



THE LAST FANTASCOPE?

Miguel Herrero Herrero

I believe I have acquired the latest Fantoscope to be identified as such and possibly the oldest known of this type of large magic lantern. The Fantoscope was developed in the 18th century and employed advanced technology for its time. They were mainly used to perform phantasmagoria shows around the end of the 18th century and the beginning of the 19th century, although they were also used for scientific and educational purposes. The Belgian magician, physicist and aeronaut Étienne-Gaspard Robert (1763-1837), better known as Robertson, master of phantasmagoria, was the one who improved the projector and named it a Fantoscope. In 1799 he patented it; I have an original copy of the patent in my collection.



Miguel Herrero Herrero with his Fantoscope

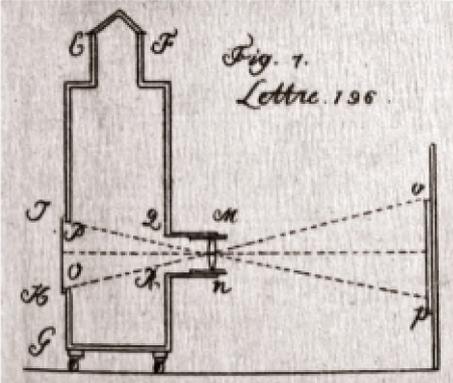


Diagram of Euler's lantern from his letter

When I published *Robertson's Complete Works (Obras Completas de Robertson, Cinestesia, 2021, see TML 28)* I was aware that the eminent French physics professor and aeronaut Jacques Charles (1746-1823) actually developed a precedent around 1780. Later I found that the Swiss physicist and mathematician Leonhard Euler (1707-1783) was the first to describe a magic lantern for the projection of opaque objects, between 1750 and 1751. In 1762, in a letter published in his three-volume work *Letters to a Princess of Germany*, Euler gives a detailed description of projecting opaque bodies. My Fantoscope has the same design as the one described by Euler, which would make it the oldest of those known.



The oil lamps inside the Fantoscope

These large Fantascope, in addition to projecting glass slides with hand-painted colour images and animated with various mechanisms, are also megascopes or episcope – projectors of opaque objects, engravings, busts, articulated figures, white shadows (a form of silhouette), etc. They have a diaphragm or 'cat's eye' associated with the lens, to regulate the intensity of the light and the aperture of the lens. The adjustable lens can focus or defocus the image and the intensity of the light can be regulated using one or more light reflectors. For illumination they had one or more Argand, oil or gasoline lamps – later they also used oxyhydrogen lamps. Some have an autofocus mechanism built into the wheels. Most have a support frame with legs and wheels which may be covered in rubber to reduce noise and/or to be moved along tracks.

I acquired the fantoscope for my collection in 2024 at an American auction held by the Austin Auction Gallery. The lots were magic lanterns, antique cameras and related items from the collection of Sam Westfall of Kansas, Texas. However, the auction house appeared to be unaware of this lantern's relevance as the description for the lot was very brief: "large magic lantern with two lamps."



Images projected by the Fantoscope: (left) talking skull and (right) white shadow (19th century) – note the dark and light sections are correct in contrast to normal shadows

The all-metal fantoscope has two Argand lamps, two reflectors, an adjustable objective lens, a diaphragm or cat's eye in the shape of two doors, and two chimneys. The enormous contraption is surprisingly complete and I have been able to put it into operation projecting phantasmagoria, white shadows, figures, etc., all originals from my own collection. I have also projected my own hand making it appear to catch the viewer!



Images projected by the Fantoscope: (left) a sculpture and (right) Miguel Herrero's hand!

Information about Miguel Herrero Herrero's latest book and film/show project is given on the next page.