It is with a deep sense of loss that I write about my friend and colleague, **Harvey Fletcher**, eminent scientist and engineer, who died on 1981 July 23 at the age of 96. A trailblazing investigator of the nature of speech and hearing, Dr. Fletcher was known for his significant contributions in music, acoustics, electrical engineering, speech, atomic physics, motion pictures, and education.

Born in 1884 in Provo, Utah, Fletcher spent his youth enjoying camping and fishing trips into the mountains with his family. He later described these close family experiences as "the highlights of my boyhood." As a 14-year-old he once announced that he would "rather be good than famous," a statement which reflects his early commitment to morality. The record of his personal and professional life testifies to the fact that he managed to succeed in both pursuits.

Fletcher studied at Brigham Young University, graduating in 1907. As a graduate student at the University of Chicago, he participated in an experiment with Professor Robert A. Millikan to isolate a single electron and measure its charge. Instead of using tiny atomized water droplets to determine the charge as Millikan attempted, Fletcher's approach was based on the use of atomized oil. The importance of this achievement was recognized when Millikan received the Nobel Prize. This fundamental research contributed to the field of electronics, which led to the development of the radio and television industry. Fletcher was graduated summa cum laude with a Ph.D. from the university in 1911.

In the summer of 1911 Flectcher returned to Brigham Young University as chairman of the physics department. After teaching for five years he accepted an invitation from Frank Jewett, head of research at Western Electric in New York City,

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to join the company doing research in sound. While there his genius was recognized and he was appointed director of physical research when the company became Bell Telephone Laboratories. During his career at Bell he published 51 papers and two books, *Speech and Hearing*, and *Speech and Hearing in Communication*, both considered major treatises on the subject. He was responsible for the development of early Western Electric Hearing Aids. He, in fact, made a hearing aid for Thomas A. Edison, who was one of Fletcher's acquaintances.

Fletcher supervised the development of the clinical 2A Audiometer and of a survey method of testing hearing, which was widely accepted in schools all over the country. In 1933 he and his group of scientists and assistants were the first to demonstrate stereophonic sound transmission and stereophonic recording (1939). He worked with conductor Leopold Stokowski in 1939 in a concert given at Carnegie Hall featuring stereophonic recording. The audience heard the Salt Lake City Tabernacle Choir singing in three dimensions.

A truly outstanding record of achievement and honors belongs to Fletcher. He was a co-founder of the Acoustical Society of America and became its first president. In appreciation of his leadership, he was made an honorary member—an honor at that time shared only with Thomas Edison. A president of the American Society for the Hard of Hearing, he was also elected to honorary membership in the American Otological Society, the Audio Engineering Society and the American Speech and Hearing Society. In 1924 he was awarded the Louis E. Levy Medal for physical measurements of audition by the Franklin Institute. President of the American Physical Society, he also received the Progress Medal Award from the American Academy of Motion Pictures in Hollywoood. U.S. President Harry Truman honored him with a Certificate of Merit in 1948. For his distinguished work in the field, Fletcher received Gold Medals from the Audio Engineering Society, the Acoustical Society of America, and the Society of Motion Picture and Television Engineers.

Fletcher had more than 20 patents in his name and wrote numerous papers published in professional journals dating from 1911 to 1965. He received honorary doctorate degrees from six universities. Yet, all these are only a small sampling of the many achievements of this remarkable man.

The father of five sons and one daughter, Fletcher was both a devoted husband and father, as well as an active member of his church, the Latter-Day Saints, where he held high office. His guiding hand was responsible for generating a spirit of enthusiasm, integrity and spirituality in the lives of countless students and scientists who have felt the influence of his life and work.

Mark Gardner