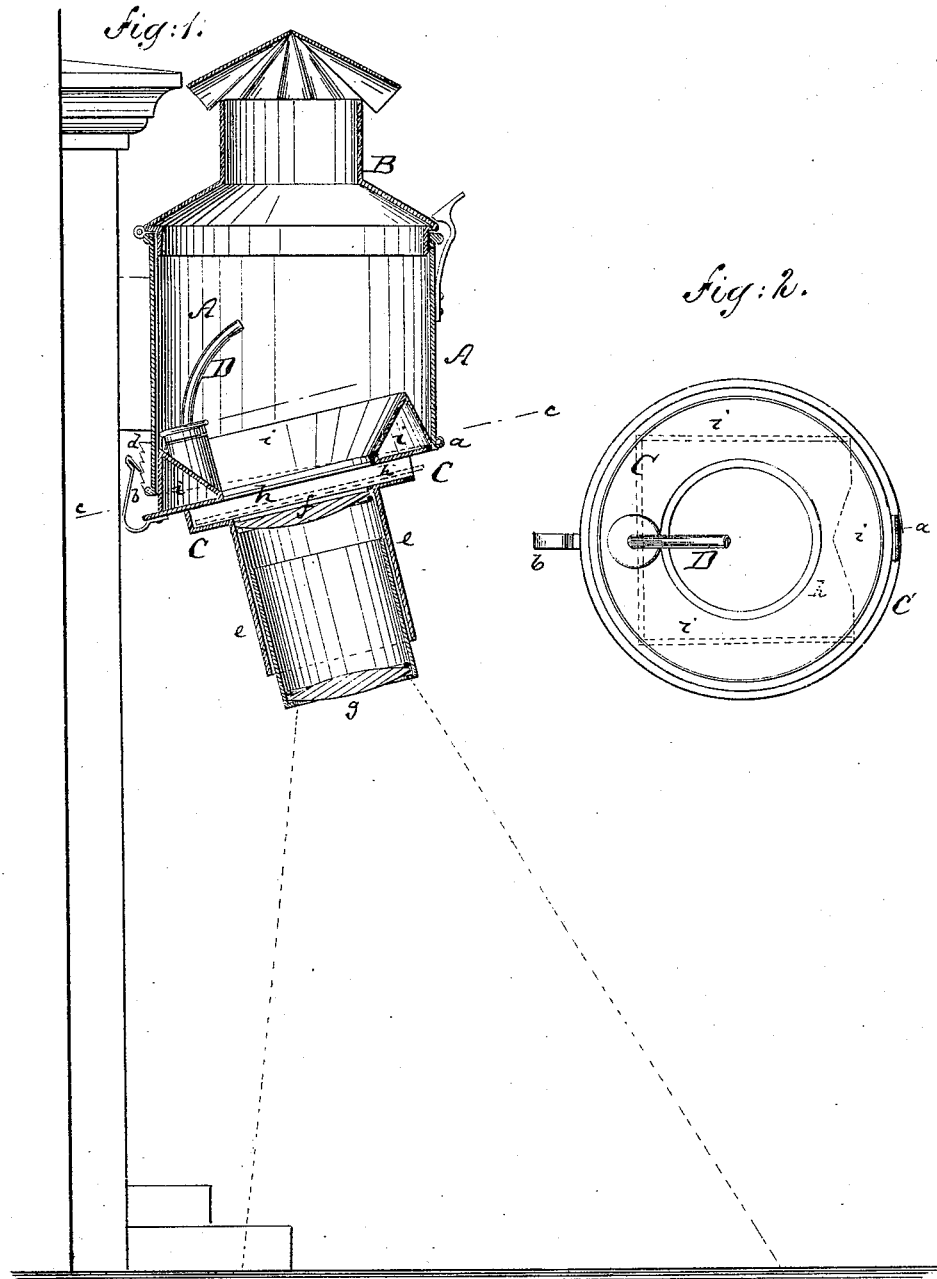


C. A. BOURQUIN & G. T. VAN HEERS.  
MAGIC-LANTERNS.

No. 181,626.

Patented Aug. 29, 1876.



*Witnesses:*  
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# UNITED STATES PATENT OFFICE.

CHARLES ANTOINE BOURQUIN, OF VESOUL, AND GERARD THEODORE VAN HEERS, OF ROUCHAMPS, FRANCE.

## IMPROVEMENT IN MAGIC LANTERNS.

Specification forming part of Letters Patent No. **181,626**, dated August 29, 1876; application filed June 10, 1876.

*To all whom it may concern:*

Be it known that we, CHARLES A. BOURQUIN, of Vesoul, Haute Saône, France, and G. THEODORE VAN HEERS, of Rouchamps, Haute Saône, France, have invented a new and Improved Advertising-Lamp, of which the following is a specification:

Figure 1 is a vertical central section of our improved advertising-lamp. Fig. 2 is a transverse section of the same on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to a new construction of adjustable lamp for producing illuminated advertisements on sidewalks, roadways, paths, or walls of buildings. It consists in applying the lamp-burner to a hinged lens and picture holder, and in thereby rendering the lamp properly adjustable, all as hereinafter more fully described.

A is the body of the lamp, of cylindrical, prismatic, or other form, and made of sheet metal or other material. Its inner surfaces are, preferably, smooth and bright, to constitute reflectors. B is the dome of the lamp, constituting, by preference, also a reflector. This dome should be hinged to the body A, but may be rigidly fastened thereto.

The lamp is, by suitable means, secured to the wall of a building or other support.

C is the lens-holder, hinged at *a* to the lower part of the lamp A, to constitute the bottom of the same. By a catch, *b*, locking into a ratchet, *d*, or by equivalent means, the angle of the lens-holder to the lamp can be regulated at will. The lens-holder C is provided with a downwardly-projecting tubular and, preferably telescopic extension, *e*, which contains two lenses, *f* and *g*, for diffusing and reflecting the rays of light from the lamp. Above the upper lens *f* the holder C forms a chamber, *h*, for the reception of a picture or letter slide, which is to be of ordinary or colored glass, blackened or made opaque, except at the places occupied by the letters or designs that compose the advertisement. D is the lamp-burner. The same is intimately con-

nected with, and projects from, the adjustable lens-holder C, as shown. When the lamp is to burn liquid fuel its oil-reservoir *i* is formed in the upper part of the lens-holder, and made annular, as shown, to leave room for the rays of light to reach the lens *f*. When the lamp is to burn gas the holder C may, by suitable means, be connected with the supply-pipe.

We prefer to secure the burner to the lens-holder, as thereby the relative position of the burner to the lenses remains the same. Yet, for many purposes, it will suffice to secure the burner to the body of the lamp.

When the lamp has been properly suspended and lighted, and the picture-slide pushed into the chamber *h*, the rays of light from the burner will pass through the translucent parts of the slide, and through the lenses toward the pavement, and will on the pavement produce an enlarged illuminated copy of the letters or designs contained on the slide.

The tube *e* of the lens-holder is inclined toward the wall, as shown, and the position of the picture slide and lenses is thereby rendered such that the illuminated advertisement will be produced on the sidewalk at a distance from the building. Yet, by the hinge *a* and catch *b d*, this distance can be regulated with great exactness.

We claim as our invention—

1. The magic lantern A, provided with the hinged lens-holder C, and with the regulating-catch *b d*, substantially as herein shown and described.

2. In combination with the hinged lens-holder C of a magic lantern, the burner D, secured to said hinged lens-holder, substantially as specified.

3. The annular oil-reservoir *i*, combined with and formed on the hinged lens-holder C, of a magic lantern, substantially as specified.

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