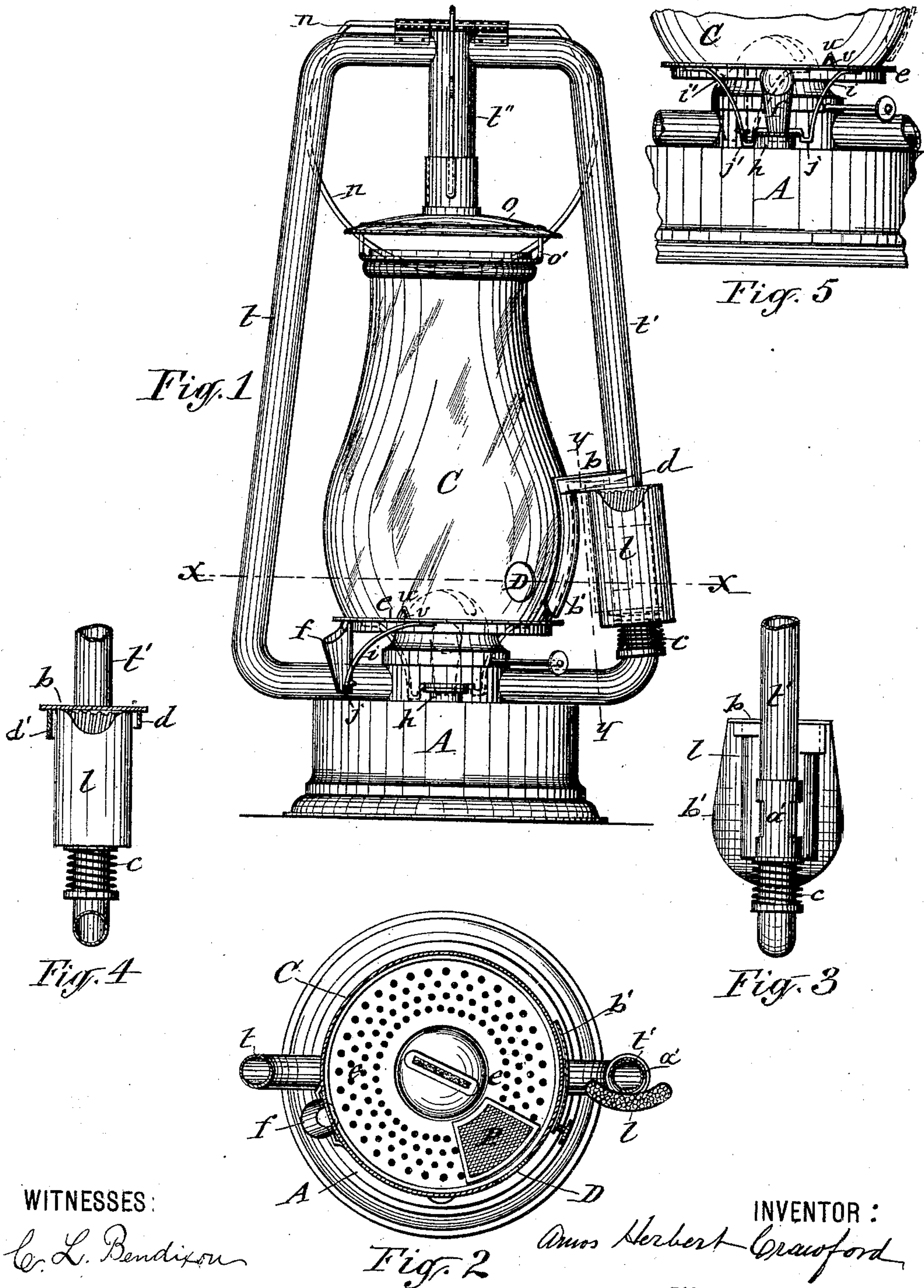


(No Model.)

A. H. CRAWFORD.  
LANTERN.

No. 435,134.

Patented Aug. 26, 1890.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

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## LANTERN.

SPECIFICATION forming part of Letters Patent No. 435,134, dated August 26, 1890.

Application filed October 2, 1889. Serial No. 325,776. (No model.)

*To all whom it may concern:*

Be it known that I, AMOS HERBERT CRAWFORD, of Liverpool, in the county of Onondaga, in the State of New York, have invented  
5 new and useful Improvements in Lanterns, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention consists in a novel combination, with a lamp or lantern, of certain auxiliary devices connected therewith for the purpose of facilitating the operation of replenishing the lamp with oil and for lighting and also extinguishing the lamp when desired,  
15 all as hereinafter fully described, and set forth in the claims.

