

Technical Innovations of the 19th Century Leading to Motion Pictures

Persistence of vision first exploited through stroboscopic toys such as the **Zootrope** from 1820-1835.

Photography evolves from primitive Daguerreotypes to rapid shutter exposures: 1839-1872.

Eadweard Muybridge investigates sequential motion through photographic experiments: 1872-1877.

Celluloid roll film developed by George Eastman: 1884-1888.

Edison laboratories, with major contributions from Edison's assistant **William Dickson**, invented the **kinetoscope**, a self-contained machine allowing one viewer to see a short loop of film. The first American film, *Fred Ott's Sneeze*, was produced by Edison for the kinetoscope in 1891. The first kinetoscope parlor opened in New York City in 1894.

Thomas Armat demonstrated the first projector to throw moving images onto a screen in 1895, marketed in agreement with Edison, called the **Vitascope**. The **Lumiere brothers** in France used the first portable movie camera in 1895 and established 35mm as the standard film width. They also pioneered the documentary film.

The first commercial American film showing using the Vitascope projector opened on April 23, 1896. The first kiss was shown on screen also in 1896.

Beginnings of Film Narrative

The earliest films simply capitalized on the novelty of seeing images in motion, such as waves at the beach, approaching locomotives, or stylized historical re-enactments, and were part of **vaudeville** bills.

Many early attempts at adapting literary works, historical events, or serious drama to film simply reproduced stage conventions and were shot statically.

Frenchman **Georges Melies** was the first filmmaker to realize the potential of film as a vehicle for pure imagination. His *Trip to the Moon* (1902) was the first film to use both animation and **special effects** to develop its plot.

Edwin S. Porter shot the first successful American film narrative, *The Great Train Robbery* (1903). Porter, who worked for the Edison Company, pioneered film narrative by using both indoor and outdoor settings, using cuts to move through time and space, and employing action sequences that introduced audiences to the visceral excitement of violent action.