W. WENDERHOLD.

PROJECTION LAMP HOUSE.

APPLICATION FILED APR. 9, 1917.

1,346,359.

Patented July 13, 1920.

2 SHEETS—SHEET 1.

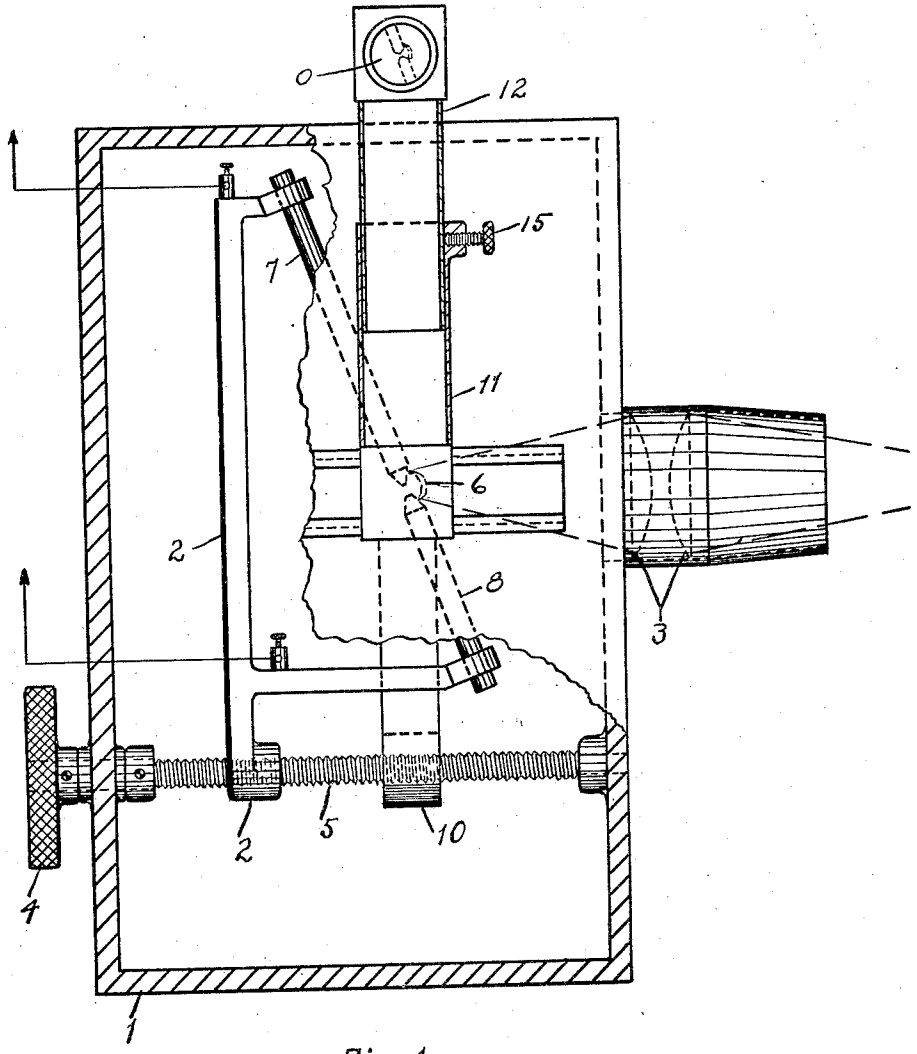


Fig. 1.

INVENTOR

William Wenderhold

W. WENDERHOLD.

PROJECTION LAMP HOUSE.

APPLICATION FILED APR. 9, 1917.

1,346,359.

Patented July 13, 1920.

