

Lamp Burner.

Patented Aug. 13, 1861.



Inventor:
Carlton Newman

UNITED STATES PATENT OFFICE.

CARLTON NEWMAN, OF PITTSBURG, PENNSYLVANIA.

LAMP.

Specification forming part of Letters Patent No. 33,047, dated August 13, 1861; Reissued April 4, 1876, Nos. 7029 and 7030.

To all whom it may concern:

Be it known that I, CARLTON NEWMAN, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Lamps; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the annexed drawing, forming part of this specification, in which—

Figure 1 is a perspective representation of my improved lamp. Fig. 2 represents the same lamp with the crown piece or top of the burner frame turned up on its hinge so as to expose the wick tube, and the supply tube for the purpose of lighting the lamp, trimming the wick, or replenishing the oil.

In both of the figures like letters of reference denote similar parts.

My improvement is designed to obviate a serious inconvenience in the use of lamps for burning coal or carbon oil, which owing to the large amount of carbon they contain require the use of a cone or cap placed over the wick tube and wick, and a chimney so arranged as to cause a free supply of air below the cone or cap. In order to light the lamp, trim the wick, or replenish the oil, it is necessary to remove the glass chimney, and the cone, which, when the lamp is in use, is a great inconvenience, as the chimney and cone become very much heated; and even if this is not the case the necessity for the frequent removal of the glass chimneys causes them to be often broken. Another objection to the use of these lamps is, that if it is desired to light them at night it is difficult and troublesome to remove the chimney and cone in the dark. All these obstacles to the convenient use of the coal oil lamp I have overcome by combining in the construction of my lamp the following features, viz: uniting the crown or top piece of the burner with the cone, or constructing these two parts in one piece, inserting a tube for filling the lamp with oil inside the burner frame and under the cone and making the crown piece separate from the perforated ring below the crown, and connecting them with a hinge or pivot and spring catch, so that by turning the crown piece over on its hinge, the chimney and cone are easily and at once removed, exposing the wick tube and wick, and the aperture for refilling the lamp with oil.

In the drawing Fig. 1 represents a lamp for burning coal or carbon oil. The perforated burning frame *a* with its flat wick holder *b*, and cone or cap *c*, the crown piece *d* (in which the crown is placed), and the glass chimney *e*, may be all of any ordinary construction, excepting that the crown-piece *d* and perforated burning frame *a*, which are usually made in one piece, I make separate, and the cone which is usually separate, I attach to the crown piece so as to form a single part with it. The top of the perforated burner frame *a* where it comes in contact with the base of the crown piece *d* is furnished with a bead or flange *f* so as to give a bearing for the crown piece. The crown piece and cone I connect with the burner frame *a* by a hinge *h* so constructed as to allow the crown piece to be turned over to one side, far enough to be out of the way in trimming the lamp and yet not so far as to allow the glass chimney to come in contact with the oil receptacle *g* or other part of the lamp, as it might thus be liable to break. On the opposite side of the burner frame *a* is a spring catch *i* which when the crown piece is shut down, passes over the bead *k* on the rim of the crown piece, and thus securely holds it in place; a thumb-piece *l* on the spring, serving to depress the spring, and leave the crown piece *d* free to be turned over when desired.

It will be seen by reference to Fig. 2, that when the crown piece and cone are turned over, the chimney, being secured by a screw or spring in the usual manner, is likewise removed out of the way and thus the lamp may be lighted, a new wick inserted, or the wick trimmed without any inconvenience. If preferred to have the cone or cap detached from the other part of the burner as in the ordinary construction of lamps, this may be done by hinging the crown piece *d* to the burner frame *a* as described, and placing the cone loose either inside the crown piece, or under it inside the burner frame *a*. But the method described of making the cone in one piece with the crown, simplifies the construction of the lamp. Within the circumference of the burner frame *a*, as thus constructed, I introduce a tube *m* which opens into the oil chamber of the lamp, and is furnished with a plug or screw cap *n*. It is placed to one side of the wick tube and on that side which is farthest from the hinge of the crown piece,

so as to be more easily reached with the mouth of the oil can. Through this filling tube *m*, the lamp may be replenished with oil at pleasure, and as the filling tube is under the cone or cap *c* it is covered and concealed by it, but may be exposed by turning back the hinged crown piece and cone in the manner before described. This is a great convenience in filling lamps as it avoids the necessity of unscrewing the burner frame from the lamp and removing the wick when filling the lamp with oil, and as used by me, in combination with the hinged chimney holder, it enables the lamp to be refilled with oil without removing the chimney entirely from the burner frame; so that by means of this combination of devices the lamp may be replenished, or lighted, or the wick trimmed without having to displace the glass chimney, thus effecting a saving of time, being much more convenient, and avoiding the frequent breakage of chimneys consequent on the necessity of removing them every time any of those operations have to be performed.

I know that tubes fitted with plugs or screw caps have been used in oil lamps be-

fore, but my improvement consists in placing this filling tube inside of the burner frame, in combination with the separable hinged crown piece by means of which it can be reached without removing the glass chimney and cone.

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

The use in burners for coal or carbon oil lamps of a supply tube for the oil, placed within the circumference of the burner frame, and under the cone or cap, in combination with a burner frame having a chimney holder hinged or pivoted to the burner frame, for the purpose of enabling the lamp to be replenished without either unscrewing the burner frame from its socket or removing the glass chimney from the lamp, substantially as described.

In testimony whereof, the said CARLTON NEWMAN has hereunto set his hand.

CARLTON NEWMAN.

Witnesses:

M. G. CUSHING,
M. McBRIDE.