soper, completes his third term in office on 31 January 1959.

The organization, serving as international coordinator and technical adviser, as catalytic agent and as information clearing house for the national health services, operates in practically all areas of public health. These embrace the promotion of disease eradication and control in malaria, tuberculosis, venereal disease and treponematoses such as yaws, the endemo-epidemic diseases, and pub-

lic health administration, nursing, social and occupational health, maternal and child health, mental health, nutrition, environmental sanitation, health aspects of atomic energy, public health education and training, and health education of the public.

The conference will review the organization's program of fellowships, seminars and training courses, a major means used to help overcome grave shortages of trained public health personnel in most countries, and for strengthening the national health services. Over the past 4 years 1532 fellowships have been granted in this hemisphere; 552 fellows received support during the past year.

Psychopharmacology

The Psychopharmacology Service Center of the National Institute of Mental Health is sponsoring a conference on Child Research in Psychopharmacology, to be held at the Hotel Statler, Washington, D.C., 27–28 October. The primary objectives of the conference are: to focus on basic problems, including methodology and measuring instruments; to develop new hypotheses and approaches to the study of drug effects in children; to prepare the groundwork for initiating long-term developmental studies; and to stimulate further research interest in this important area. The conference participants will consist of representatives from the fields of psychology, psychiatry, pediatrics, social work, and neurophysiology.

Although the second day will be a closed session, a limited number of interested observers will be admitted *by advance registration* to the opening session on 27 October. Requests for attendance and further details should be addressed to Dr. Seymour Fisher, Psychopharmacology Service Center, National Institute of Mental Health, Bethesda 14, Md.

Forthcoming Events

October

19–22. Land and Water, Soil Conservation Soc. of America, 13th annual, Asheville, N.C. (H. W. Pritchard, 838 Fifth Ave., Des Moines 14, Iowa.)

19–24. American Soc. of Anesthesiologists, Pittsburgh, Pa. (J. E. Remlinger, 802 Ashland Ave., Wilmette, Ill.)

19–26. Allergology, 3rd intern. cong., Paris, France. (S. M. Feinberg, Medical School, Ward Memorial Building, 303 East Chicago Ave., Chicago, Ill.)

19–26. Medical Hydrology, 21st intern. cong., Madrid, Spain. (Dr. Francon, 55, rue des Mathurins, Paris 8e, France.)

19–28. Society of Motion Picture and Television Engineers, 84th conv., Detroit, Mich. (SMPTE, 55 W. 42 St., New York, N.Y.)

20–21. Rubber and Plastics Instrumentation, natl. symp., Akron, Ohio. (D. R.

Davis, General Tire and Rubber Co., Central Research Lab., Akron 9.)

20–22. American Oil Chemists' Soc., fall, Chicago, Ill. (Mrs. L. R. Hawkins, 35 E. Wacker Drive, Chicago 1.)

20–23. American Acad. of Pediatrics, Chicago, Ill. (E. H. Christopherson, 1801 Hinman Ave., Evanston, Ill.)

20–23. American Psychiatric Assoc., Kansas City, Mo. (1700 18 St., NW, Washington 6.)

21. American Soc. of Safety Engineers, annual, Chicago, Ill. (J. B. Johnson, 425 N. Michigan Ave., Chicago 11.)

22–24. American Assoc. of Petroleum Geologists, southwestern, Mineral Wells, Tex. (R. H. Dott, Box 979, Tulsa 1, Okla.)

22–24. American Vacuum Society, 5th natl. symp., San Francisco, Calif. (D. Gustin, P.O. Box 1282, Boston 9, Mass.)

22–24. Aviation Medicine, 4th annual symp., Santa Monica, Calif. (T. H. Sternberg, UCLA Medical Center, Los Angeles 24, Calif.)

22–26. American Soc. for the Study of Arteriosclerosis, annual, San Francisco, Calif. (O. J. Pollak, P.O. Box 228, Dover, Del.)

23. Organic Chemistry, 5th biennial symp., Philadelphia, Pa. (D. Glusker, Rohm and Haas Co., 5000 Richmond St., Philadelphia 37.)

23–25. National Soc. of Professional Engineers, San Francisco, Calif. (K. E. Trombley, NSPE, 2029 K St., NE, Washington 6.)

23–25. Rocket Technology and Astronautics, intern., Essen, Germany. (Deutsche Gesellschaft fuer Raketentechnik und Raunfahrt, e.v., Neunsteinerstrasse 19, Stuttgart, Zuffenhausen.)

24–25. International Conference on the Insulin Treatment in Psychiatry, New York, N. Y. (M. Rinkel, 479 Commonwealth Ave., Boston 15, Mass.)

24–25. Taxonomic Consequences of Man's Activities, symp., Mexico, D. F. (H. C. Cutler, Missouri Botanical Garden, St. Louis.)

24–28. American Heart Assoc., San Francisco, Calif. (J. D. Brundage, 44 E. 23 St., New York 10.)

27–28. Child Research in Psychopharmacology, conf., Washington, D.C. (S. Fisher, Psychopharmacology Service Center, Natl. Inst. of Mental Health, Bethesda 14, Md.)

27–28. Plant Physiology, 9th annual research cong., Saskatoon, Saskatchewan, Canada. (D. T. Coupland, Plant Ecology College of Agriculture, Univ. of Saskatchewan, Saskatoon.)

27–29. Radio, Institute of Radio Engineers, fall meeting, Rochester, N.Y. (V. M. Graham, EIA, 11 W. 42 St., N.Y.)

