

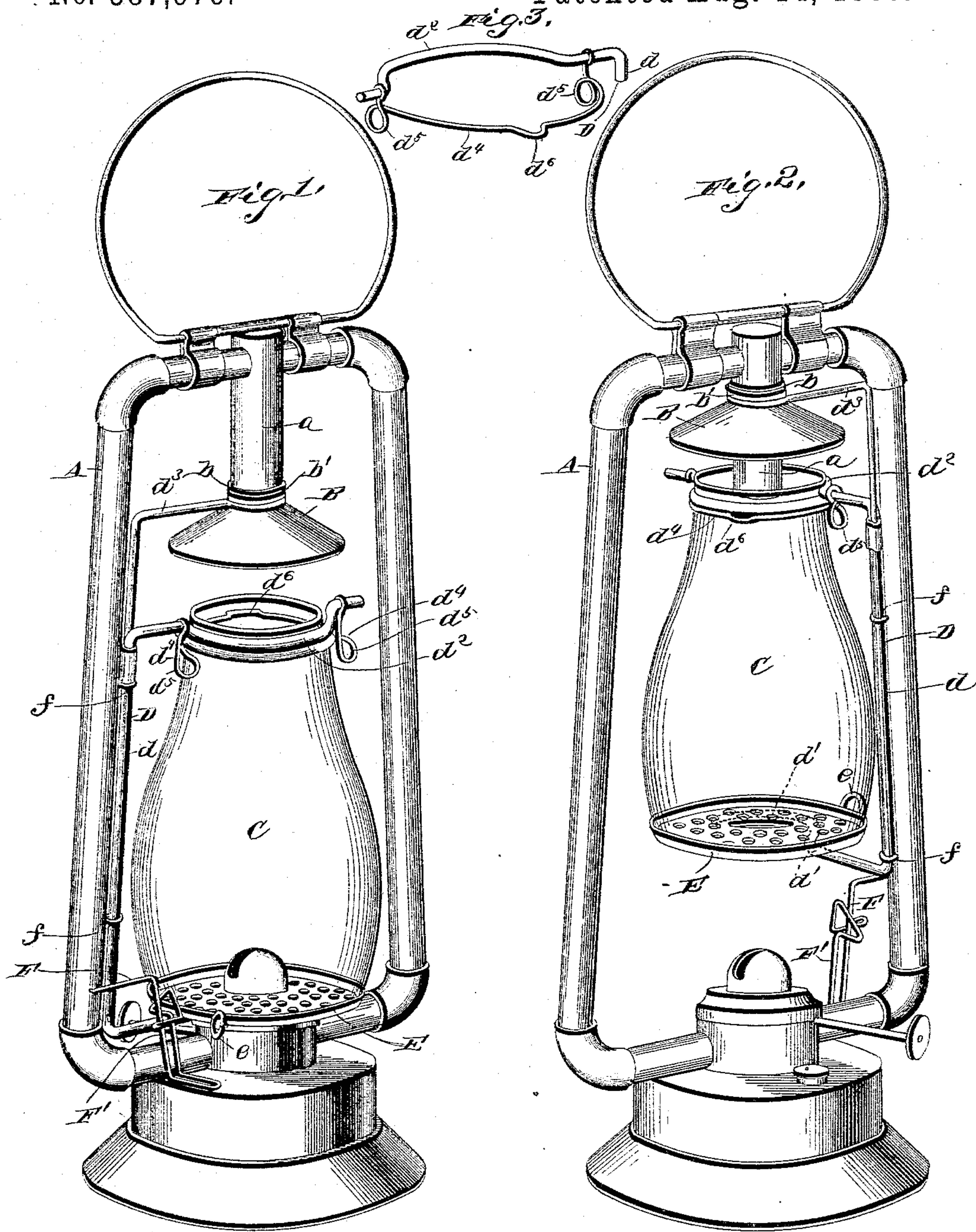
(No Model.)

W. W. HUTCHINS.

LANTERN.

No. 387,976.

Patented Aug. 14, 1888.



Witnesses.

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LANTERN.

SPECIFICATION forming part of Letters Patent No. 387,976, dated August 14, 1888.

Application filed November 15, 1887. Serial No. 255,248. (No model.)

To all whom it may concern:

Be it known that I, WILBUR W. HUTCHINS, a citizen of the United States, residing at Newport, in the county of Orleans and State of Vermont, have invented a new and useful Improvement in Lanterns, of which the following is a specification.

The invention relates to tubular lanterns.

The object of the invention is to produce a tubular lantern in which, in order to afford convenient access to the lamp for trimming and lighting, the globe may be raised and swung out of the way. Furthermore, the object is to produce a lantern from which the globe may be removed for the purpose of cleaning or for the insertion of a new one with greater facility and ease than has heretofore been attainable; furthermore, to produce a lantern in which, when it has been trimmed and lighted and is in condition for use, the parts will be retained firmly in place, and thus enable the lantern to be swung about and be used with safety as a signal-lantern, and, furthermore, to provide a simple, durable, and comparatively inexpensive lantern in which the parts will not be liable to get out of order nor become broken.

The invention consists in the novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the accompanying drawings, forming part of this specification, and in which like letters of reference designate corresponding parts, Figure 1 illustrates in perspective a tubular lantern embodying all the improvements in what I deem their best form, the parts being in position for service. Fig. 2 is a similar view of the same with the globe lifted and swung aside, as for lighting or other purposes. Fig. 3 is a detail view to show more clearly the construction of the clamping device for the top of the globe.

