

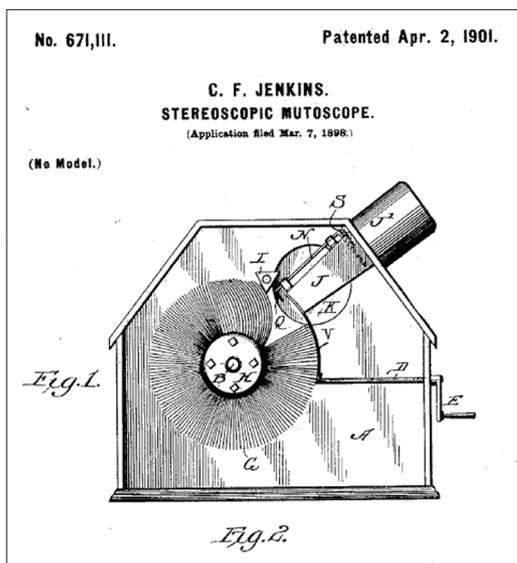
original Mutoscope reels—survive to the present day.

From 2D to 3D?

During the heyday of the Kinetoscope and Mutoscope, another visual device was continuing its own round of popularity: the stereoscope, which had been invented and improved by several people between about 1830 and 1860. The most famous design, sometimes mistakenly called the stereopticon, was the Holmes Stereoscope, invented by the physician and poet Oliver Wendell Holmes. It was simple, elegant and inexpensively made—the costliest part being a thick main lens that was sawn in half, with each half used “backwards” with the thin edges facing each other. This not only gave comfortable viewing but also provided the needed prismatic effect to coalesce the two images, one for each eye, into a 3D view.

Dickson must have seen the similarity of his own lens-equipped Mutoscope and the stereoscope. I wondered whether he had thought of combining the two devices to make a viewer for 3D flip-book motion pictures. All he would need to do would be to substitute the sawn and re-assembled lens of the stereoscope for the Mutoscope’s single viewing lens and produce a series of flipbook cards carrying the two stereo images.

My initial search for a Stereomutoscope, or Mutostereopticon, or some other variation on possible names for such a device turned up nothing—well, almost nothing. I did find a number of inventions that provided viewers with a succession of 3D stereo images—but of unrelated stills rather than a motion picture. Yet, on further investigation, it turned out that several pioneers at



An early patent diagram of a “Stereoscopic Mutoscope” from the inventor Charles Francis Jenkins. U.S. Patent 671,111

The man responsible for the earliest sound movie likely also envisioned the first 3D movies.

the beginning of the 20th century did have the idea of creating 3D motion pictures in a stereoscope–Mutoscope combination.

Numerous patents, no devices

The 3D expert Ray Zone, in *Stereoscopic Cinema and the Origins of 3-D Film, 1838-1952*, notes that there were numerous efforts to create very short 3D movies during the 19th century, but none that led to a sustained film. Zone also says, though, that Dickson himself patented a stereomutoscope in Great Britain in 1899 and received U.S. patent for the device in 1903. Other such devices were patented in 1900 by Frank Muniot and Louis Garcin of New York City and in 1901

by Charles Francis Jenkins of Atlanta, Georgia. Zone himself owned a stereomutoscope card from 1908, made by the American Mutoscope and Biograph Company—Dickson and Casler’s firm.

Despite all of these patents, I found no evidence in entertainment periodicals of the time that anyone had ever put such a device on public display. Why not is a mystery. American Mutoscope was tooled up to produce Mutoscopes in bulk; making a stereomutoscope presumably wouldn’t have

required many additional resources. Perhaps, though, it was still too expensive, and interest too low, to justify the extra expenditure.

Dickson seems to have been the first to imagine combining the Mutoscope with the stereoscope; the earliest mention of such a device appears in one of his 1880 notebooks. Interestingly, he also seems to have been the first to combine sound with motion pictures. An 1889 film of his (now lost) showed him welcoming Edison back from the Paris Exposition, the words recorded on a cylinder. Some five years later he made the “Dickson Experimental Sound Film,” which does still exist. It shows a man playing a violin into the huge bell of a phonographic recorder while two other men dance. The accompanying cylinder has been located and the sound synchronized with the image, creating the oldest extant sound movie.

Thus the man responsible for the earliest sound movie likely also envisioned the first 3D movies—yet his name is largely unknown to the general public. [OPN](#)

Stephen R. Wilk (swilk@comcast.net) is with Xenon Corp., Wilmington, MA, USA.