ings are of a remarkably high order of literary culture and style, general scholarship and soundness. The results of his work stand well the tests of time. He was eminent in teaching, in research and in the application of bacteriologic science to public health.

LUDVIG HEKTOEN

RECENT DEATHS

DR. WILLIAM BUCHANAN WHERRY, professor of bacteriology and hygiene at the University of Cincinnati, died on November 1, in his sixty-first year.

COMMANDER JOHN THOMAS WATKINS, who retired six years ago as chief of the Magnetic Division of the U. S. Coast and Geodetic Survey, died on October 29 at the age of sixty-five years.

JAMES A. HALL, professor of mechanical engineering at Brown University, died on October 29 at the age of forty-eight years.

ALEXANDER LARMOR, formerly McCrea professor of natural philosophy at Magee University College, Londonderry, Ireland, now affiliated with the University of Dublin, died on October 12. He was a brother of Sir Joseph Larmor, of the University of Cambridge.

SCIENTIFIC EVENTS

MAPPING OF AREAS IN NORTHWESTERN QUEBEC

WORKING mainly in areas that are being actively prospected and developed, field parties of the Canadian Geological Survey, Department of Mines, Ottawa, are mapping seven sections of northwestern Quebec this year. Geological investigations are under way in the Opemiska, Waswanipi, Malartic, Noranda and Amos areas, and in the Mistawak area to the north of the Normetal (Abana) property, with topographical projects in the Noranda and the Mistawak areas.

Investigations by G. W. H. Norman in the Opemiska area will furnish information for a detailed geological map. Operations at the Ventures controlled Opemiska property are the center of interest in this increasingly active mining field. Prospecting and development work is also proceeding on deposits in the vicinities of David, Simon, Gwillim and Father Lakes. In the course of his work Dr. Norman will visit recent mineral discoveries in the Opawica-Chibougamau area.

The eastern and western portions of the Waswanipi area are being mapped by B. C. Freeman and J. C. Sproule on a four-mile-to-the-inch scale. The work is intended to meet the immediate needs of prospectors.

H. C. Gunning and J. W. Ambrose are making detailed geological investigations in Malartic and Fourniere townships. During 1934 and 1935 the geology and mineral deposits along the Cadillac gold belt were mapped in detail, and the more important economic results were published early in 1936. Last year this belt was traced southeastwards to within three miles of the Canadian Malartic property, and attention was thus directed to several miles of potentially valuable territory. This year's work is intended to establish the relationship existing between the two principal gold camps in the area, and should further assist the development of intervening and adjoining territory.

An area to the east of Amos is being mapped by L. J. Weeks, in a continuation of the systematic geological mapping of this section of western Quebec as an aid to prospecting.

G. F. Flaherty commenced the detailed mapping this year of the Mistawak area lying between the Ontario boundary and the Waswanipi area. Bands of tuffs and sediments similar in character to those in Desmeloizes township to the south are being delimited, and prospects in the area are being examined.

M. E. Wilson is completing a geological study of the Noranda mine. This work is part of a study of various deposits in the area, and is designed to determine their modes of occurrence as an aid to future development.

A portion of the Noranda area, and the strip of country between Noranda and Malartic township are being mapped topographically by J. W. Spence as a control basis for later geological investigations. In the Mistawak area H. N. Spence is mapping a 6,000-square mile territory lying mainly to the north of the Transcontinental Railway. This work will provide maps for prospectors and settlers in the area.

ENDORSEMENT OF THE WORK OF THE U. S. WEATHER BUREAU BY CIVIL ENGINEERS

AN endorsement of the program and work of the U. S. Weather Bureau and a resolution urging public support for its efforts to enlarge and improve its service have been passed by the Board of Direction of the American Society of Civil Engineers. Calling for an increase in appropriations for the work of the Weather Bureau and naming six specific activities in which it believes expansion in personnel and equipment are needed, the board has issued the following statement:

> Contacts of the society's Committee on Meteorological Data, with the program and work of the U. S. Weather Bureau, have convinced the committee that the bureau should receive public support in its efforts to enlarge and improve its service. With this in mind, the Board of Direction of the American Society of Civil Engineers, at its fall meeting, voiced its approval of this government activity by adopting the following resolution:

