the schools of Toledo, Ohio, where his family resided. He attended Ohio State University and received his A.B. degree in 1912. He then attended the University of Illinois and received his A.M. degree in 1913 and his Ph.D. degree in 1916. He was assistant in physics at the University of Illinois from 1913 to 1916. He was an instructor in physics at the Carnegie Institute of Technology from 1916 to 1919; assistant professor of physics from 1919 to 1930; and associate professor of physics from 1930 until his death.

While at the University of Illinois he became interested in the optical properties of the alkali metals. This interest continued during the remainder of his career, and he contributed many papers in the field, also researches on the ratio of the charge to the mass of the electron interference in metallic films and optical dispersion of metals.

He was a member of Phi Beta Kappa, Sigma Xi, Phi Lambda Upsilon, American Association for the Advancement of Science, American Physical Society, Optical Society of America, Physical Society of Pittsburgh (president, 1929), American Association of Physics Teachers and the Association of Physics Teachers of Western Pennsylvania and Environs.

Dr. Nathanson's interest in research continued to the end. He inspired and assisted many students in numerous investigations. He was invited to talk before many scientific societies on his chosen research. His keen insight, thorough understanding and unselfish interest contributed to his success as a teacher. His clear and accurate presentation created in the student an orderly and thorough method of thinking. "He will long be remembered for his enthusiasm, frankness, sincerity, patience and modesty."

He is survived by his widow, Rose M. Nathanson, and one daughter, Carol E.

CHAS. W. PRINE
CARNEGIE INSTITUTE OF TECHNOLOGY

## IN HONOR OF GEORGE FREDERICK ARPS

IN memory of the late George Frederick Arps, who died a year ago, the educational building of the Ohio State University has been renamed Arps Hall. Dr. Arps joined the faculty of the university as assistant professor in 1910, becoming professor of psychology in 1912. He was known for his work on experimental psychology on attention, visual discrimination and color induction. Dr. J. L. Morrill, vice-president of the university, prepared the following tribute, which has been adopted by the board:

The Board of Trustees learns with deepest sorrow of the death of Dr. George F. Arps, professor of psychology since 1912; Dean of the College of Education, 1920 to 1937; and Dean of the Graduate School since May, 1937.

A teacher with the gift of contagious enthusiasm for learning, a scholar of distinguished training and attainments, an administrator of rare vision and unusual accomplishment, a counselor and companion whose generous comradeship was cherished by his colleagues, Dean Arps exemplified in his life and work the highest ideals of effective and enduring service to the Ohio State University. A distinguished figure in the world of higher education in America, by his own leadership and by the contributions to teaching and research of those whom he encouraged, assisted and inspired, Dean Arps conferred honor and prestige upon the institution which he served with unremitting labor and devotion. In his passing the university suffers irreparable loss.

*Be it therefore resolved,* that the Board of Trustees hereby expresses on behalf of the university its appreciation of a great spirit committed to high service, a character whose memory will remain as a challenge to constructive accomplishments, and

*Be it further resolved,* that in his memory the present Education Building on the campus with which he was so long and conspicuously identified be designated from and after this date as "Arps Hall"; and further that a copy of this resolution be spread upon the minutes of the board and transmitted to the members of the family with the sympathy of the board and of the university.

## RECENT DEATHS

PROFESSOR JACOB E. METZGER, director of the Experiment Station, professor of agronomy and head of the department at the University of Maryland, died on December 25, 1939, at the age of fifty-seven years.

DR. HENRY LESLIE OSBORN, professor of biology and geology and dean emeritus of Hamline University, St. Paul, Minn., died on January 3. He was eighty-two years old.

CHARLES NICOLAS AINSLIE, entomologist in the United States Department of Agriculture, 1906–1930, and collaborator thereafter, died on December 5, 1939, at the age of eighty-three years.

DR. ALMON ERNEST PARKINS, professor of geography at the George Peabody College for Teachers at Nashville, Tenn., died on January 3 at the age of sixty years.

DR. GEORGE CHARLTON MATSON, consulting geologist and an independent oil operator of Tulsa, Okla., formerly geologist of the U. S. Geological Survey, died on January 3 in his sixty-sixth year.

# SCIENTIFIC EVENTS

## THE NEW FEDERAL NUTRITIONS LABORATORY AT CORNELL UNIVERSITY

A COMPREHENSIVE research project on the nutritional values of foodstuffs will be undertaken at Cornell University during the summer.

