

J. W. HOFFMAN.

Safety Lamp.

No. 7,303.

Patented April 23, 1850.

Fig. 1.

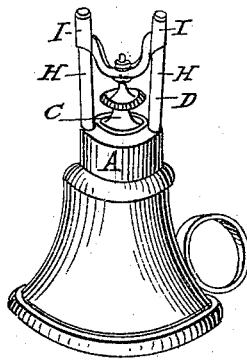


Fig. 2.

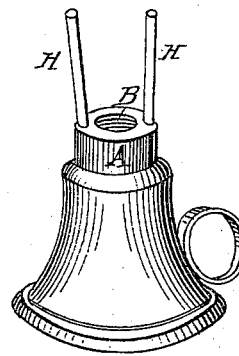
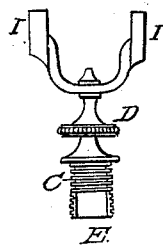


Fig. 3.



UNITED STATES PATENT OFFICE.

JOHN W. HOFFMAN, OF SOUTHWARK, PENNSYLVANIA.

SAFETY-LAMP.

Specification of Letters Patent No. 7,303, dated April 23, 1850.

To all whom it may concern:

Be it known that I, JOHN W. HOFFMAN, of the district of Southwark, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Lamp for Burning Fluid, Camphene, or Spirit-Gas, known as "Bratton's" Self-Extinguishing Safety-Lamp; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the lamp complete; Fig. 2 a perspective view of the lamp with the screw and sliding tubes removed, and Fig. 3 a perspective view of the screw and sliding tubes removed from the lamp.

Letter A in Figs. 1 and 2, is the top, or that part of the top which is secured to the lamp. C in Figs. 1 and 3 is a screw.

D, Figs. 1 and 3, a rim turned on the shaft of the screw C; H, H are the wick-tubes, Figs. 1 and 2.

I, I, Figs. 1 and 3 are slides fitting around the wick-tubes; E in Fig. 3, is an opening in the center and one side of the screw, for the purpose of pouring the liquid into the lamp.

B in Fig. 2, is a hole in the center of the top of the lamp, with a female screw cut in it, in which the screw C works.

In the construction of my improvement, the lamp-top is made of any of the known metals and of the usual form, with these exceptions; first, the wick tubes are set into the top near its outer edge; second, in the center of the top and between the two wick-tubes, an opening or hole is made, as shown by B, Fig. 2, the same being sufficiently large to admit the lamp being filled through it. Third, the tubes H, H, and the top A, are never removed from the main-lamp, but are securely cemented or fastened to it in a durable manner. The screw C working neatly and truly in the female screw in B (Fig. 2,) prevents the escape of gas; the opening E in the screw C Fig. 3, extends about one-half of the distance of the thread of the screw, commencing as shown in Fig. 3, at the bottom or lower end. Near the top of the shaft C a small shoulder is made

which forms a bearing for the coupling of the slides I, I, to rest upon; the tubes or slides are fastened together by a coupling as shown in Figs. 1 and 3; in the center of this coupling and between the slides, is a hole, through which the top end of the shaft C goes, and secured by a bur on the top, or by being riveted in such a manner as to suffer the screw to turn, while the slides only move up or down.

In order to prepare my lamp for use, take the screw C entirely out, slip the slides over the top of the wick tubes, then put in the wick, (which will require to be renewed but seldom,) which may be done in the following manner, take a thread and let it down the wick-tube, until it falls below the top of the lamp, then take a pin or splint, and draw the end of the thread through the screw-hole B, fasten the wick to it, and draw it up through the tube, next fill the lamp, and then replace the sides and screw; screw down tightly, and the lamp is ready to be lighted. In order to merely fill the lamp, it is not required to take the screw C entirely out of B, it being only necessary to unscrew the same, until the top of the opening E is sufficiently raised above the top of the lamp, to afford space to insert the mouth or spout of the can, containing the fluid, camphene, &c.

My improvement may be applied to lamps of any shape or form, made of any of the known metals, or composition of metals, or glass, used for the burning of fluid, camphene, spirit-gas, or any other liquid which is of an explosive nature.

Having thus fully described my invention, I wish it to be distinctly understood, that I do not claim as my invention, the wick-tubes H, H; neither do I claim the slides I, I, nor the top A.

What I do claim as my invention and desire to secure by Letters Patent, is—

The sliding tubes I, I, in combination with the screw C, the said screw C being furnished with the opening E through which to fill the lamp, substantially in the manner and for the purpose described.

J. W. HOFFMAN.

Witnesses:

C. ISARD,

EZRA E. BRATTON.