

His early years were spent in hydraulic power work in New England. In 1886 he became connected with the Associated Factory, Mutual Fire Insurance Companies at Providence, contributing notably to the improvement of mill building and development of fire prevention apparatus, including automatic sprinklers, fire pumps and hose, as well as to studies of the causes of fires.

In 1896, he became president and treasurer of a group of fire insurance companies, with executive offices at Providence, and increased the insurance in these companies forty-fold, or from \$65,000,000 to about \$2,800,000,000, while reducing fire hazards and insurance costs for 6,000 leading American factories, in about twenty-five years.

Mr. Freeman had been a member of the Massachusetts Metropolitan Water Board, and chief engineer for improving the tidal estuary of the Charles River between Boston and Cambridge. He made investigations for the Metropolitan Park Commission of Massachusetts, and conducted an investigation of the water supply of New York City for Comptroller Bird S. Coler, in 1899. He was a member of the Burr-Hering-Freeman Commission on water supply for the City of New York, of the Rhode Island Metropolitan Park Commission and of the President's Commission on special problems of the Panama Canal relating to dam and lock foundations, sea-level versus lock canal and prevention of earth slides.

Mr. Freeman was one of the consulting engineers to the Board of Water Supply of the City of New York, which constructed the Catskill aqueduct and reservoirs. From 1917 to 1920 he was consulting engineer to the Chinese Government on improvement of the Grand Canal and regulation of the Yellow and other rivers to prevent floods. His consulting engagements included many of the large communities of this and other countries and important industrial corporations.

Mr. Freeman was president of the American Society of Mechanical Engineers in 1905, and of the American Society of Civil Engineers in 1922. He was an honorary member of both societies. In 1923 the American Society of Mechanical Engineers awarded him its gold medal "for eminent services rendered to industry in fire prevention." He was also active in many local technical societies. He was a member of United Engineering Trustees, Inc., of the National Academy of Sciences, and numerous other scientific and engineering organizations.

He received the honorary degree of doctor of science from Brown University in 1904, from Tufts College in 1905, from the University of Pennsylvania in 1927 and from Yale University in 1931. He was also made, in 1925, Doktor Ingenieurs, Ehrenhalber, der Sächsischen Technischen Hochschule, Dresden, Germany.

Members of the John Fritz Medal Board of Award are:

American Society of Civil Engineers—Thaddeus Merri-man, Francis Lee Stuart, John F. Coleman, Herbert S. Crocker.

American Institute of Mining and Metallurgical Engineers—F. M. Becket, W. H. Bassett, Robert E. Tally, Scott Turner.

American Society of Mechanical Engineers—W. L. Abbott, Conrad N. Lauer, Roy V. Wright.

American Institute of Electrical Engineers—Baneroff Gherardi, W. S. Lee, C. E. Skinner, H. P. Charlesworth.

#### COMMITTEE OF THE AMERICAN ASSOCIATION ON THE PLACE OF SCIENCE IN EDUCATION

THE Council of the American Association for the Advancement of Science has authorized its Committee on the Place of Science in Education to prepare a one-day program to be given in Boston on December 29. The committee is authorized to invite to this program science teachers and representatives of organizations of teachers of science, and it is hoped that many teachers will be interested in attending. It is thought possible that those who attend will wish to take action relative to some kind of national organization of teachers of science.

Science teachers' organizations will be represented by appointed delegates and by any other members who may wish to attend. Individuals who are not members of organizations of science teachers or of the association are also invited.

Members of the committee are: Otis W. Caldwell, *chairman*; Karl T. Compton, E. R. Hedrick, Jerome Isenbarger, Burton E. Livingston and Morris Meister.

The completed program will be printed as part of the official association program. The preliminary program follows:

##### MORNING SESSION, 9:30 A. M.

At the Massachusetts Institute of Technology

*Presiding Officer:* E. S. Obourn, teacher of science, John Burroughs School, St. Louis.

Remarks on the Committee on the Place of Science in Education and its Function in Organizing the Program of the Conference. Otis W. Caldwell, *chairman* of the committee.

*Reports of Experiments in Teaching Scientific Method:* Discussion led by Homer W. LeSourd, teacher of physics, Milton Academy, Massachusetts; and a teacher of science in a secondary school to be selected. Open discussion.

*The Science Teacher's Scholarship and Professional Training:* Wilhelm Segerblom, teacher of chemistry, Phillips Exeter Academy, Exeter, New Hampshire. Discussion led by Ralph C. Bean, president, New England Biological Association; and Francis T. Spaulding, department of secondary education, Graduate School of Education, Harvard University. Open discussion.

