L. W. LEARY.

Portable and Stationary Lantern.

No. 85,014. Patented Dec. 15, 1868.

Fig: 1.

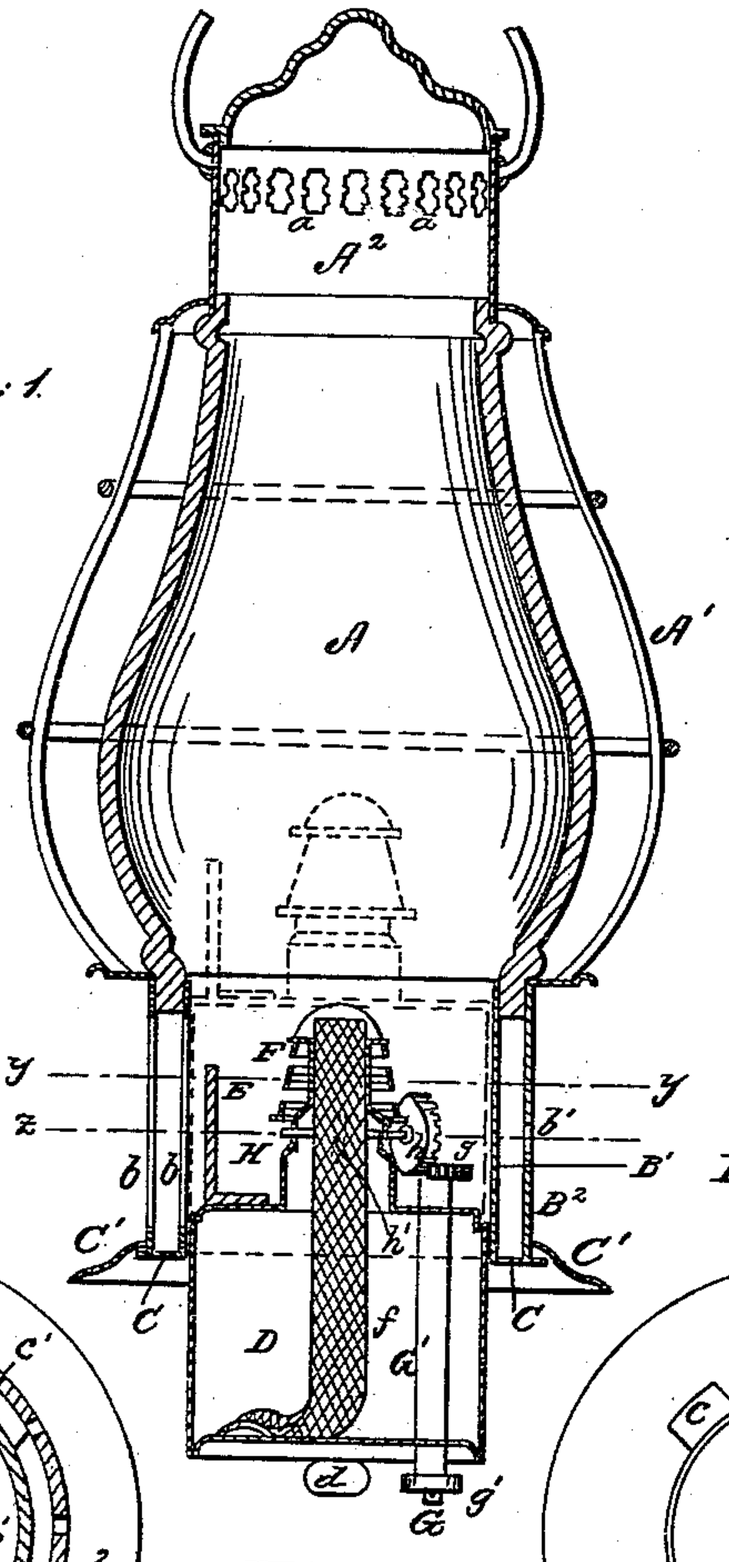


Fig: 3.

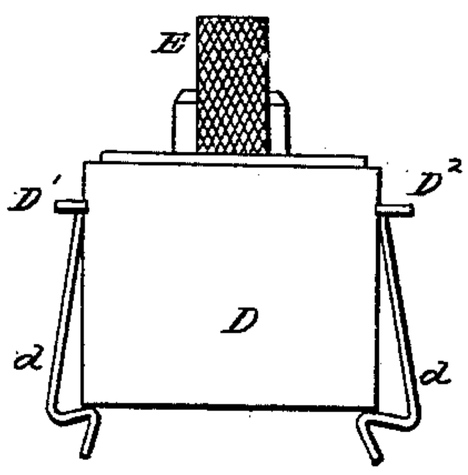


Fig: 4.

Fig: 5.

