

Improvement in Lantern Globe Holders.

Patented May 23, 1871.



Inventor:

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN LANTERN-GLOBE HOLDERS.

Specification forming part of Letters Patent No. 115,059, dated May 23, 1871.

To whom it may concern:

Be it known that I, JOHN H. IRWIN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain Improvements in Lantern-Globe Holders; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, which, together with the letters and figures marked thereon, forms part of this specification, in which—

Figure 1 is a front view of a lantern embodying my improvements. Fig. 2 is a side view of the upper deflecting-plate and a portion of the globe, showing the improved globe-holder. Fig. 3 is a plan view of the globe-supporting plate.

Like letters of reference made use of in the several figures indicate like parts.

Nature of the Invention.

This invention relates to a device for holding the glass protector or globe in place in the lantern, and it is adapted more especially for use upon the style of lantern heretofore patented by me and known as the tubular lantern, in which a deflecting-plate is supported at a short distance above the top of the globe by means of air-tubes, which descend to the base of the lantern; and my present invention consists of a device for holding the globe in place by means of an annular wire spring, which encircles the top of the globe, and is connected at one side to the said deflecting-plate, and at the other side projects upward through a slot in the deflecting-plate, as will presently more at length appear.

To enable those skilled in the art to make and use my invention, I will proceed to describe the same with particularity, making use in so doing of the aforesaid drawing.

General Description.

J is the annular wire, attached, at *h*, to the deflecting-plate G, and bent into a spring curve at *l*, at which part it descends and encircles the top of the globe H, resting and bearing down upon a bead, *h*, molded upon said globe. Opposite the curved-spring part *l* the two sides of the encircling wire join and project upward through a slot in the deflecting-plate G.

This vertical part is marked *p* in the draw-

ing. The upper end of this vertical part is bent over, forming a thumb-piece, *m*, to afford a rest for the thumb in operating the spring, and also to prevent the retraction of the spring from drawing the vertical part *p* out of the slot in the deflecting-plate when the globe has been removed.

In order to more rigidly attach the wire to the deflecting-plate at *h* I cut slits in said plate and bend the intervening metal down, and pass or weave the wire through these slits, after which it is secured by soldering.

The entire wire, and especially the part *l*, acts as a spring, the pressure thereof being exerted from the point K downward upon the bead *h* of the globe, and the wire encircles the collar *i* of the globe above the said head, so that any lateral motion of the globe is prevented.

The globe may be removed by raising the holder, by means of the thumb-piece *m*, until the encircling wire clears the top of the globe, when the said globe may be taken out.

The globe, when in position, is supported upon the perforated plate F, or gallery, which is perforated with slots for convenience of lighting the lamp without removing the globe.

It will be apparent, upon consideration, that this forms a very secure fastening, because the pressure is direct from the plate G to the plate F, which holds the globe firmly at both ends; and the globe cannot be shaken out, because the encircling wire offers lateral resistance at every point, while any upward motion is prevented by the curved-spring part *l* of the holder, which resists very rigidly any further contraction, so that the holder can only be operated from the point *m*.

Claim.

Having thus fully described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

The lantern-globe holder, consisting of the encircling wire J, rigidly attached to the cap G at one side, and having at the other the part *p*, by which it may be operated, substantially as and for the purpose specified.

J. H. IRWIN.

Witnesses

J. W. MUNDAY,
H. F. BRUNS.