

erosion. Water erosion, of course, is much more widespread and destructive because it is a continuous process in many parts of the country. More than 50 million acres of land in the United States has been destroyed for crop production by erosion. Another 125,000,000 acres of land new in crops has lost all or most of its topsoil. About 100,000,000 acres is rapidly approaching that condition. At least three fourths of the farm land of the United States used for clean-tilled crops is subject in varying degrees to erosion, the damage from which to farm lands, roads, reservoirs, irrigation ditches and valley lands is estimated at more than \$400,000,000 a year. Studies in Oklahoma show that cultivated fields lost 84 per cent. more rainfall and 667 times more soil than similar fields that were under a grass sod.

The Bureau of Agricultural Engineering has studied control of erosion by artificial structures such as terraces, tile drains, check dams and soil-saving dams. The field research of the Bureau of Chemistry and Soils and Agricultural Engineering has been conducted at field stations at Bethany, Mo.; Guthrie, Okla.; Hays, Kans.; LaCrosse, Wis.; Clarinda, Iowa; Pullman, Wash.; Statesville, N. C.; Temple, Tex.; Tyler, Tex., and Zanesville, Ohio. The Bureau of Plant Industry, in addition to introducing and selecting plants best suited for use in soil erosion control work, recently established large-scale soil erosion nurseries on which will be grown various plants for use in control projects. These nurseries have been financed with emergency funds.

Research primarily discovers how erosion may be controlled most effectively and economically. These results are translated into action by farmers themselves and by the Soil Erosion Service which is demonstrating effective methods of land conservation in forty erosion control projects in 32 states. Ranging in size from 50,000 to 16,000,000 acres each, these projects cover representative watersheds in the major agricultural sections where erosion has become a critical problem.

#### THE ANNUAL MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION

THE sixty-fourth annual meeting of the American Public Health Association will be held in Milwaukee, from October 7 to 10. The society has a membership of 4,500 professional public health workers whose annual sessions review developments in health protection and promotion and outline plans and policies for future advances.

Several related organizations have announced that they will meet simultaneously with the association at Milwaukee. They are: American Association of School Physicians, International Association of Dairy

and Milk Inspectors, Conference of State Sanitary Engineers, International Society of Medical Officers of Health, Association of Dairy, Food and Drug Officials, Conference of Wisconsin Health Officers, Conference of State Laboratory Directors and Association of Women in Public Health.

The fourth Health Education Institute sponsored and conducted by the association will be held on October 4, 5 and 6, prior to the opening of the several conventions. The subject will be "Health Education in Small Cities and Rural Communities."

A Health Exhibit including in its scope commercial, scientific and educational displays will be conducted as usual at Milwaukee.

Plans for the preliminary program include special sessions on The Rôle of a Health Department in a Program of Social Security, Mental Hygiene, Professional Education, Veterinary Public Health, Diphtheria Immunization, and a session on the history and achievements of the Committee on Administrative Practice, celebrating its fifteenth anniversary.

The association is divided into ten sections—Health Officers, Laboratory, Vital Statistics, Public Health Engineering, Industrial Hygiene, Food and Nutrition, Child Hygiene, Public Health Education, Public Health Nursing, Epidemiology. Subjects to be discussed include pneumonia, trench mouth, syphilis, measles, outdoor bathing places, scarlet fever, milk sanitation, water sanitation, foods, health education, and many other topics representing the responsibilities of health authorities.

The chairman of the Local Committee on Arrangements is Dr. John P. Koehler, Health Officer of Milwaukee. Information in regard to the congress can be obtained from the American Public Health Association at 50 West 50th Street, New York City.

#### THE LOS ANGELES MEETING OF THE PACIFIC DIVISION OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

A PRELIMINARY announcement of the forthcoming meeting of the Pacific Division, to be held at the University of California at Los Angeles during the week of June 24, 1935, will be distributed to members early in April.

Two of the principal addresses to be presented during the meeting will be given by Professor Bailey Willis, president of the Pacific Division, and Fred. E. Wright, of the Geophysical Laboratory, Washington, D. C. The subject of Professor Willis's address will be "The Living Globe," while that by Mr. Wright will be on "The Surface of the Moon."

