

Obituary of the Society's First President: C. Francis Jenkins (1867–1934)

With the death of C. Francis Jenkins, June 6, 1934, our Society lost not only its founder, but also one of the inventors of the motion picture projector, around which the entire industry has been built up. Those of us who had the privilege of knowing Mr. Jenkins intimately knew him as a man of great imagination and boundless energy, evidenced by something over four hundred patents in his own name, both here and abroad.

On various occasions he had to leave his beloved laboratory and devote his attention to raising sufficient funds to carry on his prime work — research and invention. His indomitable will and faith can not be better indicated than by quoting a statement that he often made and evidently thoroughly believed, "If a thing is very difficult it is as good as accomplished; if it is impossible it will take a little time."

In his laboratory he surrounded himself with young men and young women because, as he put it, "If Jenkins tells them it can be done, they believe it." Once Mr. Jenkins hired a brilliant scientist from one of the great research laboratories of the country. The scientist did not last long because, as Jenkins said, "He spent too much time proving why it wouldn't work instead of figuring out how to do it."

Mr. Jenkins was a true and loyal friend; a hard fighter, loved by those who knew him well, and respected by even his business enemies, of whom he had a few — invariably the price of success.

In his home life I have never seen a more beautiful relationship between man and wife. Mrs. Jenkins was his sweetheart to the very end, and he treated her, both in private and in public, as a youthful lover. They had no children but were continually doing things for their nieces and nephews and the children of their friends. Jenkins was always trying to help young people get a start financially.



C. Francis Jenkins

Just before the depression Jenkins sold his business. His manner of disposing of the tidy sum he received was very characteristic of the man. First he created a trust fund to take care of Mrs. Jenkins for the rest of her life. The remainder of the money he and Mrs. Jenkins gave away outright and unconditionally to poor relatives, friends, and servants whom they had had from time to time.

Like many inventors Jenkins was of a high-strung, nervous temperament. At times when he would get too fidgety and nervous to work, he would leave his laboratory and pilot his private plane up into the great blue reaches of the sky, where he found peace and quietness to rest his nerves. Often his wife, good sport that she was, would go with him on those flights.

About 1930 Mr. Jenkins' health began to fail. His heart made it necessary for him to drop most of his active work at his laboratory. The majority of his time thereafter was spent quietly, though restlessly, at his home in Washington.

Probably realizing that his years were numbered, he wrote his autobiography and published it in 1931 as a book entitled *The Boyhood of an Inventor*, from which the following data are drawn largely.

A red-headed boy, C. Francis Jenkins was born of Welsh-French parents — Quakers — near Dayton, Ohio, in 1867. When he was about two years of age his parents moved to a farm near Richmond, Indiana. His early boyhood was spent in the log cabin home on that farm. Like many other farm boys Jenkins learned various things by experience and hard knocks. He early began to show great interest in mechanical things. Hours were spent turning the hand-wheel of his mother's sewing machine and trying to puzzle out the mechanics of the sewing. Other lessons were learned from the spinning-wheel, the flax-break, the wool-carder, the butter-churn, the log-lever cheese press, the winnowing mill, and such early mechanical aids that have long since been superseded but that nevertheless utilized many of the principles of mechanics of modern machinery.

Probably his earliest invention was a bean-shelling machine which he made as a boy. Following that, he invented a jack to lift wagon wheels for greasing purposes. Some of them he painted bright colors, and in selling them he learned one important business principle, i.e., that appearance goes a long way in selling an article.

Jenkins' early schooling was at the little country school to which he walked three miles from his house and three miles back again. This was followed by high school and Earlham College. Later in life his College gave him the honorary degree of Doctor of Science (1929). While at school the school board gave him a Leyden jar and a static machine, because nobody else knew how to work them. That was probably the start of his interest in electricity, which was to play so great a part in his success in later life.

Jenkins also learned that hydrogen gas made from sulphuric acid and zinc would fill paper bags and cause them to rise like balloons. Perhaps those experiments implanted in his mind the seed of a desire to fly. After he was fifty years old he bought his first aeroplane and received his pilot's license.

Parties in his youth usually furnished their own entertainment. The games played were those of mental skill, cleverness, quickness; tricks such as trying to blow a card from off a spool by blowing through the hole — involving a principle of aerodynamics; turning a tumbler of water upside-down on a card, and the like — far different from the hired entertainment furnished the present-day youth.

