

(No Model.)

A. J. SAWYER, C. WOODBURY, & E. LANE.

LANTERN.

No. 281,797.

Patented July 24, 1883.

Fig. 1.

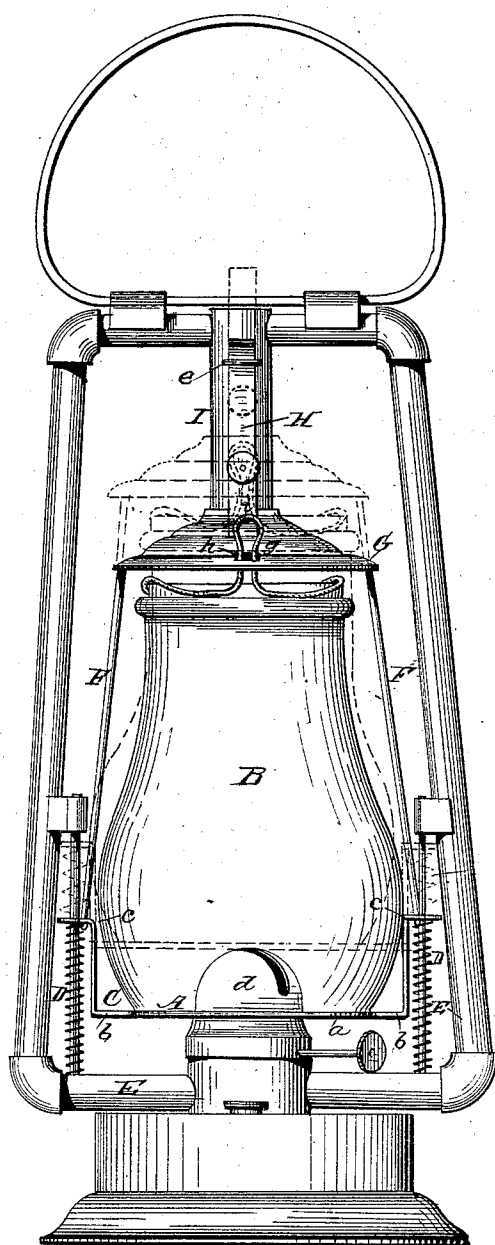
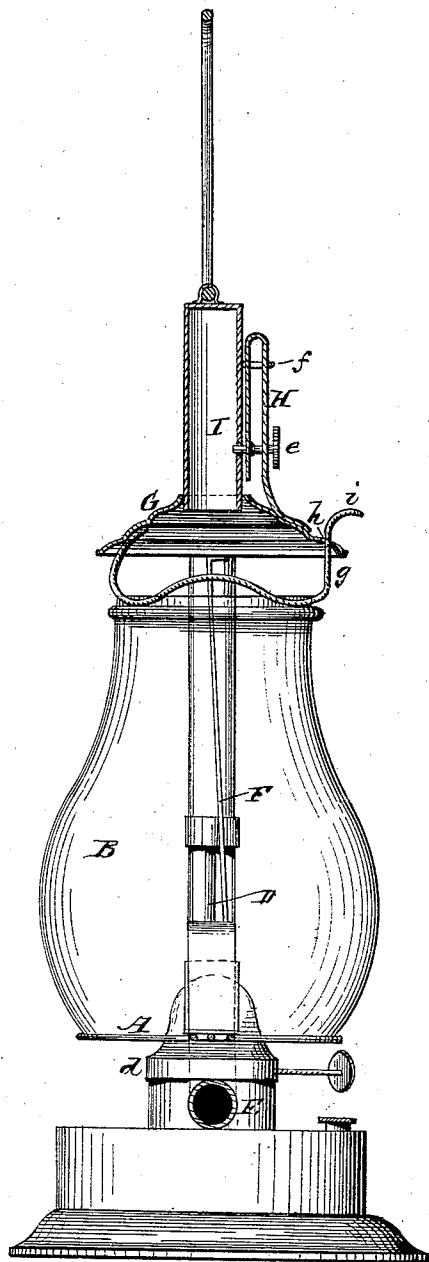


Fig. 2.



WITNESSES
F. L. Curand
N. E. Diphant

INVENTORS
Allen J. Sawyer
Clark Woodbury
Erastus Lane
per Chas. H. Fowler
Attorney

UNITED STATES PATENT OFFICE.

ALLEN J. SAWYER, CLARK WOODBURY, AND ERASTUS LANE, OF OLDTOWN,
MAINE.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 281,797, dated July 24, 1883.

Application filed May 28, 1883. (No model.)