Referring to the drawings it will be seen that I have represented my invention applied to the ordinary form of tubular lantern. As the construction and general operation of this class of lanterns is so well known, and as my invention pertains rather to the fitting of the globe and the mode of mounting and swinging

the latter, it will not be necessary to encumber this specification with a description of all the lamp.

The globe-cap B, as heretofore, is fitted to slide on a vertical tube, *a*, which is a dependent portion of the top of the main frame A. The tube *a* is encircled by a cylindrical portion, *b*, of the globe-cap B, to which is attached an angle-arm, *d*³, of the sliding globe-frame D. Thus the globe-cap B slides up and down on the vertical tube *a* when the sliding globe-frame is raised or lowered. The angle-arm *d*³ of the sliding globe-frame terminates in a ring which fits around the cylindrical portion *b* of the globe-cap and is secured in place by a ring, *b*¹, which is fastened to the cylindrical portion *b*, preferably by soldering.

The globe-frame D, constructed as here shown, has essentially the side wire, *d*, which extends from its base or globe-seat along the inclined sides of the main frame A to a point a short distance below the globe-cap, thus leaving sufficient space between the globe-cap and the top of the globe for a purpose well known. When constructed with reference to durability, economy, and strength, the main body of this frame can be constructed of a single piece of wire, each end being turned at an angle and bent into semicircular form, as at the bottom *d*¹ and at the top *d*², with such additional bends to suit the conformation of the lantern. The side wire, *d*, of the globe-frame D is arranged parallel with the inner side of one of the side tubes and passes through staples *f f*, extending inward from the inner side of said tube. By this arrangement not only is the globe-frame freely allowed lateral swinging movement, but at the same time a vertical movement, for the purposes hereinafter stated. The wire base *d*¹ thus formed is soldered to the bottom of the usual perforated plate, E, which is thereby incorporated with the sliding globe-frame D and serves as a seat for the globe C. A small ring, *e*, is soldered or otherwise secured to the plate E to facilitate the manipulation of the sliding globe-frame. The upper portion, *d*², of the sliding globe-frame has hinged to it a semicircular piece of spring-wire, *d*⁴, and together they form a ring which fits snugly around the upper portion of the globe C and firmly retains it in place in the

lantern. This semicircular piece of spring-wire, which, as stated, is hinged to the upper portion, d^2 , of the sliding globe-frame, has formed in it near the points of juncture, loops d^5 , which add resilience to the wire and make a perfect clamping device that is capable of securely holding the top of the globe C. Intermediate of the ends of this semicircular piece of spring-wire is formed a thumb-piece, d^6 , by means of which, when it is desired to remove the globe from the lantern, the spring-wire portion is raised.

To keep the sliding globe-frame in an elevated position, I provide a bracket, F, which is preferably composed of wire and secured at the ends to both the main frame and to the base of the lantern, respectively; but it is obvious that it may be attached either to the base or to the main frame without departing from the spirit of my invention. Indeed, any form of support will answer the same purpose, whether made of wire or any other material. After the sliding globe-frame has been raised or lowered, in order to keep it in the adjusted position a spring-catch, F', is provided, which is also made of wire, and preferably soldered to the base of the lantern.

In constructing my lantern I prefer to employ one continuous piece of wire in making the bracket F and the spring-catch F', as shown in the drawings; but this is not essential, as the bracket may be made of one piece and secured to the main frame and the spring-catch of another piece and fixed to the base.

When it is desired to trim and light the lamp, the operator takes hold of the small ring e of the perforated plate with the forefinger and presses back the spring-catch with his thumb and releases the sliding globe-frame, which is then raised and swung to one side, so that it may rest upon the bracket F. Free access may then be had to the burner for trimming, lighting, and other purposes. If it be desired to remove the globe for cleaning or for the insertion of a new one, the spring-wire portion d^4 or clamp is raised by means of the thumb-piece, and the globe may then readily be removed. In order to lower the frame, it is only necessary to swing it back over the lamp, and it will descend by gravity and be engaged automatically by the spring-catch.

The essential features of my invention reside in a vertically-movable and laterally-

swinging globe-frame, by means of which the latter may be raised vertically a limited distance to clear the burner and the approximate parts, and then be swung laterally to one side, leaving free access to the burner, as stated.

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

1. In a tubular lantern, the combination of the main frame and the sliding globe-frame capable of vertical and lateral movement and composed of a side wire extending along the sides of the main frame and having each end turned at an angle and bent into semicircular form, a globe-seat secured to the lower end, and a semicircular piece of spring-wire secured to the other end, substantially as and for the purpose described.

2. The combination of the main frame and a sliding globe-frame composed of the side wire having its ends of semicircular form bent at an angle, a globe-seat secured to the lower end, and a semicircular piece of spring metal hinged to the upper end and forming with the upper end a clamping device, said semicircular piece of spring metal being adapted to be swung up and down to release or clasp the globe, substantially as described.

3. The combination of the main frame and a sliding globe-frame provided at its lower end with a globe-seat and at its upper end with a clamping device composed of a portion of the sliding globe-frame bent into semicircular form and a semicircular piece of spring metal hinged to said semicircular portion of the sliding globe-frame and adapted to be swung up and down to release or clasp the globe, substantially as described.

4. In a tubular lantern, the combination of the main frame, the sliding globe-frame capable of lateral and vertical movement, and a bracket and spring-catch composed of a single piece of wire and adapted to hold the globe in an elevated or depressed position, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILBUR W. HUTCHINS.

Witnesses:

HOMER THRESHER,
H. C. CLEVELAND.