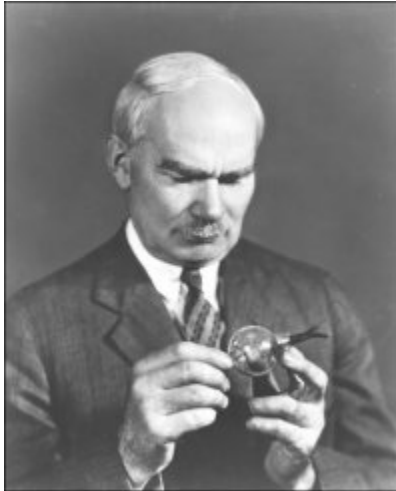


This Month's Stiff: Dr. Lee DeForest

Entered Mortal coil: 26 August 1873

Assumed Room Temperature: 30 June 1961



Dr. Lee Deforest

Father of Radio, Grandfather of Television

“How does this blamed thingy work?”

Okay kids, stop laughing! If you're not familiar with the history surrounding Dr. Deforest, then rest assured that the monikers below his mugshot were not coined by me. Lee used these very terms to describe himself in his later years as he struggled to remain in the limelight and create some sort of lasting legacy. It was only by the slimmest of margins that the above photograph, or one similar to it, does not bear a serial number on the bottom denoting the booking of someone freshly arrested. To be honest, I had a difficult time remaining objective while researching this month's Dude, as Major Armstrong is one of my personal heroes. So let's quit fooling ourselves and drop any pretense of being impartial and fair!

Lee's colorful life makes for interesting reading. From an early age, Deforest was determined to be successful at any cost, and his dream was to amass a large fortune. In the course of his life he made several fortunes. Lee lost several as well; all due to poor business sense, unwise choices for partners, and impressive legal fees accrued from defending himself from patent infringement and suing others. When Lee died in 1961, he only had \$1,250 in his bank account. Here's a few of the high and low points of Lee's life:

The Spade Detector:

In 1903, Deforest learned of Reginald Fessenden's new electrolytic detector for use in radio receivers during a casual visit to the fellow inventor's laboratory. Lee copied Fessenden's circuit, modified it slightly, and renamed it the Spade Detector. Fessenden discovered this infringement, sued Deforest, and won. Fessenden was awarded damages.

Invention of the Vacuum Tube Triode:

DeForest modified the diode detector tube in 1906 by adding a third element, which was termed the grid. Amplification of signals many times was now possible. However, the triode tube, or "Audion" as he called it, did not work very well. Additionally, no one understood how it worked, especially Lee. It took the genius of Armstrong to unlock the power of this new device via the principal of the feedback circuit. Lee resented the younger inventor, and proceeded to sue Armstrong over this perceived challenge. What followed was perhaps the longest patent battle in history, from 1914 to 1934, with DeForest eventually winning the rights to regeneration. While on the stand, DeForest could not describe how the circuit worked in coherent terms. Despite the legal outcome, the scientific community did not recognize the ruling of the Supreme Court, as they believed DeForest had stolen the invention from its rightful owner. After all was said and done, the invention of the vacuum tube triode is considered to be one of the fundamental inventions making modern radio communications possible.

Accused in 1912:

DeForest and his partners Smith, Burlingame, and lawyer Samuel Darby, were accused of four counts of mail fraud and other wrongdoings by stockholders in their management of the Radio Telegraph and Telephone Company. Perspective stockholders were induced to buy into the new company via demonstrations of radio communications with Paris, France. It was later learned that the demonstrations were conducted from a hidden transmitter only blocks away. Smith and Burlingame were found guilty. Upon hearing of his acquittal on January 1, 1914, right after New Year's, DeForest collapsed in his lawyer's arms. During his life, DeForest started well over 30 companies, and helped drive each into bankruptcy.

Phonofilm:

DeForest dabbled in movie technology and came up with a method of recording sound on motion picture film in 1920. The audio information was recorded on a vertical strip on the edge. Sound was reproduced by directing a light beam through the strip, where it was detected by a photocell. The variations in the light's intensity were converted to sound energy, and amplified via the usual methods. This technology is still in use today in various forms. Lee received an honorary Oscar for his invention in 1959.

Four Marriages:

Good ole' Lee really had a way with the ladies! His first wife was Lucille Sheardown, whom he married in 1906, and newspapers reported that the inventor had won her hand by tapping out love messages to her in Morse Code. The marriage was never consummated, and the couple divorced the same year. In 1907, he married Nora Blatch, who was probably every bit as smart as Lee. DeForest refused to accept her as a partner in his research and business dealings, and she subsequently divorced him after bearing a child. In 1912, Lee wed pretty opera singer Mary Mayo, and stayed with her for 15 years, despite her being an alcoholic. They had two children together, but one died at birth. Finally, DeForest married 21 year old actress Marie Masquini in 1930. Marie stayed with the crotchety old inventor until his death. She apparently was the love of his life and a good woman, tending to Lee tenderly in his final days.

DeForest thought of himself as the *Father of Radio*, and wrote an autobiography under the same moniker in 1949. As an experiment, he had a letter mailed to Hollywood, California, where he resided, with only the words "Father of Radio" on the envelope. The letter was returned to the sender with "addressee unknown" stamped on it. During an episode of "This is Your Life", Lee was also hailed as the "Grandfather of Television". Lee also tried unsuccessfully to convince Marie to write a book about him: the prospective title would have been "*I Married a Genius*". Talk about gall!

Deforest's life story is replete with tales of controversy, envy, avarice, brilliance, culture, and romance. The reader is encouraged to research further. I apologize if this particular essay ran a little on the long side.

References and Tidbits:

Empire of the Air: The Men Who Made Radio, Tom Lewis

The Complete Lee Deforest Web Page. URL <http://leedeforest.org>

Biography of Deforest, PBS. URL <http://www.pbs.org/transistor/album1/addlbios/deforest.html>

For a bit of humor, see *Saturday Night Live's Calvin Deforest's webpage* (Lee's great nephew), at <http://www.unproductions.com/calvert.htm>

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Originally Published: April 5, 2004