In the annexed drawings, Figure 1 is a front elevation of a lantern embodying my improvements. Fig. 2 is a horizontal transverse section on line *x x*, Fig. 1. Fig. 3 is an exterior side elevation of the match-safe and its shield with their connection to the upright frame or usual air-tubes of a lantern. Fig. 4 is a vertical transverse section on line *y y*, Fig. 1,  
20 showing the match-safe in its normal or housed position; and Fig. 5 is a detail view of the funnel in its position over the oil-inlet of the lamp.

Similar letters of reference indicate corresponding parts.

A represents the lamp of the lantern; *e*, the usual perforated horizontal plate, which is mounted on the lamp concentric with the burner and adapted to be rotated about the  
35 latter.

C denotes the globe, which is supported on the plate *e*.

*t t'* are the air-tubes, which rise from the lamp at opposite sides of the globe and are  
40 united at the top with a downwardly-extending tube *t''* in the usual and well-known manner, said tubes forming a rigid upright frame, the top of which is provided with a suitable handle *n* by which to carry the lantern. An annular horizontal disk *o* is connected to and surrounds the open lower end of the tube *t''*, and has attached to it a wire ring *o'*, which embraces the upper end of the globe C, so as to support the same thereat and  
45 allow it to be turned when desired. The

globe C, I form with an aperture D in its side, said aperture being of a size to allow a person to introduce a match and bring it into sufficient proximity to the burner of the lamp to light the same, said aperture also allowing  
55 a person to blow through it and across the burner to extinguish the light when desired, and thus both operations of lighting the lamp and extinguishing the light can be accomplished without raising the globe C from its seat.

To further facilitate the operation of lighting the lamp, I secure thereto at the inside of the globe, and preferably horizontally to the top of the plate *e*, a stationary scratch-plate P. Said plate, extending horizontally  
60 from the globe to the burner and being in a plane below the burner, affords ready access to the latter for lighting the same, which is readily accomplished by a person introducing a match through the aforesaid aperture and rubbing it across the scratch-plate, so as to ignite the match, and then passing the match straight to the burner. It will thus be  
65 observed that during the aforesaid operation of lighting the burner the match is shielded from wind and rain by the globe, and consequently said operation is greatly facilitated.

In connection with the globe C formed with the aperture D, as described, I employ a plate or shield *b'*, adapted to cover and uncover the aperture, as may be desired. This plate I preferably arrange stationary in its position by forming its upper end with a horizontal extension *b* and rigidly attaching it there-  
80 by to the upright frame or tube *t'*. By turning the globe it can be brought into a position to cause the aperture D to be either covered by the shield *b'* or removed therefrom, as may be desired.

By providing the plate *b'* with a bright or polished surface at the side facing the burner of the lamp A said plate is made to serve as a reflector of the light from the lamp.

The plate-extension *b*, I utilize as a cap for  
85 the match-safe *l*, which I swivel on the tube *t'* underneath said cap by means of a sleeve *a'*, attached to the match-safe and loosely embracing the tube. Said match-safe I support by a spring *c*, preferably of the form of a  
90 100



spiral surrounding the tube below the sleeve  $a'$  and seated on a collar attached to the tube under the spring, which latter pushes up the match-safe; so as to hold the open upper end thereof close to the under side of the cap.

The shield  $b'$  serves to protect the match-safe from the heat of the lamp when the globe is turned to carry the aperture D behind the shield.

To more effectually shield the match-safe from rain and snow, I provide the cap  $b$  with downward-extending flanges  $d d'$ , adapted to receive between them the top portion of the match-safe, as shown in Fig. 4 of the drawings. The flange  $d$  is comparatively short to allow the match-safe to pass under it by pushing the latter down and turning it on the tube  $t'$ , so as to obtain access to the matches, as represented in Fig. 1 of the drawings. The flange  $d'$  is of such a depth as to prevent the match-safe from passing under it when depressed, as aforesaid, and thus said flange serves as a stop in turning the match-safe to its position under the cap  $b$ .

$f$  represents a funnel, which I attach to the edge of the globe-supporting plate  $e$  in such a position that when the said plate is turned to bring the funnel directly over the oil-inlet  $h$  of the lamp A the aperture D of the globe is at the opposite side of the lantern, and thus the lamp can be replenished with oil while the lamp is burning without danger of igniting the gas emitted from the oil. The funnel is carried to and from the oil-inlet  $h$  of the lamp by turning the plate  $e$ , and in this operation the funnel serves as a handle by which to turn the said plate.

