

(Model.)

W. A. PORTERFIELD & F. S. CLINTON.

Lantern.

No. 237,317.

Patented Feb. 1, 1881.

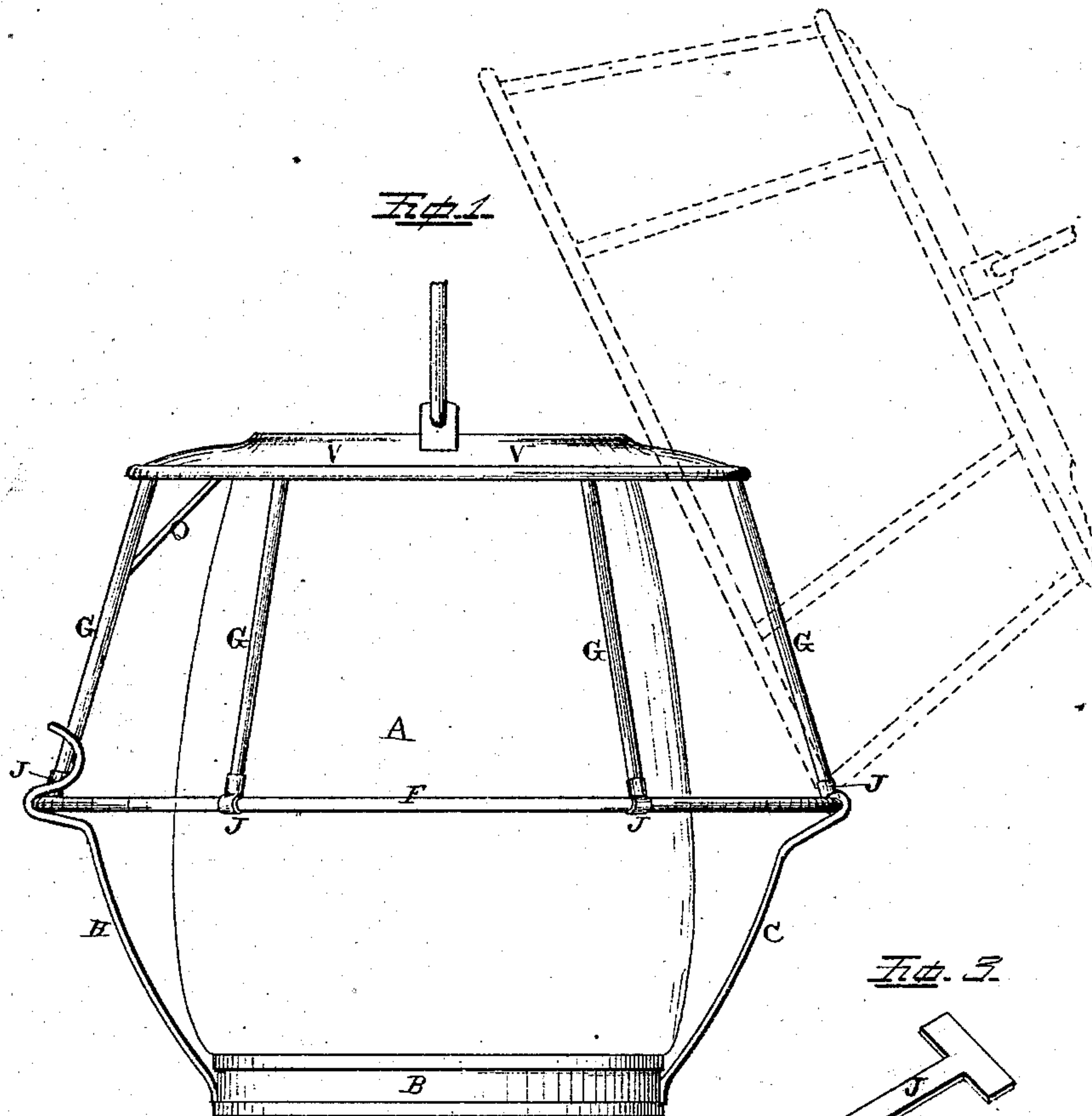


Fig. 3

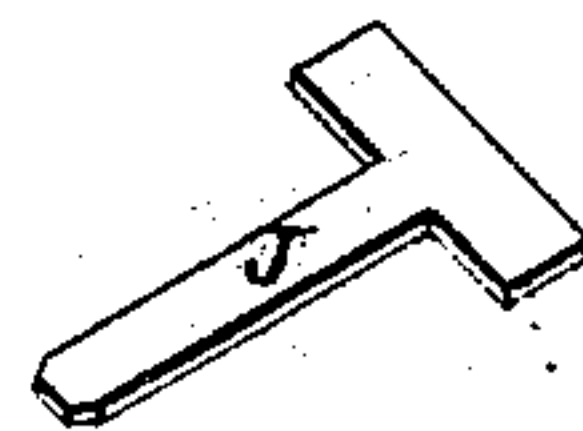
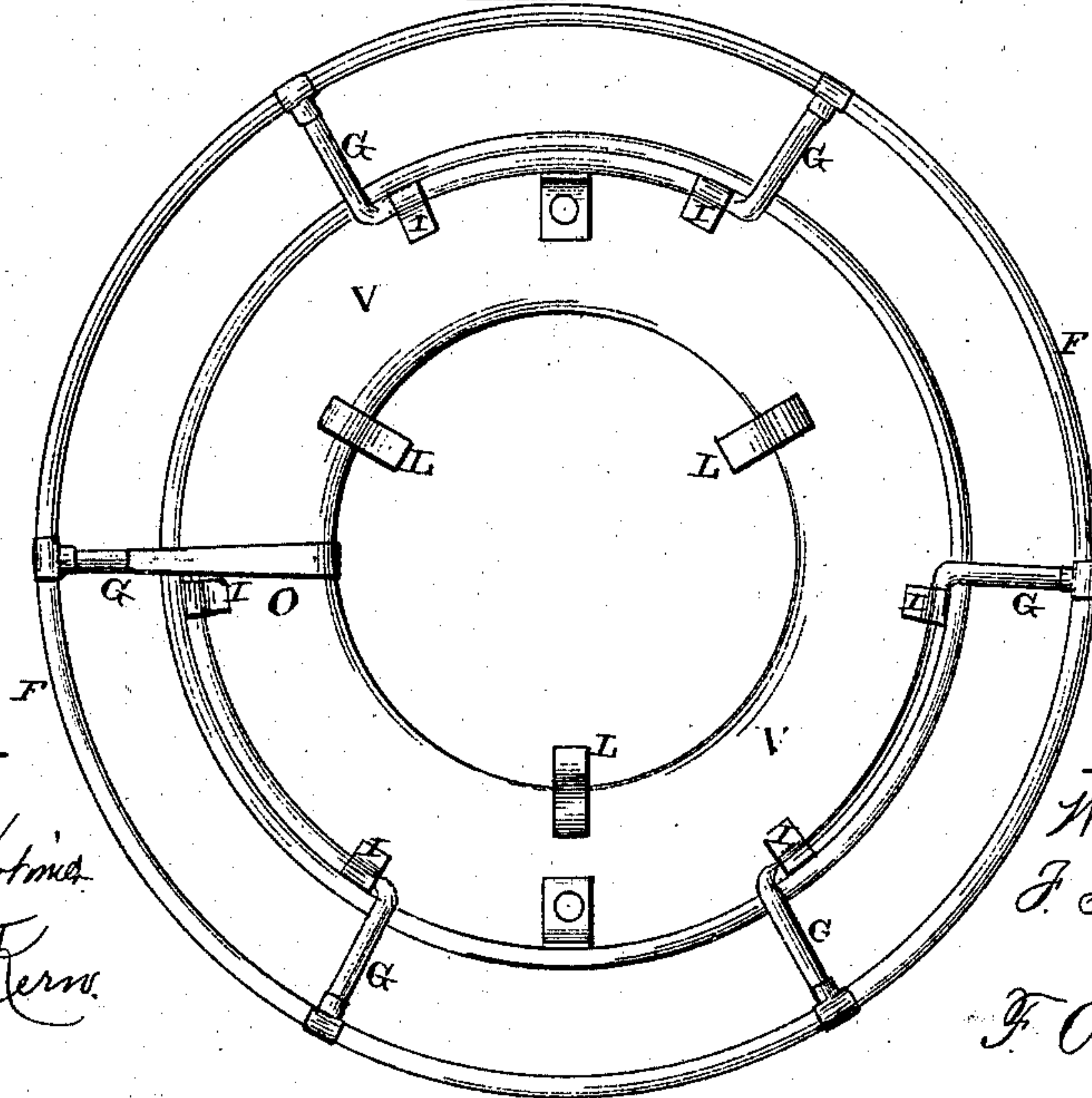


Fig. 2



Witnesses.

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UNITED STATES PATENT OFFICE.

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LANTERN.

SPECIFICATION forming part of Letters Patent No. 237,317, dated February 1, 1881.

Application filed December 6, 1880. (Model.)

To all whom it may concern:

Be it known that we, WILLIAM A. PORTERFIELD and FREDERICK S. CLINTON, of Bellaire, in the county of Belmont and State of Ohio, have invented certain new and useful Improvements in Lanterns; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in lanterns; and it consists in a guard which is hinged upon a suitable support which extends up from the bottom part of the frame, and which guard extends only half-way down the side of the lantern from above.