The meetings will open formally on the morning of Tuesday, June 25, with a general symposium on "The

Earthquake Situation." The following topics will be discussed:

"Historically Recorded Earthquakes in California": Owen C. Coy, University of Southern California, Los Angeles.

"Seismologic Research":

- (a) Earthquakes of Northern California, Perry Byerly, University of California, Berkeley.
- (b) Research on Near and Far Earthquakes, B. Gutenberg, California Institute of Technology, Pasadena.
- (c) Vibration Research for Earthquake-resistant Buildings, L. Jacobsen, Stanford University.
- (d) Development of the U. S. Coast and Geodetic Survey Seismological Program in California, T. J. Maher, U. S. Coast and Geodetic Survey, San Francisco.

"Mechanics of Earthquake Activity": Bailey Willis, Stanford University.

"The Construction of Earthquake-resistant Buildings": Geo. B. McDougall, state architect, Sacramento.

The afternoon of Tuesday, June 25, will be devoted to a series of reviews on the progress of research in selected fields of general interest. Attention will be centered upon a few of the most noteworthy achievements described in relation to outstanding developments and problems of commanding interest in the fields at large. The reviews will be presented as follows:

"Recent Developments in Acoustics": V. O. Knudsen, University of California at Los Angeles.

"The Mechanism of Heredity": Th. Dobzhansky, California Institute of Technology.

"Recent Developments in the Field of Hormones": B. M. Allen, University of California at Los Angeles.

On the morning of Wednesday, June 26, a symposium on "The Virus Diseases of Plants and Animals" will be held under the auspices of the American Phytopathological Society, Pacific Division; Botanical Society of America, Pacific Section; Society for Experimental Biology and Medicine, and the Western Society of Naturalists.

The remainder of the week will be given over to the programs of participating societies of which seventeen or eighteen will be joining in the meeting.

Members proposing to present papers are reminded that titles received after May 1 will be too late for publication in the program. This will be distributed during the last week of May to all members of the association resident in the territory of the Pacific Division.

Many excursions of considerable interest are being arranged and will be described in full in the program.

J. MURRAY LUCK,  
*Secretary*

## SCIENTIFIC NOTES AND NEWS

ON the occasion of his eighty-second birthday on March 29 Professor Elihu Thomson was presented with the medal of honor of the German Society of Engineers. The presentation was made at a luncheon of the board of directors of the General Electric Company. Among those present were Owen D. Young, Gerard Swope, Philip Stockton, Charles F. Adams and Francis Lee Higginson. Because of Professor Thomson's ill health Edwin W. Rice, Jr., accepted the medal, which was presented by Kurt von Tippleskirch, German consul in Boston. As translated the inscription on the medal reads: "On Elihu Thomson, the great pioneer in the realm of engineering, the inventor and scientist, the promoter of cooperation among engineers, there is conferred on his eighty-second birthday the V. D. I. medal of honor."

THE Kelvin Gold Medal for 1935, awarded triennially as a mark of distinction in engineering work or investigation of the kinds with which Lord Kelvin was especially identified, has been conferred on Sir John Ambrose Fleming, in recognition of his services to electrical science and particularly of his invention of the thermionic valve. The presentation ceremony

is expected to take place at a meeting of the British Institution of Civil Engineers early in May.

DR. IRVING LANGMUIR, of the General Electric Company, and Professor Harold C. Urey, of Columbia University, will be the guests of honor at a dinner on Monday evening, April 22, one of the opening events of the tercentenary celebration by the American Chemical Society of the founding of the nation's chemical industries. The dinner will be given by the Division of Physical and Inorganic Chemistry. Professor Victor K. LaMer, of Columbia University, will preside.

A PORTRAIT of Dr. Martha Tracy, dean of the Woman's Medical College of Pennsylvania, was presented to the college on its eighty-fifth anniversary on March 9. This is Dr. Tracy's twenty-fifth year at the college. Dr. Ellen C. Potter, Trenton, N. J., made the presentation. Dr. Helen Ingleby, professor of pathology, on behalf of trustees, faculty, students and friends, presented an automobile to Dr. Tracy.

THE Cross of the Legion of Honor was conferred on March 26 by Consul General Charles de Font-