From the lower end of the funnel are extended in opposite directions two braces  $i i'$ , which are rigidly secured to the funnel and to the plate  $e$ . These braces I form with downward-projecting guards  $j j'$  at opposite sides of the discharge end of the funnel. Said guards, abutting against opposite sides of the upward-projecting nipple of the oil-inlet  $h$ , serve to hold the funnel in its position while pouring the oil into the funnel, which conducts the same into the inlet  $h$ . The guard  $j'$  is of such a depth as to prevent its passing over the cap of the aforesaid nipple during the operation of moving funnel to the oil-inlet  $h$ , and thus said guard serves as a stop which limits the movement of the funnel to and from one side only of the oil-inlet  $h$ , and this insures the covering of the aperture D by the shield  $b'$  when the funnel is removed from the aforesaid oil-inlet and in a position to cause the lower end of the brace  $i$  to abut against the side of the nipple adjacent to the removed funnel, as indicated by dotted lines in Fig. 5 of the drawings. By turning the plate  $e$ , so as to carry the funnel still farther from the oil-inlet  $h$ , the aperture D of the globe is brought toward the front and away from the shield  $b'$  sufficiently to afford access through it to the interior of the globe, as illustrated in Fig. 1 of the drawings. This latter move-

ment of the plate  $e$  is also limited by the brace  $j'$  coming in contact with the horizontal lower end of the tube  $t$ .

In order to compel the globe to turn with its supporting-plate  $e$  and thus insure the aforesaid changes of the positions of the aperture D in relation to the shield  $b'$  by the turning of the globe, I provide the base of the globe with a notch  $u$ , and the plate  $e$  with the projection  $v$ , which enters said notch when the globe is set in its required position on the plate.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a lantern, the combination, with the stationary tubes  $t t'$  and lamp  $l$ , of the rotative globe C, provided with an aperture in its side, a match-safe connected to one of said tubes, and a shield interposed between the globe and match-safe to close the aperture of the chimney and protect the match-safe from the heat of the lamp, substantially as set forth.

2. In a lantern, the combination, with the stationary tubes  $t t'$ , lamp A, and rotative globe C, provided with an aperture in its side, of a match-safe swiveled to one of said tubes, and a shield secured stationarily to the tube carrying the match-safe and adapted to close the aperture of the globe, substantially as described and shown.

3. In a lantern, the combination, with the tubes  $t t'$ , lamp A, and globe C, of the match-safe  $l$ , connected to one of said tubes and adapted to slide circumferentially thereon, the cap  $b$ , secured to the tube carrying the match-safe and extending across the top of the latter, and the shield  $b'$ , attached to said cap and extending between the match-safe and globe, substantially as described and shown.

4. In a lantern, the combination, with the tubes  $t t'$ , lamp A, and globe C, of the sleeve  $a'$ , loosely embracing the tube  $t'$ , the spring  $c$ , supporting said sleeve, the match-safe  $l$ , attached to the sleeve, the cap  $b$ , attached to said tube and provided with the pendent side flanges  $d d'$ , and the shield  $b'$ , attached to said cap and extending between the match-safe and globe, substantially as described and shown.

5. In combination with the lamp provided with the oil-inlet  $h$ , a funnel permanently carried on the lamp and arranged movably laterally to and from the oil-inlet thereof, as set forth.

6. In combination with the lamp provided with the oil-inlet  $h$  and rotary globe-support  $e$ , the funnel  $f$ , attached to said globe-support, as and for the purpose set forth.

7. In combination with the lamp A, provided with the oil-inlet  $h$  and rotary globe-support  $e$ , the funnel  $f$ , suspended from said globe-support, and the braces  $i i'$ , extending from the lower end of the funnel to the globe-support, substantially as described and shown.



8. In combination with the lamp A, provided with the oil-inlet *h*, projecting from the top of the oil-reservoir, and the rotary globe-support *e*, the funnel *f*, permanently attached  
5 to and suspended from the globe-support, and the braces *i i'*, extending from the lower end of the funnel in opposite directions to the globe-support and affixed thereto and formed with the downward-extending guards *j j'* at

opposite sides of and below the funnel, substantially as set forth.

In testimony whereof I have hereunto signed my name this 28th day of September, 1889.

AMOS HERBERT CRAWFORD. [L. s.]

Witnesses:

C. H. DUELL,  
H. M. SEAMANS.