It further consists in a guard which extends only half-way down the side of the lantern from above, and which is supported upon one side by a suitable support, which extends up from the bottom portion of the frame, and which is held upon the opposite side by means of a spring-clasp, whereby, when the upper portion of the guard is released from the spring-clasp, the entire guard and top of the lantern can be swung back out of the way.

It further consists in securing to the under side of the guard and the reflector a strip which is inclined diagonally upward, and which catches over the top of the globe and keeps it in position when the frame is being swung back.

It further consists in forming the guard of the ring which extends around the central portion of the globe of separate wires, which are bent into a U shape and then secured to the under side of the reflector, while their lower ends are secured to the ring by means of T-shaped fastenings, all of which will be more fully described hereinafter.

The object of our invention has been to dispense with that portion of the guard which extends around the lower portion of the globe, and to attach the guard to the lower portion of the frame of the lantern by means of devices which will allow the guard to be freely moved back from over the top of the globe, so that ready access can be had to the interior of the lantern for the purpose of cleaning and lighting it.

Figure 1 is a side elevation of our invention, showing the guard over the globe in solid lines, and turned back in dotted lines. Fig. 2 is an inverted view of the reflector and its attachments. Fig. 3 is a perspective of the T-shaped plates by means of which the wire guards are attached to the band.

A represents the globe, and B the upper portion of the frame, inside of which the lower end of the globe rests. These two parts may be constructed in any desired shape, form, or manner. Secured to one side of this ring or frame B is a support, C, which extends about half-way up the side of the globe, and which has secured to its upper end, in any suitable manner, a guard. This upper end is preferably made bifurcated, and then the two ends are bent over the ring F of the guard, one end being placed upon one side of one of the vertical wires G, and the other one being placed on the other side of the wire G, so as to prevent the guard from moving laterally upon the support. This support forms a hinge, upon which the guard turns in such a manner that the whole upper portion of the lantern can be turned back from over the top of the globe, as shown in dotted lines in Fig. 1. Secured to the opposite side of the frame B from the support is a spring-clasp, H, which catches over the ring F and one of the vertical wires G in such a manner as to hold the top of the lantern in position after it has been once closed over the top of the globe.

It will be seen that the guard extends down from above only half the length of the globe, so as to leave the whole lower portion of the globe free in every way, with the exception of the support and the spring-catch. This construction causes much less interference with the radiation of the light in all directions, protects the globe fully as much, and gives the lantern a much more elegant appearance.

The vertical wires G of the guard are bent into U shape, and are secured to the under side of the reflector by means of bands or strips I, or any other suitable devices, and then have their lower ends secured to the ring F by means of the T-shaped pieces J. These T-shaped pieces J are made of any suitable thin sheet metal, and have the horizontal portion wrapped around the lower end of the wire, while the ver-

tical portion passes down under and around the ring F, and up over the tubular portion formed by the part that has been wrapped around the vertical wire, as shown. This T-shaped piece forms a very secure fastening under any and all circumstances, and gives rather an elegant appearance and finish to the joint. Also, secured to the under side of the reflector are a number of flat springs, L, which catch over the top edge of the globe, and thus prevent the reflector from being forced so tightly down upon its top as to cause breakage. These springs also take up the expansion and contraction of the glass from heat and cold, and thus keep the glass always securely held in position.

When the top of the lantern is swung back, as shown in dotted lines in Fig. 1, the glass is apt to become more or less displaced; and in order to form a guide, I attach to the vertical wire G, over which the spring H catches, and to the under side of the reflector, the inclined strip O, which, by bearing diagonally against the edge of the globe, pushes the globe back into position. This guide is very essential where it is desired to close the top quickly, for it guides the globe back into position much more quickly than can well be done by hand, especially should the globe be hot.

The reflector V here shown consists simply of a round band, such as is generally used for this purpose.

We are aware that a lantern-guard has been made in two parts, the upper one of which turns backward, and this we disclaim. Our guard is made of but a single piece, so as to leave the bottom part of the globe perfectly free, with the exception of the two parts O H, which come on the sides of the globe, and do not interfere with the radiation of the light either forward or back.

Having thus described our invention, we claim—

1. In a lantern, the combination of a support or hinge which extends up from the lower portion of the lantern, a guard which extends only a portion of the way down the side of the globe from above, and a spring-catch for holding the guard in position, substantially as described.

2. The combination of the guard and reflector with the inclined guide for moving the top portion of the globe into position, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 3d day of December, 1880.

WILLIAM ALPHONSO PORTERFIELD.
FRED SUMNER CLINTON.

Witnesses:

D. W. COOPER,
M. HOLDENFRE.