

## SCIENTIFIC EVENTS

### THE ALBERT FARWELL BEMIS FOUNDATION

DR. KARL T. COMPTON, president of the Massachusetts Institute of Technology, has announced the establishment of the Albert Farwell Bemis Foundation, dedicated to the advancement of housing for the benefit of the public and of the building industry. The purpose of the foundation will be to search for and disseminate knowledge pertaining to adequate, economical and abundant housing.

The establishment of the foundation has been made possible by a grant from the Albert Farwell Bemis Charity Trust, the trustees of which are Farwell G., Alan C. and Judson Bemis, sons of the late Albert Farwell Bemis, of Boston. The new foundation is a memorial to their father, who died in 1936.

The foundation, which will be a separate division of the institute, perpetuates the life-long interest of Mr. Bemis, who believed, after many years of pioneering studies, that better and more economical housing could be achieved only through improvements in the technology of building.

The foundation will be directed by John E. Burchard, of Winchester, who for several years has been vice-president of the Bemis Industries, Inc., where he was closely associated with the late Mr. Bemis in research on housing and the utilization of housing materials. Mr. Burchard will begin his work as director of the foundation in September.

The foundation will cooperate with various departments of the institute, especially the departments of architecture and civil engineering, and the division of industrial cooperation, the three departments whose work most closely approaches that of the foundation.

The major policies of the foundation will be determined by the president of the Massachusetts Institute of Technology with the counsel of an advisory committee, the members of which will be men prominent in the architectural and building professions.

The general program will include:

Coordination of the available knowledge on materials, construction methods and the economics of shelter.

Stimulation and planning of research in various phases of the building industry.

Dissemination of information on its various activities for the greatest benefit of the public and the building industry.

Cooperation with all departments of the institute in making available the latest material on housing for undergraduate and graduate instruction in the institute.

As a central organization for the study of housing, the foundation is expected to play an important part indicating and preparing for research fundamental

problems the solution of which will contribute notably to the technological advancement of building. Other problems involving the economics of housing are the transportation and distribution of building materials, studies of the effect of mass production in those portions of the building industry where this technique has been applied, analysis of the cost of existing houses in terms from which conclusions may be drawn; land development studies; studies of building costs in terms of maintenance. The entire field of building materials may also be of interest to the foundation, particularly the behavior of building materials in combination as opposed to their behavior individually. The foundation plans to publish the results of its activities at such times and in such form as will be of the greatest assistance to the public and to industry.

### THE PROPOSED POLISH BALLOON FLIGHT INTO THE STRATOSPHERE

THE National Geographic Society, after a conference with members of the Polish Embassy staff, has announced that the next manned-balloon flight into the stratosphere will be made from Poland in September, under the auspices of the Polish army. The pilot will be Captain Zbigniew Burzynski, who has returned to Poland after a visit to the United States, during which he consulted with Major Albert W. Stevens, who commanded the stratosphere flight of the National Geographic Society and the U. S. Army Air Corps in 1935, and with specialists of the National Bureau of Standards, who designed some of the instruments used in the ascent.

The balloon, which is almost completed, will be considerably larger than the *Explorer II* of the Geographic-Army flight, and will be made of rubberized silk, which was both grown and processed in Poland. Its volume will be more than 4,800,000 cubic feet as against 3,700,000 cubic feet for *Explorer II*; the height at take-off time, 459 feet as against 315 feet, and the greatest diameter 209 feet as against 192 feet. In spite of this greater size, the bag will weigh only 3,300 pounds instead of the 6,350 pounds of *Explorer II*, owing to the lesser weight per square yard of the silk fabric. The spherical gondola to be used will be made of aluminum and steel.

Balloon and gondola together, ready for flight, will weigh less than half as much as *Explorer II*, so that it should reach a much greater height, probably 81,000 feet (15 1/3 miles) above sea level. *Explorer II* established the present world altitude record of 72,395 feet (approximately 13 3/4 miles), in an ascent from the Black Hills, near Rapid City, S. D., on November 11, 1935.

Captain Burzynski will be accompanied by Captain F. R. Hynek, also of the Polish Army, and Dr. Yodko Narkiewicz, Alpinist and explorer. In 1935 they established a record by remaining in the air fifty-seven hours and forty-five minutes, while flying from Warsaw into Russia. The flight will be made from a valley in the Tatry Mountains near Zakopane, in southwestern Poland near the Czechoslovakia border. Studies to be made will include cosmic radiation, pressure and temperature. Among the instruments to be used will be several loaned by the National Geographic Society which were used in the flight of *Explorer II* in 1935. Funds amounting to nearly \$200,000 were raised by popular subscription.