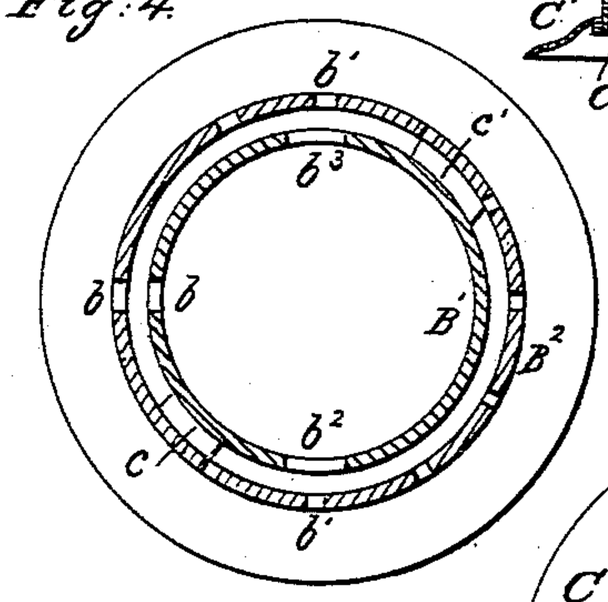
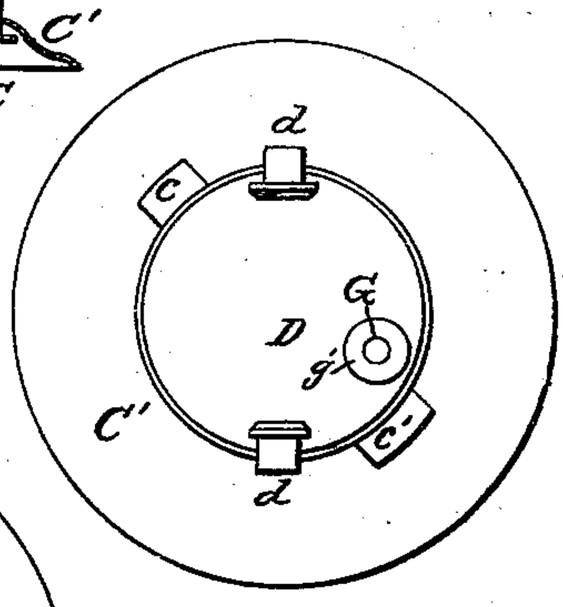
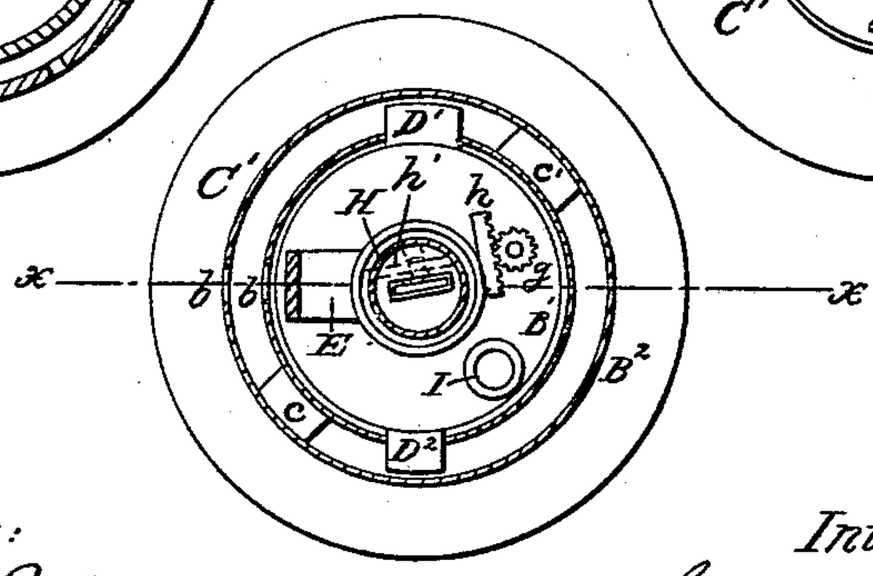


Fig: 2.





Witnesses:
J. Snowden Bell.
Charles Herron.

Inventor:
Leml W Leary
By D Edmonds & Co his attys.

United States Patent Office.

LEMUEL W. LEARY, OF NORFOLK, VIRGINIA.

Letters Patent No. 85,014, *dated December* 15, 1868.

IMPROVEMENT IN PORTABLE AND STATIONARY LANTERNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LEMUEL W. LEARY, of Norfolk, in the county of Norfolk, and in the State of Virginia, have invented new and useful Improvements in Portable and Stationary Lanterns; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which make part of this specification, and in which—

Figure 1 represents a vertical section of my improved lantern, at the line *x x* of fig. 2;

Figure 2, a horizontal section of the same, at the line *y y* of fig. 1;

Figure 3, a view, in elevation, of the lamp detached;

Figure 4, a horizontal section of my improved lantern, with the lamp removed, at the line *z z* of fig. 1; and

Figure 5, a bottom view of the same, with the lamp in the position shown by fig. 1.

