being invited to prepare a book for the American Nature Series (Henry Holt and Co.) on "Shell-Fish Industries." This book of 360 pages and 67 figures was published in 1910. It is charmingly written and is clear, humorous, literary and withal genuinely scientific. Naturally the story of the oyster occupies most of the book, namely, twelve chapters out of twenty-two. Other chapters deal with clams, scallops and general topics, such as anatomy, development, physiology, sea farming, interrelations of organisms, adaptations and design, etc. His last and in many respects most valuable original scientific contribution was on the "Ciliary Mechanisms of Lamellibranchs" (*Jour. Morph.*, 26, 1915). This study was begun in 1898 and later was continued in visits to all coasts of the United States. In this summary of years of work he describes these ciliary mechanisms in thirty different species, and his figures are so beautifully drawn that the Wistar Institute chose some of them as models for its style book.

He was a broadly trained naturalist with artistic temperament and in all his work showed what might be called a "perfection complex," which necessarily led him to limit the field of his research work but to do as thoroughly as possible all that he undertook. In his study of the shellfish he said he had traveled almost every mile of our Atlantic coast from Nova Scotia to Louisiana. He was particularly skilful with hand and eye, an excellent dissector and draughtsman, and his handwriting was like perfect copperplate. He loved the great outdoors and was a skilled photographer and an excellent shot with pistol and rifle.

In social relations he was reserved almost to the point of shyness, and his modesty and sense of humor prevented his thinking of himself more highly than he ought to think. But he was generous in appreciation of others and he bound his friends to him with bonds of real affection.

In 1892 he married Ida M. Archambault, of Buchanan, Mich.; to them were born four daughters, all of whom survive him. A host of former students and friends mourn with them the loss of a delightful and unselfish companion and a noble personality.

EDWIN G. CONKLIN

DANIEL WEBSTER HERING
1850–1938

DANIEL WEBSTER HERING, professor emeritus of physics and senior member of the faculty at New York University, died at his home in New York City on the 24th of March, 1938, at the age of 88 years.

Born on the 23rd of March, 1850, near Smithburg, Maryland, which lies on the western slope of the Blue Ridge Mountains, Professor Hering commenced his higher education in 1869 at the Sheffield Scientific School of Yale College, where he earned his Ph.B. degree in 1873. In 1876, when President Gilman opened the Johns Hopkins University primarily as a school for graduate study, we find Daniel Webster Hering among the first twenty fellows appointed to that institution, where he enjoyed the intellectual atmosphere surrounding such productive scholars as Sylvester, Remsen, Rowland and Martin. His field of study in this newly formed institution was civil engineering; and, there being at that time no regular provision for granting a degree in civil engineering at Johns Hopkins, credit for his scholastic achievements was transcribed to Yale, where he was granted the degree of civil engineer with honors in 1879.

In the years 1880 to 1884 he was professor of mathematics in Western Maryland College at Westminster, and in the following year became professor of physics at the Western University of Pennsylvania—now the University of Pittsburgh.

In accepting a position in 1885 as professor of physics and applied mechanics at New York University, Professor Hering commenced an association with that institution which was unbroken for a period of fifty-three years; barring a brief period of one semester at Western Maryland College, where he substituted for a professor who had gone overseas during the world war. While associated with New York University, Professor Hering was active as head of the department of physics until 1916, when he was retired. During the years 1902 to 1915 he was dean of the graduate faculty. From 1926 until his death he was curator of a very rare and valuable collection of some 1,800 clocks and watches donated to New York University by the late Mr. James Arthur.

In addition to these academic responsibilities, Dr. Hering was distinguished by the honorary degree of doctor of laws from the University of Pittsburgh in 1907; and again from New York University in 1917; in 1895 the Western Maryland College had conferred upon him the doctorate of philosophy. He became an honorary member of the Society of Phi Beta Kappa in 1887; was a fellow of the New York Academy of Science; and an early member, and later a fellow, of the American Physical Society.

In physics, as in other sciences, there are some who make important discoveries along the frontier of the great unknown; there are others, quite as worthy although often less spectacular, who step into the newly conquered territory, clear up the debris of battle and make habitable the ground gained. Of this latter type was Dr. Hering. His mind was ever keen in picking out what, in physical discovery, was really important. His pen was quick to record and transmit to his fellow physicists the latest investigations performed in foreign countries in what was then "modern physics."