An appropriation from Bankhead-Jones funds has been made available for three laboratories and greenhouses at the university, in which the U. S. Department of Agriculture will center investigations extending throughout the United States. The second unit of

the new federal nutritions laboratory at the university is now under construction. Professor L. A. Maynard, head of the department of animal nutrition at the university, has been appointed director of the laboratory. He will work in conjunction with Dr. E. C. Auchter, chief of the Federal Bureau of Plant Industry.

Nearly all the efforts of the past have been directed toward increasing the production of foods. A serious attempt will now be made to increase the nutritional value of foodstuffs through studies of soil and crop management, soil types and plant and animal nutrition.

Commenting on the program Secretary Wallace said:

> Work at the new laboratory is expected to develop facts that will enable practises in soil management and crop production to be dovetailed more closely with human nutritional needs. Agricultural scientists have done a good job in solving problems of quantity production and market quality. To-day, new advances in the science of nutrition make it necessary to think about doing an equally good job on quality production as it relates to nutritional value.

One of the early steps will be a survey of mineral resources in the soils of the United States—not the minerals that are used as precious metals or industrial materials—but the vital elements that must be obtained from foods, which in turn get them from the soil.

The official announcement points out that

> soil deficiencies often show up in plant life. In turn, animals feeding on these plants develop deficiencies which seriously affect their health. A striking case is that of animals in certain areas which waste away and die because of a lack of cobalt in the soil and forage. The animal's daily need of this mineral could be held on the head of a pin. One of the objectives of the research program is to determine the exact amount of the mineral necessary for the improvement of plant and animal life. The time is regarded as ripe for beginning a system of study that will start with the soil and go right through to man. Those in charge of the project believe that the investigations will lead eventually to the production of foods which contain all the complex and subtly balanced nutrients which human beings need for sound health.

## THE AMERICAN STANDARDS ASSOCIATION

THE American Standards Association has now completed its twenty-first year as central coordinating agency for the development of American industrial standards. During that time industry has used its facilities for the approval of more than four hundred standards, and some six hundred industrial and governmental groups have taken part in the work. American standards in engineering and allied fields have contributed greatly to our modern methods of production; and American standard safety codes have become the backbone of state industrial regulations for the protection of workmen.

Edmund A. Prentis, president of the association, speaking at this year's annual meeting, welcomed the following six trade and governmental groups that have affiliated with the association in the past twelve months. These are the American Association of Textile Chemists and Colorists; the American Institute of Architects; the American Welding Society; the Federal Works Agency; Modular Service Association, and a photographic group (consisting of the Agfa Ansco and Eastman companies). This brings the basic membership of the American Standards Association to seventy-three national trade associations, technical societies and governmental groups.

The advisory committee has been reorganized to include executives from industries not previously represented. The present committee consists of Howard Coonley, Ralph Budd, Floyd Carlisle, Karl T. Compton, Lammot du Pont, Lincoln Filene, Walter Gifford, Leroy Lincoln, J. H. McGraw, Jr., A. W. Robertson, Alfred Sloan, E. R. Stettinius and Walter Teagle.

According to the official announcement of the association, work undertaken during the year includes a program of standards for the prevention of occupational disease such as silicosis and other ills born of breathing air contaminated with toxic dusts and gases.

A new departure is the development of standards for photographic apparatus, supplies and equipment. Another project taken up during the year is standardization in the field of aeronautics. Last February representatives of the principal aeronautical organizations in this country met at the headquarters of the association to discuss the possibilities of national and international standardization of aircraft engines, aircraft and aviation fuels. In May, informal international conferences on these subjects were held in New York. The war situation in Europe, however, has brought international work practically to a standstill.

Perhaps the most important work completed during the year is the "American Standard Inspection Requirements for Motor Vehicles" developed under the supervision of the National Conservation Bureau and the American Association of Motor Vehicle Administrators.

Fourteen committees are working under the supervision of a Building Code Correlating Committee on a group of standards covering the entire field of the average building code. Another project has to do with coordination of dimensions of building materials and equipment, which it is hoped will encourage the application of new methods and processes that will lead to more economical housing. A number of projects have also been undertaken in the consumer field.

Officers of the association for 1940 are: Edmund A. Prentis, of the firm of Spencer, White and Prentis,