Jenkins' father was progressive, although not inventive nor particularly mechanical. He used machinery of the latest type on his farm, and it was Jenkins' particular job to keep all the mechanical gadgets operating and in repair. He proved so adept at the job that he built up quite a reputation in the neighborhood as a clever mechanic. The day he saw his first locomotive he ran off from his family, who were meeting friends at the rear of the train, and spent his time studying the engine. Later he found out enough about its operation so that he borrowed a locomotive and took his girl for a ride.

When he was a young man his desire to "go places and do things" took him to the Pacific Coast. There he worked in lumber camps, on a ranch, and down in Mexico in a mine. His first job in the lumber camp was riding logs. The first day was a series of spills into the water, but his persistence kept him at it all day long, even though soaking wet, and he soon learned the trick. His indomitable will and persistence were characteristics that contributed greatly toward his success.

As a result of a Civil Service examination he received an appointment as a clerk to Sumner I. Kimball, the founder of our life-saving service, which is now the U. S. Coast Guard. This position brought him to Washington, D.C., where a few years later he resigned to start on his real life work, inventing.

It was at Washington that he met and married Grace Love, of whom he writes in his book, "Perhaps the turning point came when he married that wonderful girl, 'Miss Grace,' who had endeared herself to everyone by her sympathetic understanding and unselfishness, winning the hearts and confidences of all who came in contact with her. It is to her kindly help and business wisdom, rather than to any personal 'genius,' that this inventor attributes such success as has attended his efforts."

Jenkins built the first horseless carriage in Washington — a small steam car — and went broke trying to promote it. Later he developed the self-starter for automobiles, which proved to be a financial success.

Photography and the projection of motion pictures were really his life's great work. In addition to his work on the development of the motion picture projector, he made many contributions to the motion picture art. Notable among them are the first fire-proof projector — really the foundation of the home and school movies of today; a high-speed camera for showing in slow motion such things as the flight of a projectile, Bobby Jones' golf drive, etc. His Chronoteine camera takes 3200 separate exposures in one second; the film moves through it so rapidly that 400 feet of film can be shot up into the air before the first end falls to the ground.

Jenkins early recognized the need of standardization in the motion picture industry. The need was stimulated by the World War, and to meet the demand Jenkins founded the Society of Motion Picture Engineers in 1916 and became its first president. That organization is today international in scope. It is the outstanding organization in motion picture engineering, and its standards have attained worldwide recognition. Its *Transactions* and *Journal* form the greatest technical library pertaining to motion pictures in existence.

In 1921, Jenkins set up his own research laboratory at Washington, D.C. It was in this laboratory that Jenkins developed the prismatic ring, a device for producing a smoothly oscillating beam out of a continuous beam of light. As time went on, Jenkins became interested in radio. By conducting tests with his own aeroplane he discovered that a radio "shadow" was cast behind a metal plane and that an antenna flown in that area could be used for two-way telephone conversation without interference from engine ignition.

Sending photographs by radio, and later by television, interested Jenkins greatly. I shall never forget the thrill of standing in his laboratory and having a photograph of my daughter transmitted over the regular telephone line to the U. S. Naval broadcasting station at Anascostia, Md. There it was broadcast by radio, picked up in the Jenkins laboratory, and reproduced at the side



Plaque on building where Jenkins jewelry store stood, on Main Street in Richmond, Ind. This store was owned and operated by the Jenkins family from the turn of the century until the 1970s. (Photo courtesy of Lincoln Endelman.)

of the sending device. Jenkins established his own station for broadcasting motion pictures by radio. Nightly entertainment of that sort was transmitted from his station, W3XX. Relatively simple and inexpensive receivers had been developed by Jenkins and sold practically at cost to thousands of radio fans all over the country.

A more complicated machine for receiving weather bureau maps by radio was developed and installed on many of the Government ships. Jenkins had the fullest cooperation of the U. S. Bureau of Standards, the Army, and particularly the Navy, in testing out his many inventions, some of which were purchased by the Government and put into regular service.

As often happens to a man who works so intensively, his health began to fail. As a result, in 1930 he sold out his principal business, the Jenkins Television Corporation. A failing heart kept him more and more at home until his death in 1934. With his passing went one of the ten men in the United States having over three hundred patents in their own name. He was a man of great vision, with the courage of his convictions; a man of indomitable will and boundless energy; a man having great love for his fellow men, a fine Christian character respected by all who knew him and loved by those who had the opportunity of being associated with him. Perhaps the greatest monument to him is the continued success of the Society he founded and for which he worked so hard in its early struggle for recognition.

— L. C. Porter