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,

reelected president; R. E. Zimmerman, vice-president, United States Steel Corporation, reelected vice-president; R. P. Anderson, secretary of the division of refining of the American Petroleum Institute, elected chairman of the Standards Council; H. S. Osborne, engineer in charge of operating results of the American Telephone and Telegraph Company, elected vice-chairman of the Standards Council.

CONVENTION OF THE AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

THE winter convention of the American Institute of Electrical Engineers will be held in the Engineering Societies Building, New York City, from January 22 to 26.

The technical sessions will include papers on the following subjects: Electric Welding, Basic Sciences and Automatic Stations, Lightning Protection, Use of Radio for Airplane Navigation and Weather Forecasting, Circuit Breakers, Industrial Power Applications, Relays, Power Generation, Transportation, Electronics, Production and Application of Light, Power Transmission, Instruments and Measurements, Electrical Machinery, Insulation Co-ordination. There will be conferences on Electric Welding, Feedback Amplifiers, Networks, Sound, Test Code for Synchronous Machines, Transportation, the Use of Electronic Devices, Standards, Definitions.

On Wednesday evening, January 24, both the Edison and Hoover Medals will be presented in the Engineering Auditorium. The Edison Medal was awarded to Philip Torchio "for distinguished contributions to the art of central station engineering and for achievement in the production, distribution, and utilization of electrical energy." The Hoover Medal "awarded by engineers to a fellow engineer for distinguished public service" will be presented to Gano Dunn.

After the presentations a popular lecture on "Atomic Disintegration" will be delivered by Dr. Enrico Fermi, of Columbia University. His lecture will be followed by demonstrations of atomic disintegration by Dr. John R. Dunning. Dr. Fermi has been working with Dr. Dunning and the research group in physics at Columbia University, using the cyclotron in experiments on the physics of atomic nuclei.

Preceding the technical sessions on relays and communication on Tuesday afternoon a general session will be held for the presentation of the Alfred Noble Prize to Claude E. Shannon, of the Massachusetts Institute of Technology. He was awarded the prize for his paper entitled "A Symbolic Analysis of Relay and Switching Circuits."

Inspection trips of general interest will be available to members and guests attending the convention. The dinner honoring the "Outstanding Young Electrical Engineers" for 1939 will be held on Monday evening, January 22, at the Town Hall Club, New York. Larned A. Meacham, of the Bell Telephone Laboratories, Inc., New York, is the winner of the 1939 Eta Kappa Nu Award. Carl K. Gieringer, of the Liebel-Flarsheim Company, Cincinnati, Ohio, and Jesse E. Hobson, of the Westinghouse Electric and Manufacturing Company, E. Pittsburgh, Pa., will receive the Honorable Mention Award.

Following the convention there will be a post-convention cruise. The party will sail from New York at noon on January 27 on the *S. S. Robert Lee* and will return on the afternoon of January 30. It is planned to visit Williamsburg, Jamestown, Yorktown and Virginia Beach.

OFFICERS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

A FULL account of the Columbus meeting of the American Association for the Advancement of Science and the scientific societies associated with it, edited by the permanent secretary, will be printed in the issue of SCIENCE for February 2.

Officers for 1940 were elected as follows:

President: A. F. Blakeslee, Carnegie Institution of Washington, Cold Spring Harbor, N. Y.

Vice-presidents of the association and chairmen of the sections:

Mathematics: A. B. Coble, University of Illinois.

Physics: A. L. Hughes, Washington University, St. Louis.

Chemistry: George Scatchard, Massachusetts Institute of Technology.

Astronomy: Robert R. McMath, McMath-Hulbert Observatory, Pontiac, Mich.

Geology and Geography: Hugh D. Miser, U. S. Geological Survey, Washington, D. C.

Zoological Sciences: L. J. Cole, University of Wisconsin.

Botanical Sciences: M. L. Fernald, Harvard University.

Anthropology: W. Duncan Strong, Columbia University.

Social and Economic Sciences: Holbrook Working, Stanford University.

Historical and Philological Sciences: Chauncey D. Leake, University of California Medical School, San Francisco.

Engineering: Robert L. Sackett, Pennsylvania State College.

Medical Sciences: Paul R. Cannon, University of Chicago.

Agriculture: W. H. Chandler, University of California at Berkeley.

Education: E. S. Ashbaugh, Miami University, Oxford, Ohio.

Members of the Sectional Committees:

Mathematics: J. L. Walsh, Harvard University.

Physics: George R. Harrison, Massachusetts Institute of Technology.