physics at Pennsylvania State College in 1929, Dr. Whitmore was instructor in organic chemistry at Williams College and at Rice Institute, assistant professor at the University of Minnesota and professor and head of the chemistry department at Northwestern University.

He is consultant and member of the Scientific Advisory Committee of the Chemical Warfare Service. He has held many offices in the American Chemical Society, starting with the treasurership of the Southeast Texas Section in 1917, and including nine years of service as a national director and eight years as secretary and chairman of the Division of Organic Chemistry. He was a vice-president of the American Association for the Advancement of Science in 1932. He has also been chairman of the Division of Chemistry and Chemical Technology of the National Research Council and a member of other divisions of that organization.

AWARD OF THE CHARLES FREDERICK CHANDLER MEDAL

THE sixteenth award of the Charles Frederick Chandler Medal of Columbia University has been made for 1936, the centennial of Chandler's birth, to Dr. John Howard Northrop, of the Rockefeller Institute for Medical Research. Dr. Northrop, who will deliver the annual Chandler lecture next spring, was cited for fundamental discoveries concerning bacteria, the constitution of protein and the chemistry of digestion.

The medal was founded in 1910 to honor Chandler, called the father of the American Chemical Society, who was born on December 6, 1836, and who, for more than half a century, accomplished pioneer work in industrial chemistry, advanced public health and directed the teaching of chemistry at Columbia.

Dr. Northrop received the degree of bachelor of science from Columbia in 1912, the master of arts in 1913 and the doctorate in 1915. He held the William Bayard Cutting Travelling Fellowship in 1915–16. He has been associated with the Rockefeller Institute since 1916, becoming a member in 1924. During 1918– 1919 he served as captain in the Chemical Warfare Service. He is a member of the editorial board of the *Journal of General Physiology* and of the National Academy of Sciences. He received the Stevens Prize of the College of Physicians and Surgeons in 1931, and Harvard University conferred upon him the honorary degree of doctor of science during the Tercentenary Celebration last September.

Previous recipients of the Chandler Medal include Leo H. Baekeland, William A. Hillebrand, Willis R. Whitney, F. G. Hopkins, Edgar R. Smith, R. E. Swain, E. C. Kendall, Samuel W. Parr, Moses Gomberg, John Arthur Wilson, Irving Langmuir, James Bryant Conant, George O. Curme, Jr., Jacob Goodale Lipman and William F. Giauque.

Besides Professor Thomas, Professer Leo H. Baekeland and Professor Arthur W. Hixson are members of the Chandler Lectureship Committee.

In making public the award Dr. Butler said in part:

Columbia University could not let the one hundredth anniversary of the birth of Professor Charles Frederick Chandler go without recognition and grateful acknowledgment of his outstanding scientific and university service.

In 1864 Chandler came to Columbia as one of the group which planned the establishment of the famous School of Mines, the first of its kind in the United States. His associates were Professor Thomas Egleston and General Francis Laurens Vinton. From that time he remained at the head of the department of chemistry at Columbia until his retirement in 1911. His eager and many-sided personality led him into various forms of public service, in each of which he distinguished himself.

He was dean and executive officer of the School of Mines for a third of a century, and in addition taught chemistry to the students of medicine at the College of Physicians and Surgeons, and served as Health Officer of the City of New York. He built many monuments, some of them visible and some invisible, but all of an excellence and a distinction which have made his name a memorable one.

Columbia University, in its every part, held his personality in warm affection and will always hold his memory in highest honor and gratitude.

SCIENTIFIC NOTES AND NEWS

DR. AMBROSE SWASEY, the distinguished mechanical engineer, chairman of the board of directors of Warner and Swasey, Cleveland, Ohio, celebrated his ninetieth birthday on December 19.

BRIGADIER-GENERAL DAVID LEGGE BRAINARD, retired, known for his Arctic explorations, celebrated his eightieth birthday on December 21.

LEADERS in military and civil aviation, including members of the National Advisory Committee for Aeronautics, honored Wilbur Wright and Orville Wright on the thirty-third anniversary of the first flight by Orville Wright at Kittyhawk, N. C., on December 17, 1903. A wreath was placed on the grave of Wilbur Wright, and personal greetings, including a message from President Roosevelt, were presented to Orville Wright at his home. Those present included Dr. Joseph S. Ames, chairman of the National Advisory Committee for Aeronautics, and Dr. Charles G. Abbot, secretary of the Smithsonian Institution.