and happy fruition. His last day was a busy and a cheerful one. Before the dawn of the next he went quietly to sleep.

W. C. MENDENHALL

RECENT DEATHS

DWIGHT PORTER, emeritus professor of hydraulic engineering at the Massachusetts Institute of Technology, died on February 26. He was in his eightieth year.

WILLIAM HALE HERRICK, retired professor of chemistry at Pennsylvania State College, died on February 26. He was eighty-five years old.

DR. CLEOPHAS C. O'HARRA, professor of geology and president of the South Dakota State School of Mines, died on February 21, at sixty-eight years of age.

HENRY EDISON PHELPS, research engineer with the American Telephone and Telegraph Company from 1917 to 1934 and with the Bell Telephone Laboratories since March, 1934, died on February 21, at the age of forty-one years.

DR. HERBERT A. PULLEN, past president of the American Society of Orthodontists and a former dean of the University of Buffalo, died on February 17.

DR. ARTHUR THOMSON, emeritus Dr. Lees professor of anatomy at the University of Oxford, died on February 7 at the age of seventy-six years. He was distinguished for his work as an anatomist and as a physical anthropologist.

PROFESSOR WALTHER SPIELMEYER, chief of the division of neuropathology in the Forschungsanstalt für Psychiatrie in Munich, died on February 8.

SCIENTIFIC EVENTS

THE THREE HUNDREDTH ANNIVERSARY OF THE FOUNDING OF CHEMICAL INDUSTRIES IN AMERICA

APPOINTMENT by the Manufacturing Chemists Association of a committee to cooperate with the American Chemical Society in celebrating in New York during the week of April 22 the three hundredth anniversary of the founding of the chemical industries in America has been announced.

The members are: E. M. Allen, president of the Mathieson Alkali Works; Lammot du Pont, president of E. I. du Pont de Nemours and Company, and George W. Merck, president of Merck and Company.

Science and industry will join in an exposition of chemistry's development since John Winthrop, Jr., first colonial governor of Connecticut, in 1635 mapped out a far-reaching program for the production of salt, iron, glass, potash, tar, black lead, saltpeter, medicines, copper, alum and other chemicals.

Dr. Arthur W. Hixson, professor of chemistry at Columbia University and chairman of the general committee of arrangements, reports that at the tercentenary assembly, to be attended by more than 10,000 representatives of chemistry and allied sciences, Winthrop will be heralded as the real founder of the nation's chemical industries.

Inventions, discoveries and explorations in chemistry over the span of 300 years will be traced to show how infant industries have become the bulwark of national defense, the basis of modern industrial progress and the source of a large and growing percentage of national wealth.

Senator Pat Harrison of Mississippi and Representative James W. Wadsworth of New York will be among the speakers at a dinner meeting on Wednesday evening, April 24. On the same day a chemical industries symposium, planned to interpret the close relationship between the chemical industries and the national welfare, will be held. Thomas Midgley, vice-president of the Ethyl Gasoline Corporation, will deliver an address on "Chemical Developments in the Next One Hundred Years." William B. Bell, chairman of the board of directors of the American Cyanamid Company, will speak on "National Planning and the Chemical Industries."

Other themes at this symposium include: "What the American Chemical Industries Have Done and Are Doing for the Nation"; "New Foreign Problems Confronting the American Chemical Industries"; "Scientific Foundations of the American Chemical Industries."

On Thursday, April 25, there will be a symposium on the economic problems of the chemical industry, with R. P. Soule, chemical economist of the Tri-Continental Corporation, as chairman. "Machine Age or Material Age?" is one of the topics to be discussed.

The rise of the process industries in the post-war decade will be described, the discussion centering around synthetic fuels, building materials, rubber wrappings; the encroachment upon agriculture and the products of the farm; the realignment of industries and the outlook for the future.

Depreciation and obsolescence charges under the New Deal will be another theme of this symposium. The chemical industry, according to the announcement, is outstanding in high charges for depreciation and obsolescence. The chemists will discuss federal policy toward reducing corporate surpluses and increasing tax revenues, and will explain their attitude

toward current and past depreciation and obsolescence reserves.