To all whom it may concern:

Be it known that we, ALLEN J. SAWYER, CLARK WOODBURY, and ERASTUS LANE, all being citizens of the United States, residing at Oldtown, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Lanterns; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a front elevation of our invention, and Fig. 2 a side elevation thereof.

This invention relates to certain new and useful improvements in lanterns, and has for its object to provide a simple and inexpensive means whereby the globe of a lantern may be automatically raised and held above the burner, ready for lighting, when not in use, or to at any time extinguish the flame, said globe being readily closed down upon the burner, when desired to close the lantern, by a gentle pressure of the fingers. A further object of our invention is to so construct the upper binding ring or spring, which retains the globe in position, that the same may be brought up close against the globe-cap, thereby rendering the removal or insertion of a globe easy of accomplishment without danger of its being broken. These objects we attain by the construction substantially as shown in the accompanying drawings, and hereinafter more fully described and claimed.

In the drawings, A represents the usual perforated plate, provided with an annular flange, a, said plate and flange being adapted to receive and support the globe B.

Suitably secured to and extending out from the sides of the flanged plate A are wings C, forming right angles b c, and adapted to work on guide-rods D, secured to the tubes or guards of the lantern-frame. These guide-rods D have placed thereon spiral springs E, which bear against and are compressed by the right-angular portion c of the wings C when the globe and perforated plate are brought down upon and over the burner-cap d.

Secured at one end to and extending upwardly from the right-angular portion c of the

wings are stay-rods F, said rods being secured at their other end to the globe-cap G, sliding on the tube I.

Fastened to the globe-cap G is a sliding spring-catch, H, its bolt e being adapted to lock in a perforation formed in the central tube or flue, I, of the lantern, an eye, f, connected to said tube or lantern-flue, serving to retain the spring of the catch in its position and form a guide therefor. When the bolt e of the spring-catch H is withdrawn from the perforation in the tube or flue I, the spiral springs E, bearing against the right-angular portions c of the wings C, automatically force the perforated plate A and globe B up above the burner-cap d, as shown in dotted lines, Fig. 1, and the lantern is thus opened for the purpose of extinguishing the flame or cleaning the wick, and said lantern may remain open until needed for use.

When it is desired to close the lantern, it is only necessary to press down upon the globe-cap G until the bolt e of the spring-catch shoots home, and the globe is thereby locked in its closed position.

Though we have shown the spiral springs working on guide-rods secured at the lower portion of the lantern-frame, the same may be as readily arranged at the upper portion and perform their functions equally well.

The upper binding ring or spring, K, which retains the globe B in its vertical position, is bent up on either side of said globe a certain distance—say one-half an inch—toward the cap G, then forward and downward until it again sets upon the globe, and is provided with an extension, g, passing up through a slot, h, in the globe-cap, terminating in a thumb-rest, i, by which said binding ring or spring is lifted from the globe, an extension, k, opposite to the one g, being made fast to said globe-cap. When this binding ring or spring is raised up, the bends therein cause its forward portion to come close up against the globe-cap, and thereby admit of the easy removal or insertion of a globe.

Having now fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The means herein described for automatically raising and sustaining a lantern-globe

above the burner, which consists of spiral springs placed around suitable guide-rods connected to the lantern-frame and adapted to actuate the usual perforated plate or globe-support, and the stay-rods connecting the right-angular wings of said plate or globe-support with the sliding globe-cap, substantially as shown, and for the purpose set forth.

2. The combination, in a lantern, of a perforated annularly-flanged plate or globe-support provided with right-angular wings extending therefrom, with suitable guide-rods secured to the lantern-frame, the spiral springs placed thereon, the stay-rods connecting the wings of the plate or globe-support with the sliding globe-cap, and the sliding spring-latch secured to said cap, substantially as and for the purpose specified.

3. The binding ring or spring of a lantern, adapted to fit around the upper portion of the globe to retain it in a vertical position, secured to and depending from the globe-cap, the same being bent up on either side of said globe a sufficient distance, as described, and then bent forward and downward until it again rests thereon, and provided with a free extension

passing up through a slot in the globe-cap, terminating in a thumb-rest, substantially as and for the purpose set forth.

4. The globe-cap of a lantern, adapted to slide upon the central tube or flue thereof, provided with a sliding spring-catch locking in a perforation in said tube or flue, and having depending therefrom the binding ring or spring for the globe, constructed substantially as shown and described, and suitable stay-rods connecting with the right-angular wings of the perforated plate or globe-support, in combination with the guide-rods to which said wings are movably secured, and the spiral springs placed thereon to actuate said plate or globe support, as and for the purpose specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

ALLEN J. SAWYER.
CLARK WOODBURY.
ERASTUS LANE.

Witnesses:

EPHRUM SAWYER,
ASA T. WING.