WHEREAS, More accurate and complete meteorological data are essential to many branches of human endeavor including navigation, agriculture, aviation and engineering; and

WHEREAS, The Special Committee on Meteorological Data of the American Society of Civil Engineers, the Water Resources Committee of the National Resources Committee and the Advisory Committee to the Secretary of Agriculture on the Weather Bureau, have all urged expansion and improvement of the service furnished by that bureau, which will call for an increase for appropriations for the bureau, now deemed inadequate even for the present service; therefore, be it

Resolved by the Board of Direction of the American Society of Civil Engineers that it endorses improvements in the service of the Weather Bureau, and the provision of an adequate increase in appropriation therefor, especially along the following lines:

(a) Stimulation of the service by adding qualified new men, by additional training of selected men now in the present organization, by further personal contact between field and office officials, and by regular inspections of both first-order and voluntary stations.
(b) Research.
(c) Extension of upper-air observations to attain, if possible, more exact and longer range forecasting.
(d) Increased number of observation stations, especially in the higher mountain areas, and reports from more ships at sea.
(e) Snow surveys and evaporation observations from water, snow and soils.
(f) The complete adoption and use of the International Figure Code.

Dr. Daniel W. Mead, professor emeritus of hydraulic and sanitary engineering, University of Wisconsin, is president of the society and chairman of the board. George T. Seabury, New York, is secretary.

THE TWELFTH NATIONAL EXPOSITION OF POWER AND MECHANICAL ENGINEERING

THE twelfth National Exposition of Power and Mechanical Engineering will be held at the Grand Central Palace, New York City, during the week of November 30. Three floors will be occupied and admission will be by invitation or by registration only. Operating exhibits will be emphasized and the equipment on display will range from power-producing equipment, factory machinery and industrial equipment to materials of construction and plant accessories.

The exhibits of equipment and products have been designed to meet current needs. Machinery will be in operation. All the effective principles of modern display will be utilized to show products so that they may be easily inspected and so that attention will be drawn to their new and important features. Competent men from technical staffs will answer questions, demonstrate products and explain how principles may be applied to the specific problems of the inquirer. The comprehensive presentation, including the latest output of competitive manufacturers, will provide visiting executives and engineers with a sound basis for their comparison of relative advantages.

Exhibits will range from large, heavy equipment used in the generation of power to mechanical equipment for handling materials and tools. Classifications of equipment on display will include: fuels, combustion equipment; refractories, steam-generating equipment; steam distribution equipment; piping and fittings; prime movers, pumps and hydraulic equipment; electric generators and motors; electrical transmission, distribution, control; power transmission; control apparatus and precision instruments; power-driven machinery; tools and machine tools; material handling equipment; heating, ventilating, refrigeration, air conditioning; lubricants; operation and maintenance materials.

Machinery and operating plant equipment will constitute a major section of the exposition. Steam-generating equipment and accessories will as usual play a prominent part. Valves and controls of every type and the latest in pipe fittings in terms of their industrial applications will be displayed. Many exhibits will feature plant accessories. A complete line of pumping equipment will offer unusual features from the standpoint of operating efficiency. Innumerable exhibits will be devoted to the latest indicating, recording and controlling devices applicable to temperature, flow, pressure, level and time.

The American Society of Mechanical Engineers and the American Society of Refrigerating Engineers will hold meetings in New York during the week of the exposition.

THE PONTIFICAL ACADEMY OF SCIENCES

A NEW Pontifical Academy of Sciences was initiated by Pope Pius on October 30. It was announced that members had been selected solely for scientific achievement. It consists of seventy members as follows: Italy, 33; United States, 6; France, Germany and Belgium, 5 each; Holland, 4; Great Britain, 3; Austria, 2, and Czechoslovakia, Portugal, Argentina, Denmark, Norway, Poland and China, one each.

From the United States the following have been elected to membership: Alexis Carrel, professor of biology at the Rockefeller Institute, New York; George Birkhoff, professor of mathematics at Harvard University; Robert Andrews Millikan, director of the Norman Bridge Laboratory of Physics at the California Institute of Technology; Thomas Hunt Morgan, director of the Wm. G. Kerckhoff Laboratories of the Biological Sciences of the California Institute of Technology; George S. Sperti, biophysicist, formerly research professor at the University of