The question of chemical prices will also come up, the discussion involving the trend of typical prices against the background of the general price structure, below both 1914 and 1926 levels. A protective tariff, according to the announcement, has not increased prices, low prices resulting in spite of high wages. Other problems to be dealt with include prices *vs.* earnings, trend of prices in the future, elastic and inelastic markets for chemicals.

A third symposium will be devoted to materials of construction in the building industry. The chairman will be Professor James R. Withrow, of the Ohio State University. A group of papers will outline the latest developments in new materials of construction important to the chemical industries. These papers will cover a wide range of materials, including metals, ceramics, plastics, rubber and alloys.

Sessions are scheduled by the nineteen professional divisions of the American Chemical Society. On Tuesday evening, April 23, the William H. Nichols Medal of the New York Section of the American Chemical Society will be bestowed upon Father Julius A. Nieuwland, of Notre Dame University.

Numerous allied organizations, industrial and scientific, are aiding in the plans for the tercentenary events. Among them are the Synthetic Organic Chemical Manufacturers Association and the chemical societies of the metropolitan district.

THE BANTING RESEARCH FOUNDATION

THE work carried out under grants from the Banting Research Foundation during the past year is reported by the secretary to have been very satisfactory. Further, during the year reports and printed papers have been received from workers whose grants terminated during the year 1932–33. As a result, the secretary is able to report that 20 papers have been published during the past year and several are in preparation or have been submitted for publication. The number of printed papers would have been increased had not the depression led editors of scientific journals to refuse three or four papers on account of their length, or the necessity of a larger number of illustrations than their funds allowed them to accept. This difficulty has shown itself most acutely in regard to the grants made for the study of the racial factor in labor by Dr. Cates, representing the committee in charge, and Dr. Goodwin. One paper in this series has now been accepted and there is hope that others will also appear during the next year.

Papers published during the year include that of Dr. A. C. Abbott, of the University of Manitoba, whose paper on constriction of the trachea confirms and extends the work of Breitner and others on the effect of oxygen restriction on the thyroid gland; that of Dr. J. Beattie and P. R. MacDonald, of McGill University, which forms an important contribution to the physiology of the lachrymal gland; Dr. Maurice Brodie, of McGill University, whose seven papers on infantile paralysis led up to his work on treatment, which is attracting wide-spread interest; Dr. A. M. Davidson, of the University of Manitoba, in five communications on fungus diseases of the skin, contributed much to our knowledge of these diseases, their animal hosts and their treatment. Dr. R. D. H. Heard and Dr. A. D. Welch, of the University of Toronto, showed that ascorbic acid was the substance which prevented the oxidation of epinephrine in adrenal perfusates. This work also opened up a field of study in the oxidation reduction changes in the body, which had not been previously explained. Dr. R. F. Shaner, of the University of Alberta, published two interesting studies of the embryological development of the eighth nerve nuclei. Miss Armine Alley, of McGill University, published three papers dealing with the mechanism of gastric secretion and with the treatment of hyperacidity.

The grant made annually under the second clause of the foundation's charter to Sir Frederick Banting for the working of the department of medical research of the University of Toronto, was also productive of much valuable work and some thirteen papers. Several of these dealt with the biochemistry of silica in the body, others with the phospholipids and glycerophosphates, their enzymic hydrolysis and the type of phosphoric esters in malignant tissues. To these studies Dr. E. J. King, M. E. Dolan, H. Stantial, A. R. Armstrong, J. J. Rae, J. Fallon, D. A. Irwin and E. L. Outhouse contributed, while H. J. Perkin contributed a paper on the determination of iodine in the blood.

THE ROTHSCHILD COLLECTION OF BIRDS AT THE AMERICAN MUSEUM OF NATURAL HISTORY

THE Rothschild or Tring collection of birds is now being prepared for classification and exhibition at the American Museum of Natural History under the supervision of Dr. Ernst Mayr, associate curator of birds. It was acquired from Lord Rothschild in London in 1932 and was presented to the museum in memory of Harry Payne Whitney by his family, but was never unpacked because of inadequate facilities for storage and display. However, the Whitney Wing, made possible by a gift of $750,000 from Mr. Whitney in 1929 and matched under the terms of the gift by an equal sum from the city of New York, has recently been completed, and in this wing part of the collection will be exhibited, while part will be stored in 52,000 drawers as a study collection. The collec-