The object of my invention is to provide a lantern, either portable or stationary, which can be lighted with ease and certainty in the open air, in situations exposed to the wind and rain, as on the deck of a vessel, the platform or roof of a railroad-car in motion, &c.; to which end,

My improvements consist in attaching the globe or glass portion of the lantern to a hollow cylindrical metallic base, which is made double, and within which the lamp is placed, being held in position by springs, and inserted, lowered, and removed, as hereafter described.

A vertical friction or igniting-plate is secured upon the top of the lamp, in convenient proximity to the wick, and a narrow vertical slot is cut in the inner and outer casings of the base, within which the lamp is so placed that, when lowered, the friction-plate will be opposite the slots, through which a match can be inserted, ignited upon the plate, and the lamp lighted without removing it from the lantern, or involving any risk of the match or lamp being extinguished by rain or currents of air, thus enabling the lantern to be used in many situations where one of ordinary construction would be very inconvenient, if not altogether useless.

In the accompanying drawings, which show a convenient arrangement of parts for carrying out the objects of my invention—

A represents the globe of the lantern, and A^1 the guard or cage which surrounds it.

The globe A is secured to a cylindrical sheet-metal base, composed of the inner and outer sections B^1 B^2, united at their lower ends by an annular plate or flange, C.

Narrow vertical slots *b b* are cut in line with each other, in the sections B^1 B^2, and the outer section, B^2, is likewise perforated with a series of holes, b^1, for supplying air to the lamp.

Vertical slots b^2 b^3 are made in the inner section, B^1, and openings *c c'* in the flange C, one of which, *c'*, is larger than the other.

D represents a cylindrical metallic lamp, which fits within the inner section, B^1, and F, its burner, which may be of any approved construction, and adapted to burning any kind of oil preferred.

The black lines in fig. 1 show the lamp in position to be lighted, and the red lines its position after being lighted, and when in use.

A vertical friction-plate, E, of steel or hardened iron, and serrated or roughened upon its outer face, is secured upon the top of the lamp D, its top being slightly below that of the burner F, and contiguous thereto.

f represents the wick, which is raised and lowered by means of a spur-wheel, *h'*, upon a horizontal shaft, H, carrying a crown-wheel, *h*, upon one of the ends, which is rotated by means of a pinion, *g*, upon the upper end of a shaft, G, which passes through a tube, G', extending through and soldered to the lamp, and which carries a milled head, *g'*, upon its lower end.

By this means the wick may be raised and lowered without removing the lamp from its position in the base of the lantern, or opening any door or orifice therein.

Horizontal lugs or projections D^1 D^2, of which D^1 is the larger, are secured upon the periphery of the lamp, near its top, and immediately beneath them the plate-springs *d d* are secured to the lamp, by their upper ends.

An annular flange or foot, C', serves as a rest for the lantern when set down, and draught is maintained through the openings *a* in the cap A^2.

I represents a screw-cap covering an opening through which the lamp is filled.

The operation of my improved lantern is as follows:

The lamp D, being properly filled and trimmed, is inserted into the inner section, B^1, by causing its lugs D^1 D^2 to enter the openings *c' c* of the flange C, and turning it until they enter the vertical slots b^3 b^2, when the lamp is pushed up to the position shown by the red lines in fig. 1, and the springs *d* pressing outward, their lower ends rest upon the flange C, and hold the lamp securely in position.

Owing to the lugs D^1 D^2 being of different sizes, it is impossible to put in the lamp in a wrong position.

When the lamp is to be lighted, the lower ends of the springs *d* are pressed inward, and the lamp drawn down to the position shown by the black lines of fig. 1, when the lugs D^1 D^2 rest upon the flange C, and hold it.

These lugs being at right angles to the friction-plate E, the latter will be directly opposite the slots *b b*, through which a match is inserted, ignited upon the plate, and the lamp lighted, both operations being performed inside the base, and without risk of interference from rain or currents of air.

The lamp is then pushed up to the position shown by the red lines, and is ready for use.

My lantern is of cheap and simple construction, and from the certainty with which it can be lighted in the open air, and in any kind of weather, it will be found

to be of great practical value to brakemen upon railroads, for use on decks of steamers or sailing-vessels, and numerous similar cases. Moreover, the improvement is readily applicable to street-lamps or other stationary lights.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent, is—

1. Lighting the match and wick within the base, without removing the same, or opening any door, substantially as described.

2. The vertical friction-plate E, secured upon the top of the lamp, in combination with the sections B^1 B^2, slots *b b*, and burner F, or an ordinary wick-tube, as set forth.

3. The lugs D^1 D^2, and springs *d d*, in combination with the flange C, openings *c c'*, sections B^1 B^2, and slots b^2 b^3, the whole constructed and operating substantially as and for the purposes described.

The above specification signed by me, this 20th day of October, 1868.

LEM'L W. LEARY.

Witnesses:

JOS. T. POWERS,

CHARLES HERRON.