S. S. NEWTON.

LAMP.

No. 187,409. Patented Feb. 13, 1877.

Fig. 1.

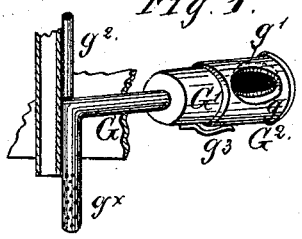


Fig. 2.

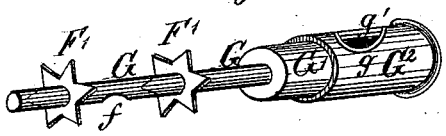
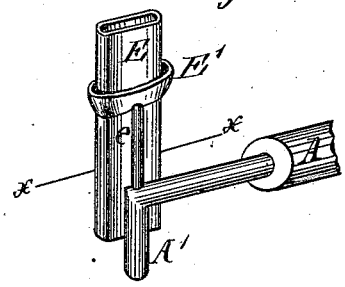


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

STEPHEN S. NEWTON, OF BINGHAMTON, NEW YORK.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **187,409**, dated February 13, 1877; application filed December 6, 1876.

To all whom it may concern:

Be it known that I, STEPHEN S. NEWTON, of Binghamton, in the county of Broome and in the State of New York, have invented certain new and useful Improvements in Lamps; and hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Figure 1 is a perspective view, partly in section, of one part of my invention. Fig. 2 shows a modification of the filling-tube. Fig. 3 represents another part of the invention.

The object of the first part of my invention is to provide a convenient, safe, and expeditious method of filling a kerosene-oil lamp without removing the burner; and to this end this part of the invention consists in combining, with the burner, a filling-tube, provided at its inner end with numerous ports, or a wire-gauze strainer, which will permit a free passage of oil, but will prevent the ignition of the oil or gas within the lamp, should flame be communicated to the oil or vapor within the filling-tube.

The invention further consists of certain details of construction, which will be fully explained.

In Fig. 1, G G^1 is the filling-tube, the inner end having several perforations, $g^\times$. The outer end of the tube has a port, g^1, and is surrounded by a sleeve, G^2, which is provided with a corresponding port or opening, g. g^3 is a spring friction-stop, secured to the tube, with its free end resting upon the sleeve G^2. g^2 is a gas-escape tube, connecting at its lower end with the perforated end of the filling-tube, its upper open end passing up by the side of the wick-tube.

It will, of course, be understood that the end G^1 of the filling-tube extends out beyond the burner to a distance convenient for filling, and it will be readily seen that after the oil has been poured in through port g^1, this port can be closed by rotating the sleeve G^2, and that the sleeve will be held in place by the spring friction-stop g^3.

In Fig. 2, I have shown the shaft G on which the star-wheels F′ F′ are mounted, made hollow, with one end enlarged, and provided with a rotating sleeve, G^2, and ports $g\,g^1$, through which to pour oil, the inner port f opening into a tube provided at its lower end with perforations, substantially as shown at $g^\times$, Fig. 1, and in substantially the same position relative to the wick-tube.

By turning the tubular shaft G around until ports g^1 are up, the shaft may be used as a filling-tube, as is tube G G^1.

In Fig. 3 the filling-tube is represented by A A. E is the wick-tube, and E′ is a drip-cup, or drip-collar, to collect the oil, which would otherwise flow down the wick-tube to the upper plate of the burner, located at about the line $x\,x$, and would pass from there down the outside of the lamp. e is a small tube, serving to conduct oil from the drip-cup E′ to the body of the lamp through the filling-tube, and also as a gas-escape.

In Figs. 1, 2, and 3, I have left out such parts of the burner as are not needed to illustrate my invention.

I do not claim, broadly, the employment of a filling-tube projecting from the lamp and having a strainer, but my construction possesses some advantages over those heretofore used. By arranging it horizontally I am enabled to employ it to actuate the star-wheels, and by using an external rotating sleeve to close the filling-port I am enabled to use a tube of small diameter where it passes through the collar, and of large size where the oil is poured in, which is desirable in a horizontal tube.

Having thus described my invention, what I claim is—

1. In a lamp a horizontally-projecting filling-tube, provided with an enlarged outer end, and also provided at its inner end with numerous ports to prevent the ignition of gas through the filling-tube, substantially as set forth.

2. In a lamp the combination, with the projecting filling-tube, provided with an enlarged outer end, of a sleeve rotating on the outside of said tube, which serves to close the oil-opening in the tubes, substantially as set forth.

3. In a lamp, the combination of a projecting filling-tube, the sleeve G^2, and spring friction-stop, g^3, substantially as set forth.

4. In a lamp, the combination of the gas-escape tube g^2, with the filling-tube G G^1, substantially as set forth.

5. The combination of the wick-tube E, the drip-cup E′, drip-tube *e*, and the filling-tube A A′, substantially as set forth.

In testimony that I claim the foregoing I hereunto set my hand this 15th day of November, 1876.

STEPHEN S. NEWTON.

Witnesses:

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