G. EDWIN BURKS

1901–1994

BY PHILLIP S. MYERS

GEORGE EDWIN (ED) BURKS, former vice-president of research and engineering at Caterpillar, Inc., died March 16, 1994, at Methodist Medical Center in Peoria, Illinois. He was a member of the Westminster Presbyterian Church, where memorial services were held. His body was donated to medical science. He was survived by his wife, Chloe Bernice Burks, and several nieces and nephews. He was preceded in death by four brothers and one sister.

Ed was born on April 10, 1901, in Phillipsburg, Montana, to Frederick Carlyle and Elisabeth Fulton Gabell Burks. He attended grade school and his first two years of high school in Phillipsburg, Montana. He finished his last two years of high school in San Francisco. Circumstances dictated that he obtain his formal education beyond high school primarily at night—he went to night school for seven years. He took extension courses in engineering at the University of California. In 1972 he was awarded an honorary doctoral degree from Bradley University in Peoria, Illinois. In 1961 he was given honorary membership in Pi Tau Sigma and in 1964 an honorary membership in Tau Beta Pi. In addition to his engineering and personal skills, he was a talented writer, producing many technical and nontechnical papers.

In 1920 Ed started his engineering career as a draftsman for the Western Telegraph Company in San Francisco. In 1923 he became a designer for the Schmeizer Manufacturing Company.
in Davis, California, where he worked until 1928, when he became a designer and field engineer for the Western Harvester Company in Stockton, California.

In 1929 he started his thirty-eight-year career with Caterpillar, Inc., as a member of their engineering staff in the San Leandro plant. In 1930, by marrying Chloe Bernice Schweitzer in Davis, California, he started another career that was to last until his death.

At San Leandro, Ed advanced from chief draftsman to supervisor of experimental and research engineering. In 1938 he was offered, and accepted, the position of assistant chief engineer, engine design, at Caterpillar headquarters in Peoria, Illinois. In 1942 he was promoted to chief engineer. In 1954 he was promoted to director of engineering and research and in 1955 to vice-president of engineering and research, a position he held until his retirement in 1967. During the twenty-five years that he was the predominant factor in Caterpillar engineering, the company experienced a tenfold growth in sales and a twentyfold growth in earnings. The output of heavy-duty diesel engines used in earthmoving equipment increased by four to fivefold through a continuing program of development of each component, continuing redesign, and laboratory research. Ed led the effort with a number of innovative patents. After his retirement he continued as a consultant to Caterpillar, Inc. Ed has contributed, perhaps more than anyone else, to Caterpillar's international stature and to U.S. leadership in the field of earthmoving machinery. This technology has been of great importance both in peace and in war.

Ed also found time to serve his profession through his publications and his service in professional engineering organizations. He was a fellow of the Society of Automotive Engineers and in 1966 was elected as national president. He was a member of the American Society of Mechanical Engineers, American Society of Metals, American Ordnance Association, and Corps of Engineers Advisory Council. In 1978 he was elected to membership in the National Academy of Engineering.

Ed also used his engineering background and good judgment to serve his country. In 1960 he served on the Advisory Commit

Ed also contributed time and resources to society. He served on the board of trustees of Bradley University from 1956 until 1988 and again from 1989 to 1994. He was vice-chairman of the board in 1979. In 1990 he and his wife received the Bradley University President's Award. The Burks Design Center in Jobst Hall at Bradley University was named in his honor in 1993. He served as adjunct professor of senior engineering students. The G.E. Burks Religious Studies Scholarship was established in his honor. His philanthropic gifts to Bradley University total more than $330,000 from 1971 through 1994. Other philanthropic interests included WCBU public radio, the Bradley University Chiefs Club, Boy Scouts of America, and Westminster Presbyterian Church.