*Experiments with High-school Science Clubs:* Morris Meister, chairman of the department of physical science, Haaren High School, New York.

*Science Clubs in Relation to State Academies of Science:* S. W. Bilsing, department of entomology, Agricultural and Mechanical College of Texas. Discussion led by Pauline Beery Mack, editor, "Science Leaflets," State College of Pennsylvania.

#### LUNCHEON, 12:30 P. M.

*Presiding Officer:* Jerome Isenbarger, teacher of biology, Chicago Public High Schools.

*Some Reactions of Science upon Those Who Study It:* John C. Merriam, president, Carnegie Institution of Washington.

#### AFTERNOON SESSION, 2:00 P. M.

*Presiding Officer:* H. A. Carpenter, specialist in science, Rochester Public Schools, New York.

*The Work of the Central Association of Science and Mathematics Teachers:* W. F. Roecker, teacher of science, Boys' Technical High School, Milwaukee.

*Types of Useful Organizations of Science Teachers:* W. L. Eikenberry, head of science department, State Teachers College, Trenton.

*Are Further Organizations of Science Teachers Needed?* An open discussion.

### THE CAMBRIDGE MEETING OF THE NATIONAL ACADEMY OF SCIENCES

THE autumn meeting of the National Academy of Sciences will be held at the Massachusetts Institute of Technology on Monday, Tuesday and Wednesday, November 20, 21 and 22, 1933.

The sessions will be held in the lecture room of the George Eastman Research Laboratories of the Massachusetts Institute of Technology.

Luncheon will be served to members of the academy and guests on Monday, Tuesday and Wednesday at the Walker Memorial, Massachusetts Institute of Technology. On the afternoons of Monday and Tuesday, tea will be served in the Forris Jewett Moore Room, 6-321, and on Tuesday at Harvard University, in a place to be announced later. The subscription dinner on Tuesday, November 21, will be held at the

Lowell House, Harvard University, at the invitation of Professor Harlow Shapley.

The provisional program follows:

#### Sunday, November 19

7:30 Dinner of the Council. Algonquin Club, Boston.

#### Monday, November 20

9:30 Business Meeting in Eastman Lecture Room, 6-120.

10:30 Welcome by President Compton and response by the president of the academy, followed by a scientific session. Eastman Lecture Room.

1:00 Luncheon for Members and Guests. Walker Memorial, North Hall.

2:30 Scientific Session. Eastman Lecture Room.

4:30 Tea in the Forris Jewett Moore Room, 6-321.

8:00 Public Lecture by Dr. Arthur E. Morgan, director Tennessee Valley Authority, on "Muscle Shoals and the Tennessee Valley Problem." Walker Memorial, Main Hall.

9:00 Reception by President and Mrs. Compton, at the President's House.

#### Tuesday, November 21

9:30 Scientific Session. Eastman Lecture Room.

12:30 Luncheon in Walker Memorial, North Hall.

2:00 Scientific Session. Eastman Lecture Room.

3:15 Visit to Technology and Harvard University Buildings. Arrangements will be made for visiting the various laboratories, libraries, museums, etc., of both institutions, by members of the academy and their guests.

5:00 Tea in the Forris Jewett Moore Room, Massachusetts Institute of Technology, and at Harvard University, in a place to be announced later.

8:00 Subscription dinner for members and guests, including ladies. Lowell House, Harvard University.

#### Wednesday, November 22

9:30 Scientific Session. Eastman Lecture Room.

12:30 Luncheon in Walker Memorial, North Hall.

1:30 Excursions to Round Hill and Oak Ridge, in case of sufficient demand.

## SCIENTIFIC NOTES AND NEWS

THE new science building at Radcliffe College has been named William Elwood Byerly Hall, in honor of Dr. William E. Byerly, Perkins professor of mathematics, emeritus, at Harvard University, who served for more than thirty years as chairman of the academic board at Radcliffe.

DR. HERMANN WEYL, formerly professor of mathematics at Göttingen, arrived in New York on October 24 to take up his work at the Institute for Advanced Study at Princeton. He also plans to give a course

of lectures at Swarthmore College. Dr. Weyl left Göttingen at the end of the spring term after the Hitler government caused several of his Jewish colleagues to be dismissed from the institution.

DR. JOSEPH S. AMES, president of the Johns Hopkins University, made the address on October 31 at a convocation of the University of Pennsylvania held in commemoration of the semi-centennial of the Graduate School of Arts and Sciences.

PROFESSOR HUGH S. TAYLOR, chairman of the de-