2 SHEETS—SHEET 2.

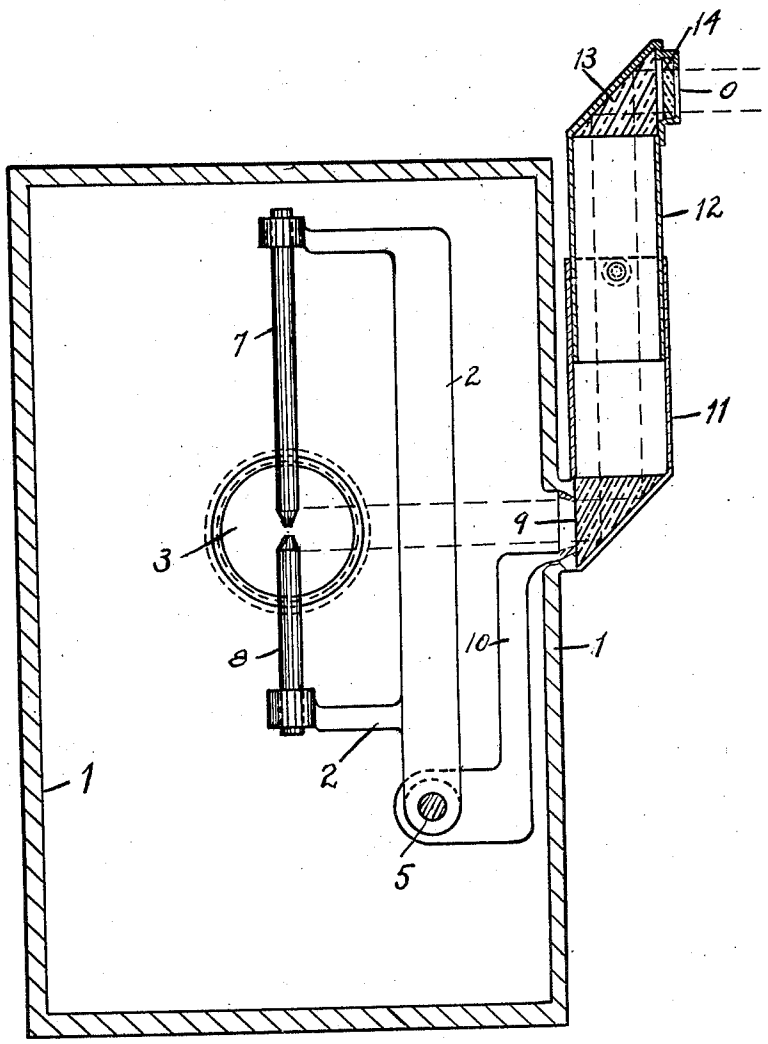


Fig. 2.

INVENTOR

William Wenderhold

UNITED STATES PATENT OFFICE.

WILLIAM WENDERHOLD, OF NEW YORK, N. Y., ASSIGNOR TO CRU PATENTS CORPORATION, A CORPORATION OF NEW YORK.

PROJECTION-LAMP HOUSE.

1,346,359. Specification of Letters Patent. Patented July 13, 1920.

Application filed April 9, 1917. Serial No. 160,882.

To all whom it may concern:

Be it known that I, WILLIAM WENDERHOLD, a citizen of the United States, residing at New York city, in the county and State of New York, have invented certain new and useful Improvements in Projection-Lamp Houses, of which the following is a clear, full, and exact description.

This invention relates to a reflector adjustably attached to a projection lamp and housing.

The object of my invention is to provide an arrangement which will enable the operator of a projection lamp to observe the light itself (inside of the housing) conveniently from a suitable point without.

To illustrate the application of my device, I have shown the use of an electric arc lamp such as used for picture projection and slide projectors.

Referring to the drawing,

Figure 1 is a side elevation of a projection lantern partly in cross section;

Fig. 2 is a vertical cross section through the lantern and my invention.

As herein illustrated, the housing 1 contains the arc lamp 2 and the lenses 3. The arc lamp is moved back and forth in the housing 1 by means of the lead screw 5, which is operated by the knurled knob 4. The arc 6 is formed between the carbons 7 and 8. Opposite the arc, I provide a reflector 9 which is supported by the bracket 10, which bracket is also connected with the lead screw 5 so that the reflector will move with the lamp when the lamp is being moved to or from the lenses 3. On bracket 10, immediately above the reflector 9, a tubular support 11 extends therefrom on the outside of the housing 7. This tubular support carries the tube 12 on which is mounted on its upper end another reflector 13 to receive the reflections from the first reflector 9. Adjacent to the reflector 13 is mounted a dimmer glass 14 (preferably colored) and at this point O, the arc is observed by the operator. The tube 12 is held in tube 17 by set screw 15, thereby enabling one to move the observation point O up or down to a place most convenient for the operator.

I have shown the device connected with the movements of the arc lamp, but it can also be attached to the housing in such a manner as to require independent operation.

What I claim as my invention is:

1. In a projection lantern, a movably mounted source of light, and means for moving the same, in combination with a device for observing the light source, said device being mounted and maintained in fixed relation to the light source and movable coincidentally therewith.

2. The combination with a lamp house, of a light source mounted therein, means for shifting said light source, and an observing device disposed in fixed relation to the light source, and disposed at the exterior of the lamp house for observing the light source, said shifting means operating to shift the observing device coincidently with the light source.

3. The combination with a lamp house, of a light source mounted therein, means for shifting said light source, said lamp house having an opening in the wall thereof opposite the light source, a reflector disposed opposite the wall opening, an observing device associated with said reflector and disposed exterior of the lamp house, said light shifting means also operating to coincidently shift said reflector and observing device.

4. The combination with a lamp house, of a light source arranged therein, a support therefor, an adjusting screw for said support, an observing device located exterior of the lamp house and disposed in relation to said light source to reveal the light from the latter, a support for said observing device, said adjusting screw also engaging the observing device support to coincidently adjust the light source and the observing device.

5. The combination with a lamp house having an opening in the side wall thereof, of a light source disposed within said house, means for shifting the same, a supporting tube located exterior of the lamp house, and carrying coöperating reflectors, one of said reflectors being disposed opposite the opening in the lamp house wall, an observing device associated with the other of said reflectors and means to shift said supporting tube coincidentally with said light source to maintain fixed relation of these devices.

6. The combination with a lamp house having an opening in the side wall thereof, of a light source disposed within said house, means for shifting the same, tubular mem-

bers disposed at the exterior of the lamp house and connected together for relative adjustment, a reflector carried by one of said tubular members and disposed opposite said opening, an observing device carried by the other of said tubular members, and means to shift said tubular members coincidentally with said light source to maintain fixed relation of these parts.

7. The combination with a lamp house having an opening in the side wall thereof, of a light source disposed within said house, a tubular member disposed at the exterior of the lamp house, a reflector carried by said tubular member and disposed opposite said opening, an observing device also carried by said tubular member, independent supports within the lamp house for said light source and tubular member, and means to move said supports in unison to maintain fixed relation of these devices while permitting adjustments of the light source.

Signed at the city of New York, New York, this 30th day of March, one thousand nine hundred and seventeen.

WILLIAM WENDERHOLD.

Witness:
MARIAN FOSTER.