Since the flight of *Explorer II* three attempts have been made to penetrate the stratosphere. On March 9, 1936, two Russians, ascending from Moscow, reached an altitude of 10,000 meters (about 32,808 feet) in a balloon of only 77,700 cubic feet capacity. On May 25, 1937, at Brussels, Professor Auguste Piccard's balloon caught fire from a gas burner used to heat air for lifting the balloon, as the ground crew were attaching the basket for the ascent of Piccard and Max Cosyns. On July 18, 1937, Professor Jean Piccard took off at Rochester, Minnesota, in a gondola lifted by a group of small balloons and, six hours later, crashed into the treetops near Lansing, Iowa. He attained a height of 11,000 feet.

#### LECTURES GIVEN BEFORE THE DEPARTMENT OF PHYSICS OF CORNELL UNIVERSITY

DURING the academic year 1937-38 reports by non-resident speakers were presented at meetings of the faculty and graduate students in physics at Cornell University as follows:

November 1, "Molecular Beam Methods of Measuring Nuclear Moments," Professor I. I. Rabi, Columbia University.

November 22, "The Diffraction of Fast Electrons by Gas Molecules," Professor Linus Pauling, California Institute of Technology.

December 16 and 17, "The Dielectric Constant of Liquids and Solids and Ferromagnetic Anisotropy," Professor J. H. Van Vleck, Harvard University.

January 17, "Stresses and Constitutional Changes in Glass During Cooling," Dr. H. R. Lillie, Corning Glass Works.

February 14, "Some Vacuum Tube Research Problems," B. J. Thompson, R. C. A. Research Laboratory.

March 21, "Some Problems of Galactic Dynamics," Professor K. Lundmark, University of Lund.

March 24, "Transmutations of Heavy Nuclei," Professor V. Weisskopf, University of Rochester.

April 18, "Recent Work in the Cavendish Laboratory," Dr. M. Goldhaber, University of Cambridge.

May 9, "Some Physical Phenomena at the Temperature

of Liquid Helium," Professor E. F. Burton, University of Toronto.

May 23, "Crystal Fluorescence," Dr. Frederick Seitz, General Electric Research Laboratory.

#### ORGANIZATION OF THE NATIONAL ASSOCIATION OF BIOLOGY TEACHERS

THE organization meeting of the National Association of Biology Teachers was held in New York City on July 1.

Fifteen delegates, representing approximately fifteen hundred pledged members in thirty-five states, adopted a constitution, elected officers and established a journal which will be known as *The American Biology Teacher*.

The purpose of the association as stated in the constitution is to organize biology teachers on a national basis by local units in order to spread vital and useful biological knowledge to the general public; to encourage scientific thinking and the scientific method, and through the journal to make available to biology teachers information concerning the selection, organization and presentation of biological materials.

The association is sponsored by the committee on biological science teaching of the Union of American Biological Societies, of which Dr. Oscar Riddle, of Cold Spring Harbor, N. Y., is chairman and Dr. D. F. Miller, of the Ohio State University, is field representative.

The officers of the association are as follows:

*President*, M. C. Lichtenwalter, Chicago, Ill.

*President-elect*, Malcolm D. Campbell, Boston, Mass.

*First vice-president*, George W. Jeffers, Farmville, Va.

*Second vice-president*, Lucy Orenstein, New York, N. Y.

*Secretary-treasurer*, P. K. Houdek, Robinson, Ill.

*Acting editor-in-chief*, I. A. Herskowitz, New York, N. Y.

*Managing editor*, J. S. Mitchell, Lexington, Ky.

Inquiries concerning membership and subscriptions to the journal should be sent to the secretary-treasurer, P. K. Houdek, Township High School, Robinson, Ill.

#### THE AMERICAN MEDICAL ASSOCIATION AND THE GROUP HEALTH ASSOCIATION, INC.

ACCORDING to reports in the daily press, the Department of Justice on July 31 charged the American Medical Association and its affiliate, the District of Columbia Medical Society, with violation of the anti-trust laws in an attempt to prevent the functioning of the Group Health Association, Inc. Thurman W. Arnold, assistant attorney general, has announced that evidence obtained in an investigation would be presented to a grand jury. The charges against the association are:

1. Threatened expulsion from the District Medical Society of doctors who accept employment with the group.
2. Threatened expulsion from the Medical Society of