Washburn wrote, "Physical chemistry is coming to be not so much a definite branch or field of chemistry as it is an attitude or point of view and method of approach to problems in all branches of chemistry"; and it is not surprising that he applied the principles of physical chemistry and thermodynamics so effectively to this new field of ceramic chemistry. The work which was carried on in his laboratory during this period included the development of precision apparatus and technique for measuring the viscosity, density and surface tension of glasses at high temperatures, as well as studies on dissolved gases in glass and the theory and methods for measuring the porosity of ceramic substances.

(4) From 1922 to 1926, Washburn literally buried himself in the task of editing the International Critical Tables. Science and technology must forever owe a great debt to his perseverance, tenacity and sacrifice in carrying on this monumental undertaking.

(5) In 1926, he assumed the leadership of the division of chemistry at the Bureau of Standards. The beginning of this last period of his career saw his work on the International Critical Tables come to a successful end. Washburn now devoted himself to the application of the principles and methods of physical chemistry to the problems of chemistry and technology, and had leisure meanwhile to satisfy partially the innate scientific curiosity of his imaginative mind. In this period he initiated a program of thermochemical research having for its object the accurate determination of the thermochemical constants of substances important to science and industry; instituted and directed the extensive project of separating, identifying and determining the constituents of petroleum, which involved the development of many and varied types of new apparatus; directed the research on rubber hydrocarbons which resulted in obtaining the first rubber crystals; and found time to make many personal contributions to science, among which may be mentioned his exhaustive study of the "Standard States for Bomb Calorimetry." The crowning achievement of Washburn's scientific career came with his discovery in December, 1931, of the fractional electrolysis of water. This process has made possible the preparation of relatively large amounts of practically pure deuterium, or "heavy" hydrogen of atomic mass 2, and has resulted in the opening up of a new field of research in physics, chemistry and the biological sciences.

Washburn's appointment as chief of the division of chemistry infused new life and activity into the group. Quiet, friendly, yet withal a little reserved, his ability, fairness and dignity at once commanded admiration and respect, which soon ripened into lasting friendship.

Dr. Washburn was a member of the National Academy of Sciences, the American Chemical Society, the American Physical Society, and the American Ceramic Society, and he carried for years a tremendous burden of committee assignments. He served as chairman of the Division of Chemistry and Chemical Technology of the National Research Council, and was American commissioner of the Annual Tables of Physical and Chemical Constants. He was a member of the International Committee on Thermochemistry and chairman of the International Commission on Physico-Chemical Standards. He was on three occasions a delegate to the International Chemical Union, and active in the work of the International Research Council. When a serious illness in 1929 compelled him to relinquish such activities, Washburn did so with deep reluctance and regret.

In 1910, Dr. Washburn married Miss Sophie de Veer, of Boston, who died two years ago. Their four children survive them.

In Dr. Washburn's death, the Bureau of Standards has lost an outstanding member of its staff—a brilliant investigator, cut off in the zenith of his career.

LYMAN J. BRIGGS

RECENT DEATHS

ARTHUR RANUM, professor of mathematics at Cornell University since 1923, died on February 28, in his sixty-fourth year.

DR. JAMES MUNSIE BELL, dean of the School of Applied Science in the University of North Carolina, a member of the faculty for the last twenty-four years, died on March 3 at the age of fifty-three years.

DR. THOMAS CLACHAR BROWN, teacher of geology at the high school at Fitchburg, Massachusetts, died on February 28. He was fifty-one years old.

THOMAS ERIC PEET, professor of Egyptology at the University of Oxford, died on February 22, in his fifty-second year.

SIR VINCENT RAVEN, a past president of the British Institution of Mechanical Engineers and formerly technical adviser to the London and North-Eastern Railway Company, died on February 14 at the age of seventy-five years.

SCIENTIFIC EVENTS

THE WORK OF THE GODMAN FUND

The London Times calls attention to the fact that January 15 was the centenary of the birth of Frederick Du Cane Godman, to whose memory the Godman Exploration Fund was inaugurated in 1920.

Godman and Osbert Salvin, a life-long friend,