D. McCARTY.

LAMPS FOR BURNING HYDROCARBON OILS, &c.

No. 189,246. Patented April 3, 1877.

Fig. 1.

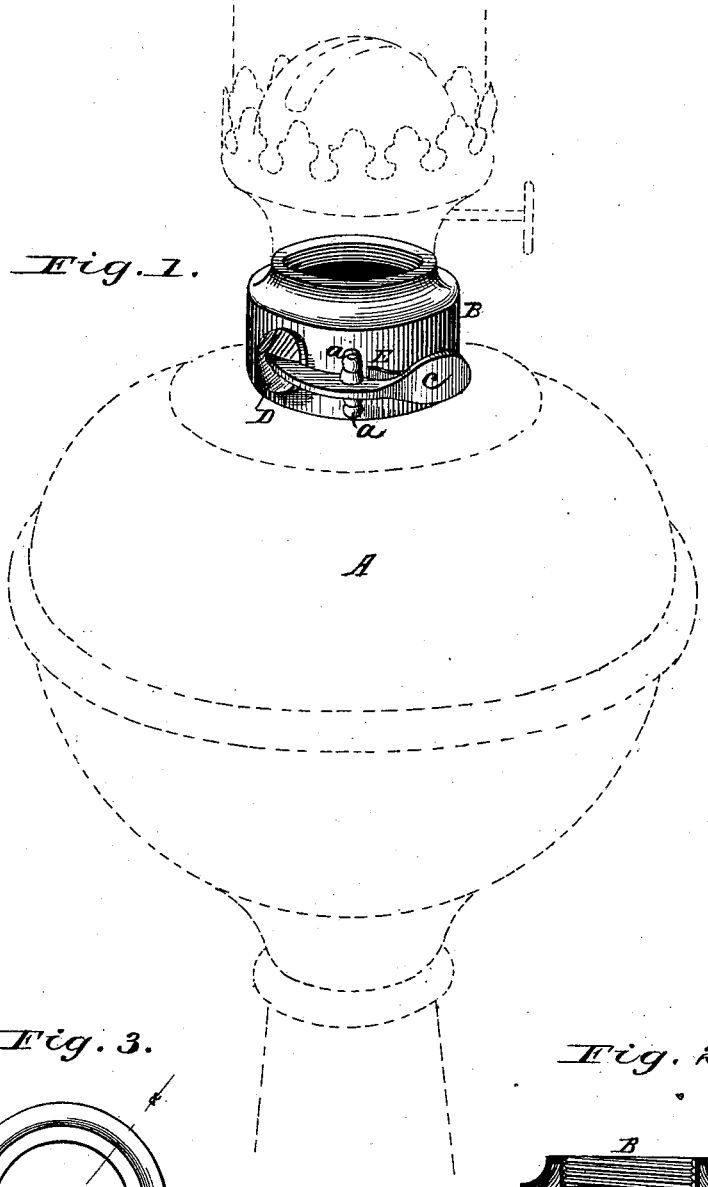


Fig. 3.

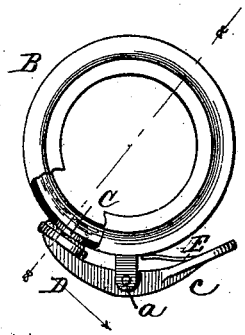
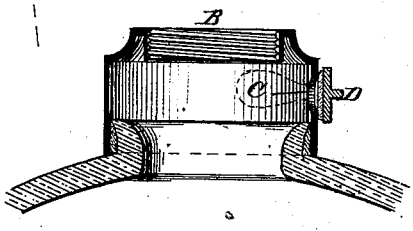


Fig. 2.



Attest;
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UNITED STATES PATENT OFFICE.

DAVID McCARTY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF A PART OF HIS RIGHT TO ELWOOD A. COLLINS AND JOHN H. LEWARS, OF SAME PLACE.

IMPROVEMENT IN LAMPS FOR BURNING HYDROCARBON OILS, &c.

Specification forming part of Letters Patent No. **189,246**, dated April 3, 1877; application filed January 30, 1877.

To all whom it may concern:

Be it known that I, DAVID McCARTY, of Philadelphia, Pennsylvania, have invented certain Improvements in Safety-Valves for Lamps, of which the following is a specification:

This invention relates to that class of lamps in which the collar to which the burner is attached is provided with an opening covered by a pivoted valve, for the purpose of admitting the escape of explosive gases, when the same become charged in the lamp-fount, thereby preventing the breakage of the lamp, and the danger attendant upon the explosion of the gases.

My invention consists in providing the periphery of the lamp-collar with an opening, and combining therewith a thumb-valve, pivoted longitudinally on, and parallel with, the lamp-collar, and providing said thumb-valve with a spring, arranged between the rear end of the valve and the lamp-collar, in such manner that the rapid escape of the gases, in case of explosion, is permitted by the same opening the valve, the latter being automatically closed by the spring; and, moreover, the valve is provided with a rearwardly-projecting thumb-piece, by which the valve can be operated by hand, all of which will be fully hereinafter described.

In the accompanying drawings, Figure 1 represents a perspective view of a lamp-collar having my improved valve, and applied to a lamp. Fig. 2 is a central sectional view; and Fig. 3, a top view, partly in section, showing the application of the valve.

The letter A represents the body of the lamp, which may be constructed of glass, or any other material ordinarily used for such purposes. B represents the ordinary annular collar, which is cemented to the lamp-fount, and is provided with a screw-thread for the application of the burner, as ordinarily. The periphery of this collar is provided with an aperture, C, and also with two lugs, *a a*, near the same, between which is pivoted the safety-valve, said valve, when in position, lying longitudinally along, and parallel with, the lamp-collar. The forward end, *b*, of the valve is provided with the packing D, forming the valve proper, and it sits immediately over the opening, while the rearwardly-projecting end *c* forms a thumb-piece, by which the valve can be operated by hand; but in order to keep the valve shut, and automatically close the same when open, I arrange between the collar C and the thumb-piece *c* a spring, E, of any preferred construction.

It will be seen from the foregoing description that the ready escape of gases, in case of an explosion, is permitted; that the valve can be conveniently operated by the thumb; and, moreover, the spring is a positive means of automatically closing the valve when opened, and retains the valve in position on its seat in a yielding manner, which is not the case where a simple gravitating-valve is pivoted at its top edge to the lamp-collar, although such construction will, of course, permit the escape of gases in case of an explosion.

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

The combination, with a lamp-collar having an opening in its periphery, of a valve, D, pivoted between the lugs *a a*, longitudinally of, and parallel with, the vertical wall of the said collar, and provided with a rearwardly-projecting thumb-piece, *c*, and a spring, E, secured between said thumb-piece and the lamp-collar, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

DAVID McCARTY.

Witnesses:

WM. P. BECKER,

THOM. K. WAUDSLELER.