27–29. Weak Interactions, APS conf. (by invitation), Gatlinburg, Tenn. (J. L. Fowler, ORNL, P.O. Box X, Oak Ridge, Tenn.)

27–31. American Inst. of Electrical Engineers, fall general, Pittsburgh, Pa. (N. S. Hibshman, AIEE, 33 W. 39 St., New York 18.)

27–31. American Public Health Assoc., St. Louis, Mo. (B. F. Mattison, 1790 Broadway, New York 19.)

27–31. Metal Exposition and Congress, 40th natl., Cleveland, Ohio. (ASM, 7301 Euclid Ave., Cleveland 3.)

27–31. Vertebrate Speciation Conf., Univ. of Texas, Austin. (W. F. Blair, Dept. of Zoology, Univ. of Texas, Austin 12.)

27–1. Mental Health, 3rd Latin American cong., Lima, Peru. (B. Caravedo, Comite Peruano Organizador, III Congreso Latinoamericano pro Salud Mental, Avenida del Golf 1040, San Isidro, Lima.)

29–30. '58 Computer Applications, symp., Chicago, Ill. (M. J. Jans, Armour Research Foundation, 10 W. 35 St., Chicago 16.)

30–31. Plastics, intern. symp., Philadelphia, Pa. (ASTM, 1916 Race St., Philadelphia 3.)

30–1. American Assoc. of Textile Chemists and Colorists, 37th natl. conv., Chicago, Ill. (J. G. Kelley, E. I. duPont de Nemours & Co., Inc., 7 South Dearborn St., Chicago 3.)

November

2–7. Radiology, 6th Pan American cong., Lima, Peru. (M. Lesende, Inter-American College of Radiology, Tucuman 1516, Buenos Aires, Argentina.)

3–4. Italian Soc. of Nuclear Biology and Medicine, 3rd cong., Florence, Italy. (Segreteria della Societá Italiana di Biologia e Medicina Nucleare, Clinica Medica, Pisa, Italy.)

4. Use of 650 and 704 Computers for Structure Analysis, conf., Pittsburgh, Pa. (G. A. Jeffrey, Dept. of Chemistry and Physics, Univ. of Pittsburgh, Pittsburgh 13.)

4–7. American Soc. of Tropical Medicine, Miami Beach, Fla. (R. B. Hill, 3575 St. Gaudens Rd., Miami 33.)

4–11. International North Pacific Fisheries Commission, 5th annual (by invitation), Tokyo, Japan. (R. I. Jackson, 209, Wesbrook Building, Univ. of British Columbia, Vancouver 8, Canada.)

5–7. Society of Rheology, annual, Philadelphia, Pa. (W. R. Willets, Titanium Pigment Corp., 99 Hudson St., New York 13.)

6–7. Nuclear Science, 5th annual, San Mateo, Calif. (H. Pratt, IRE, 1 E. 79 St., New York 21.)

6–8. Geochemical Soc., St. Louis, Mo. (K. B. Krauskopf, Geology Dept., Stanford, Calif.)

6–8. Geological Soc. of America, St. Louis, Mo. (H. R. Aldrich, 419 W. 117 St., New York 27.)

6–8. Gerontological Soc. 11th annual scientific meeting, Philadelphia, Pa. (N. W. Shock, Baltimore City Hospitals, Baltimore 24, Md.)

6–8. Paleontological Soc., St. Louis, Mo. (Miss K. V. W. Palmer, 109 Dearborn Pl., Ithaca, New York.)

6–8. Society of Economic Geologists, St. Louis, Mo. (H. M. Bannerman, U.S. Geological Survey, Washington 25.)

8. Society for the Scientific Study of Sex, 1st annual, New York, N.Y. (R. V. Sherwin, 1 E. 42 St., New York 17.)

8–13. International Rubber Conf., Washington, D.C. (B. S. Garbey, Jr., Pennsalt Chemical Corp., 813 Lancaster Pike, Wayne, Pa.)

10–12. American Petroleum Inst., 38th annual, Chicago, Ill. (API, 50 W. 50 St., New York 20.)

10–12. Physics and Medicine of the Atmosphere and Space, intern. conf. (by invitation), San Antonio, Tex. (Southwest Research Center, 331 Gunter Bldg., San Antonio.)

10–13. American Dental Assoc., Dallas, Tex. (H. Hillenbrand, 222 E. Superior St., Chicago, Ill.)

12–14. Society for Experimental Stress Analysis, annual, Albany, N.Y. (W. W. Murray, P.O. Box 168, Central Square Sta., Cambridge 39, Mass.)

12–15. Society of Naval Architects and Marine Engineers, 66th annual, New York, N.Y. (W. N. Landers, SNAME, 74 Trinity Pl., New York 6.)

16–21. Radiological Soc. of North America, Chicago, Ill. (D. S. Childs, 713 E. Genesee St., Syracuse, N.Y.)

16–23. Scientific Information, intern. conf., Washington, D.C. (Mrs. M. Sheppard, Intern. Conf. on Scientific Information, Natl. Acad. of Sciences–Natl. Research Council, 2101 Constitution Ave., Washington 25.)

17–20. Conference on Magnetism and Magnetic Materials, Philadelphia, Pa. (H. B. Callen, Dept. of Physics, Univ. of Pennsylvania, Philadelphia.)

18–20. Air Pollution, 1st natl. conf., Washington, D.C. (Dept. of Health, Education, and Welfare, U.S. Public Health Service, Washington 25.)