

## II. The Age of Invention

In the Age of Invention, which is roughly between 1875 and 1895, animation benefits from the Industrial Revolution. This is the time of inventing machinery and technological processes that *trickle down\** from the laboratories of scientists to the drawing rooms of the elite and on to benefit the middle and working classes. Geniuses like Thomas Edison, George Eastman and Louis Lumière invent machinery and systems that were specifically created to produce a moving image. At this point, animation is still considered a *silly\* parlour trick\**.

Thomas Edison didn't think there was any utility to "moving pictures" at all, because why would anyone want to sit in a room and watch a story?



*Trickle down\** = être réinjecté dans l'économie

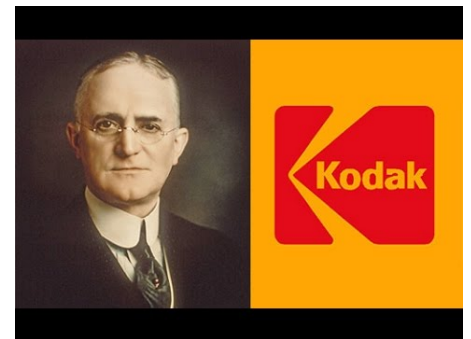
*Silly\** = foolish      *parlour trick\** = une blague de salon

In 1887, Thomas Edison transformed his research work into motion pictures.



H.W. Godwin invents nitrate celluloid film.

In 1889, George Eastman began the manufacture of photographic filmstrips using a nitro cellulose base.



Nitro cellulose is flexible

and transparent, but highly flammable. It degrades and one of the chemicals that come out of this degradation is nitroglycerin. In the 1930s, many old films of the period spontaneously combusted, causing huge fires. As a safety precaution, many old films were destroyed and because there was no value in old films and no way to reproduce them in other media, this means that films of this era are very, very rare.

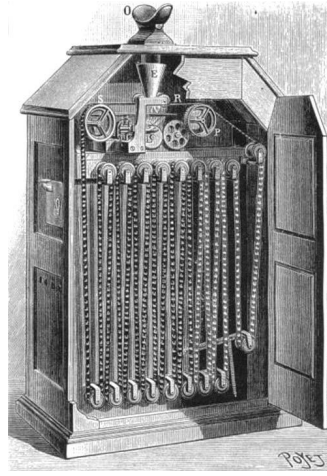


In 1892, Emile Reynaud combined his earlier invention of the praxinoscope with a projector and opened the Theatre Optique in Musée Grévin, Paris. It displays an animation of images painted on long strips\* of celluloid.

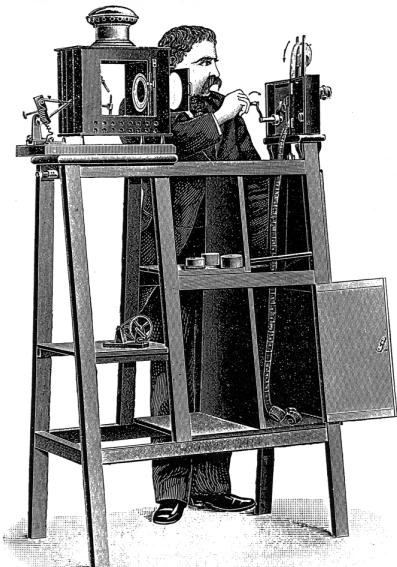
*A strip\** = une bande

# Thomas Edison, Kinetoscope

- 1893, Thomas Edison invents the Kinetoscope a device which projected a 50ft length of film in approximately 13 seconds.
- The Kinetoscope was a machine that allowed one viewer at a time to watch a movie through a viewfinder.



# Kinetoscope



*Le cinématographe Lumière: projection.*

In 1894, Louise Lumière invents the Cinématographe, which projects an image onto a wall.

The Cinématographe system used a claw (= fourche) movement and perforated film that was synced (= synchronized) to an intermittent shutter (= obturateur) movement. These mechanics were used, essentially unchanged, up until the digital era.

# The Record of a Sneeze

- 1894, Edison copyrights his first motion picture "The Record of a Sneeze". He opens his Kinetoscope Parlour, in New York City,
- This earliest instance where people pay to go out to watch a movie.
- There was no popcorn.



## YOUR MISSION

1. The second age of ANIMATION is called :
2. It started in \_\_\_\_\_ and lasted for \_\_\_\_\_ years.
3. This period corresponds to the \_\_\_\_\_.
4. What happened during this period?
5. How was ANIMATION regarded at that time?
6. What was invented in 1887?
7. Was it a safe material?
8. Why are films from the 1930's very rare?
9. Make research and find out what a PRAXINOSCOPE is? When was it first invented? Who invented it?
10. What did Thomas Edison invent in 1893? Explain how it worked and what it was used for?
11. The CINEMATOGRAPH, invented in \_\_\_\_\_ by \_\_\_\_\_ was the first machine to allow \_\_\_\_\_.
12. Where was the first place to watch a movie open? When?