kindly. His father had been distinguished before him as a professor of astronomy and mathematics and erstwhile president at Wesleyan University. He thus carried on a family tradition of intellectual interest and culture. He was a passionate and experienced traveler, and made his home the repository of many artistic treasures.

Professor Van Vleck is survived by Mrs. Van Vleck (Hester Raymond) whom he married in 1893, who shared with him his many interests and who continues to make her home in Madison, Wis., and by his son, John Hasbrouck Van Vleck, professor of mathematics and physics at Harvard University.

RUDOLPH E. LANGER

GEORGE WEST GRAVES

DR. GEORGE WEST GRAVES, professor of agriculture and biology at Fresno State College, died in Fresno, Calif., on October 26, 1943. Professor Graves was born in Cedar Rapids, Iowa, on May 1, 1886. He is survived by his wife, the former Ella Macklin, and his parents, Walter Robert Graves and Mary Alice Graves.

His early education was received in the public schools of Chicago, Ill., where he graduated from the John Marshall High School. In 1905 he was graduated from Oberlin College. He received the Ph.B. from the University of Chicago in 1908. In 1912 he was awarded the M.S. by the State College of Washington. Further graduate study at the University of Southern California, the University of California and the University of Chicago led to the Ph.D. from the University of Chicago, 1931.

His interests were broad and enhanced by visits to England, Scotland, France, Belgium, Holland, Germany, Switzerland, Austria and Italy. In connection with his travels he studied the development of gardens at Kew, Pous, Berlin, Dresden and Amsterdam.

During the first World War he served as instructor in field artillery at Camp Taylor.

His more serious research interests were in the field of botany, where he made contributions on the ecological relationships of *Pinus sabiniana*. At the time of his demise he was actively participating in a study of fertilization in *Araucaria Bidwillii*.

In addition to serving as supervisor of agriculture in the public schools of Los Angeles, Professor Graves served as instructor in the State College of Washington, the University of Southern California and the University of California.

From September, 1919, until his demise, he served continuously as head of the department of agriculture and biology at Fresno State College. During this period of service he was successful in developing the largest department in that institution. He played an active role in improving agricultural and science education in the San Joaquin Valley during the past twenty years, and was greatly interested in the development of science education throughout California. Since 1932 he contributed generously to the planning and preparation of the "Science Guide for Elementary Schools," a progressive enterprise of the California State Department of Education.

For the past sixteen years, Dr. Graves assumed the chief responsibility for the development of experimental gardens at the Fresno State College. As a token of appreciation, the administration of the college has taken steps to designate this enterprise in his memory as the George West Graves Botanical Gardens.

His general understanding of college problems had a tremendous influence in the development of the Fresno State College. His warm, friendly thoughts were generously shared with both students and colleagues, who quickly learned to seek his counsel. Always dealing with principles, never indulging in personalities, he will be remembered by those who were privileged to know him as a splendid teacher, a warm counselor and a sincere friend.

LEO F. HADSALL

FRESNO STATE COLLEGE

RECENT DEATHS

DR. LOUIS J. RETTGER, of Bedford Village, N. Y., from 1891 to 1937 professor of physiology and dean of Indiana State Teachers College and from 1931 to 1935 vice-president, died on December 1 at the age of seventy-six years.

CHARLES W. MANN, since 1922 senior pomologist at the Bureau of Plant Industry of the U. S. Department of Agriculture, died on December 3 at the age of sixtyfour years. Mr. Mann was soil scientist with the Bureau of Soils from 1906 to 1910, assistant pomologist of the Bureau of Plant Industry, 1910–1917 and pomologist from 1919–1922, when he was appointed senior pomologist. He was a fellow of the American Association for the Advancement of Science.

DR. WILLIAM SALANT, from 1908 to 1918 chief pharmacologist of the Bureau of Chemistry of the U. S. Department of Agriculture, died on December 10 at the age of seventy-three years. Dr. Salant became acting professor of physiological chemistry at the University of Wisconsin after leaving the Department of Agriculture, and from 1920 to 1929 was professor of physiology and pharmacology at the School of Medicine of the University of Georgia. He then became until his retirement in 1932 research pharmacologist of the biological laboratory at Cold Spring Harbor, L. I., N. Y.

DR. HAROLD STANARD ADAMS, vice-president and