He was alert in acquiring the technique of the production of x-rays and wireless waves following their discovery in Europe in the late nineteenth century.

This intellectual keenness in grasping the importance of new results is to be observed again in Dr. Hering's method of teaching. When the great Cavendish Laboratory was opened at Cambridge University in 1874 the laboratory method of instruction in physics was well inaugurated. This example was followed by Johns Hopkins University, where Rowland converted the kitchen of an old residence into a laboratory. Dr. Hering, realizing the value of this innovation, established an instructional laboratory by partitioning off a part of his lecture room at New York University. His convictions in this method of instruction are expressed in an article written by him in 1893 entitled "Laboratory Instruction in Physics."

Beyond the realm of physics Dr. Hering found many joys and interests in life. First among these was, perhaps, the James Arthur collection of timepieces. With characteristic energy he examined minutely every clock and watch and then prepared a careful catalogue of the collection. His enthusiasm for this work and his scholarly study of timepieces is splendidly portrayed in his beautifully illustrated book, "The Lure of the Clock," published by the New York University Press in 1932. Another major interest of Dr. Hering was the history of the public attitude toward science. This is exemplified in his very entertaining volume entitled, "Foibles and Fallacies of Science," published in 1924; and again in his James Arthur Lecture, delivered at New York University on April 2, 1936, dealing with "The Time Concept and Time Sense Among Cultured and Uncultured Peoples."

One can not conclude a minute to the memory of Daniel Webster Hering without reference to that remarkable mental and physical energy of his which remained, unabated, to the day of his death. Although suffering from impaired hearing for many years, he maintained an extraordinary sense of humor in every personal contact and radiated cheerfulness and enthusiasm to all who were fortunate enough to know him.

In 1881, Dr. Hering married Mary Hollis Webster, of Baltimore. Following her greatly lamented death in 1930, Dr. Hering continued living with his two daughters, the Misses Doris and Hollis Webster Hering, who survive him.

WILLIAM H. CREW
NEW YORK UNIVERSITY

RECENT DEATHS

COMMANDER MILTON UPDEGRAFF, professor of mathematics of the United States Navy, retired, formerly on duty at the Naval Observatory, died on September 12 at the age of seventy-seven years.

DR. WILLIS R. GREGG, chief of the United States Weather Bureau, died on September 14 at the age of fifty-eight years.

DR. JOHN CLEMENT HEISLER, emeritus professor of anatomy at the Medical School of the University of Pennsylvania, died on September 9 at the age of seventy-six years.

DR. JOHN JENNINGS LUCK, for fifteen years professor of mathematics at the University of Virginia, died on September 15 at the age of fifty-five years.

DR. JOHN B. WENTZ, associate professor of farm crops at the Iowa State College, died on August 24 at the age of forty-seven years.

DR. THOMAS C. HEBB, professor and head of the department of physics at the University of British Columbia, died on August 13 at the age of fifty-nine years. He had been connected with the university since 1916.

MARY FREYER MONTGOMERY, San Francisco, assistant clinical professor of surgery at the Medical School of the University of California, died on August 30 at the age of thirty-eight years.

WILLIAM ROBB BARCLAY, consulting metallurgist of the Mond Nickel Company, Ltd., of London, known for his work on the technique of non-ferrous metallurgy, died on September 16 at the age of sixty-two years.

THE death at the age of sixty-eight years is announced of Dean Reinhold Matsson, of Sweden, churchman and botanist.

SCIENTIFIC EVENTS

THE HERTY FOUNDATION LABORATORY

Industrial and Engineering Chemistry reports that the Pulp and Paper Laboratory of the Industrial Committee of Savannah, Inc., has become the "Herty Foundation Laboratory" under an act of the Georgia Legislature. The change took place last February. Up to that time the laboratory had been supported financially chiefly by the Chemical Foundation, Inc., and by contributions of the Industrial Committee of Savannah, supplemented by appropriations of the Georgia Legislature.

At the close of 1937 it became evident that the major part of these funds would not be available in future and that in the event that other support was not secured the laboratory faced possible closure. However, an emergency fund was raised by equipment