OBITUARIES

George W. Gardiner

George W. Gardiner, former head of the Department of Physics and founder of the Physical Sciences Laboratory at New Mexico State University, died on December 15 at his home in New York City.

Dr. Gardiner, who lived in New York after his retirement in 1961, first joined the New Mexico State faculty in 1984. He became head of the Physics Department in 1935. The Physical Sciences Laboratory, which he directed for four years, was established in 1946.

He was born in Charlottetown, Prince Edward Island, 67 years ago. He received a bachelor's degree from Acadia University in Nova Scotia in 1923, pursued further study at Cambridge University and Yale University, and received his PhD from Yale in 1929. He became a research associate in the same year at the National Bureau of Standards, where he remained until joining the faculty at New Mexico State as assistant professor of engineering physics. His research was primarily in the areas of photoelectricity, electrical properties, hydrocarbons, and telemetric instrumentation.

Dr. Gardiner was a member of the American Physical Society and the American Association of Physics Teachers.

Paul B. Flanders

Paul B. Flanders, for many years a physicist at the Bell Telephone Laboratories until his retirement in 1960, died on January 5 of this year at his home in Wantagh, L. L. N. Y.

Born in Concord, N. H., he graduated from Harvard University in 1920 with an AB degree. In 1922 he received a BS degree, also from Harvard, and in the same year joined the Engineering Department of the Western Electric Company. The Department was incorporated as the Bell Telephone Laboratories in 1925 and for the next thirty-five years he served as a member of BTL's technical staff.

After working on network theory early in his career, Mr. Flanders was

mainly concerned with research on acoustical devices, including recording systems and telephone equipment. During World War II, he worked on acoustical research involving problems in underseas warfare.

Mr. Flanders was a founding member and a fellow of the Acoustical Society of America, and he was a member of the American Physical Society.

Charles O. Williamson

Charles Oliver Williamson, an acoustical physicist and emeritus associate professor of physics at Carnegie Institute of Technology for many years, died on January 19, 1964 at the age of 73. In semiretirement after forty years of teaching, he was actively engaged in part-time teaching at Carnegie Tech and in consulting work on the acoustics of auditoriums. In 1960-61, at the request of the Olin-Mathieson Corporation, he went to Monroe, La., to design and teach a stepped-up physics course to a better-than-average class of high-school students.

He was born in London, England, attended St. Paul's Cathedral School, and came to this country with his family at the age of sixteen. He received a BA degree from Lafayette College in 1912 and an MS from the University of Pittsburgh in 1934. He also studied at McGill University. He became a United States citizen, and during World War I he served as a military band leader. At the close of the war, he joined the teaching staff at Carnegie Tech. Over the years, he designed and taught courses in general physics, electrical measurements, and electronics, as well as special courses for architects, printers, and graduate music students. With his classical background and interest in music and literature, Professor Williamson contributed much in expanding the horizons of his students beyond the technical aspects of their course work.

Professor Williamson served as a consultant to several government agencies, including the Atomic Energy Commission. He was a charter member of the Pittsburgh Physical Society, served in the various offices of the Physics Teachers Association of Western Pennsylvania and Environs (now the Western Pennsylvania Section of AAPT), and was a member of the Acoustical Society of America, the American Association of Physics Teachers, the American Association of University Professors, Sigma Xi and Pi Kappa Alpha.

J. S. V. Allen

John Stanley V. Allen, head of the Department of Physics at Bethany College, Bethany, W. Va., died of a heart attack on December 3, 1964, in Bethany, He was 58 years of age.

He was born in Painesville, Ohio, and was educated at Ohio State University, where he received his PhD degree in physics in 1934. He had taught at Bethany College since 1933, and he became head of the Physics Department there in 1942. During World War II he taught courses in electronics at Weirton Steel Company and served as chairman of the Physics and Mathematics Departments of the Navy V-12 program at Bethany.

In research conducted at Ohio State University while on sabbatical leave in 1941. Professor Allen was a codiscoverer of titanium-45. He did research on diodes for space probes during another sabbatical leave at the University of Pittsburgh during 1963. He held three National Science Foundation fellowship awards, studying at West Virginia University, Georgetown University, and Pennsylvania State University, and he was a senior physicist at the radio-telescope site at the University of Michigan in the summer of 1960. Professor Allen served as a research engineer for several summers in the General Electric Laboratories in Cleveland and Schenectady, and he also studied at the University of Chicago and at the Massachusetts Institute of Technology. At the time of his death, Professor Allen was engaged in a research project sponsored by the NSF related to space probes.

He was a member of the American Association of Physics Teachers, Sigma Xi, and Tau Beta Pi.