(No Model.)

# J. B. STETSON. LANTERN.

No. 438,869.









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# UNITED STATES PATENT OFFICE.

## JOSEPH B. STETSON, OF LINCOLN, MAINE.

# LANTERN.

SPECIFICATION forming part of Letters Patent No. 438,869, dated October 21, 1890.

Application filed February 27, 1884. Serial No. 122,164. (No model.)

### To all whom it may concern:

Be it known that I, JOSEPH B. STETSON, of Lincoln, in the county of Penobscot and State of Maine, have invented a new and useful Improvement in Lanterns, of which the following is a specification.

This invention relates to an improvement in that class of lanterns in which the globe rests upon a plate, disk, or ring which surrounds to the burner-cone and in which this plate, disk, or ring is provided with a lifting device whereby it can be raised from the burner-cone in order to expose the wick for trimming the same and lighting or extinguishing the lantern.

15 The object of this invention is to facilitate the removal of the globe from the supporting disk or ring when the globe is required to be cleaned or renewed; and my invention consists to that end in connecting the globe-

20 supporting ring to the lifting device in such manner that the plate or ring can be tilted or inclined when the catch holding the upper end of the globe is released.

In the accompanying drawings, Figure 1 25 represents a front elevation of a tubular lantern provided with my improvement, with the globe resting upon its supporting-plate and the plate resting upon the burner-cone. Fig. 2 is a similar view with the globe removed and

30 the supporting-plate tilted. Fig. 3 is a horizontal section in line x x, Fig. 1. Fig. 4 is a fragmentary perspective view of one side of the globe-supporting plate and lifting device to which it is pivoted.

35 Like letters of reference refer to like parts in the several figures.

A represents the base of the lantern; B B, the air-supply tubes; C, the central air-inlet tube, and D the bell, mounted on the air-inlet 40 tube C in such manner that it can be raised

and lowered on the same.

E represents the burner-cone; F, the perforated plate, disk, or ring which surrounds the burner-cone, and G the globe which rests on 45 the plate or disk F.

H H represent side wires or rods secured with their upper ends to the bell D and extending downwardly on opposite sides of the globe and along the inner sides of the tubes

50 B to the globe-supporting plate F.

I I are loops attached to the air-tubes B and embracing the rods H, which latter slide in the loops I in raising and lowering the globe.

 $\overline{h}$  h are eyes, formed at the lower ends of the side wires H, and jj are pivots which ex- 55 tend laterally from the plate F and are supported in the eyes h. The outer ends of the pivots j are turned down, as represented at j', whereby the pivots are securely attached to the side wires. The pivots j are constructed 60 with enlarged shanks J, which connect the pivots with the plate F, and which form shoulders whereby the lower ends of the side wires are prevented from moving inwardly or toward the globe. The upper portions h' of the 65 side wires H are arranged parallel with the downwardly-diverging side tubes B, or nearly so, and the lower portions  $h^2$  of the side wires are arranged vertically, so that the side wires are sprung into the loops I and bear against 70 the inner sides of the loops with sufficient friction to support the globe and the frame in which it is mounted when these parts are raised from the burner-cone. Each of the side wires is preferably constructed of a sin- 75 gle piece doubled back upon itself to form the eye h and secured with its ends to the bell D.

k represents the central opening in the plate F, which opening is made somewhat larger than the burner-cone to permit the plate to 80 be tilted to the angle required for conveniently removing the globe.

*l* represents an annular spring-catch secured to the under side of the bell D and adapted to secure the upper end of the globe.

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When the lantern is in its working condition, the globe rests upon the plate F and the plate F surrounds the burner-cone, as represented in Fig. 1, the upper end of the globe being held by the spring-catch l. The globe 90 and the frame in which the globe is supported are secured in this position by the friction of the side wires H in the loops I, and, if desired, by a spring-catch whereby the adjustable bell D is secured in its lowest position on the cen-95 tral air-tube C. When it is desired to remove the globe, the annular spring-catch l is raised and the upper part of the globe is turned forwardly from under the spring-catch. During this movement of the globe the supporting- 100 plate F turns on its pivots and conforms to the various positions of the globe, thereby facilitating the removal of the globe.

For the purpose of replacing the globe the 5 plate F is placed in an inclined position, the lower end of the globe placed on the same, and the upper end of the globe is then turned backwardly under the spring-catch *l* until the latter engages with the upper end of the solution of the same in the re-

movable frame.

I do not wish to confine myself to the particular construction of the lifting device herein shown and described, and my invention 15 may be applied equally well to lifting devices

of different construction.

I claim as my invention-

1. In a lantern, the combination, with the oil-pot and burner, of a globe-supporting 20 frame capable of being lifted from the burner and provided with a globe-supporting plate, disk, or ring capable of being tilted or inclined in said frame, substantially as set forth.

2. In a lantern, the combination, with the oil-pot and burner, of a globe-supporting 25 frame capable of being lifted from the burner, and a hinged globe-supporting plate, disk, or ring constituting the movable bottom of said lifting-frame, substantially as set forth.

3. In a lantern, the combination, with the 30 tubular frame B B C, of a vertically-sliding movable bell D, side wires H, and globe-supporting plate F, pivoted to the lower ends of said side wires, substantially as set forth.

Witness my hand this 30th day of October, 35 1883.

#### JOSEPH B. STETSON.

Witnesses: JAMES B. STETSON, HARRISON PIPER.