

J. Richter,
Lubricator.

No. 110,868.

Patented Jan. 10. 1871.

Fig. 1

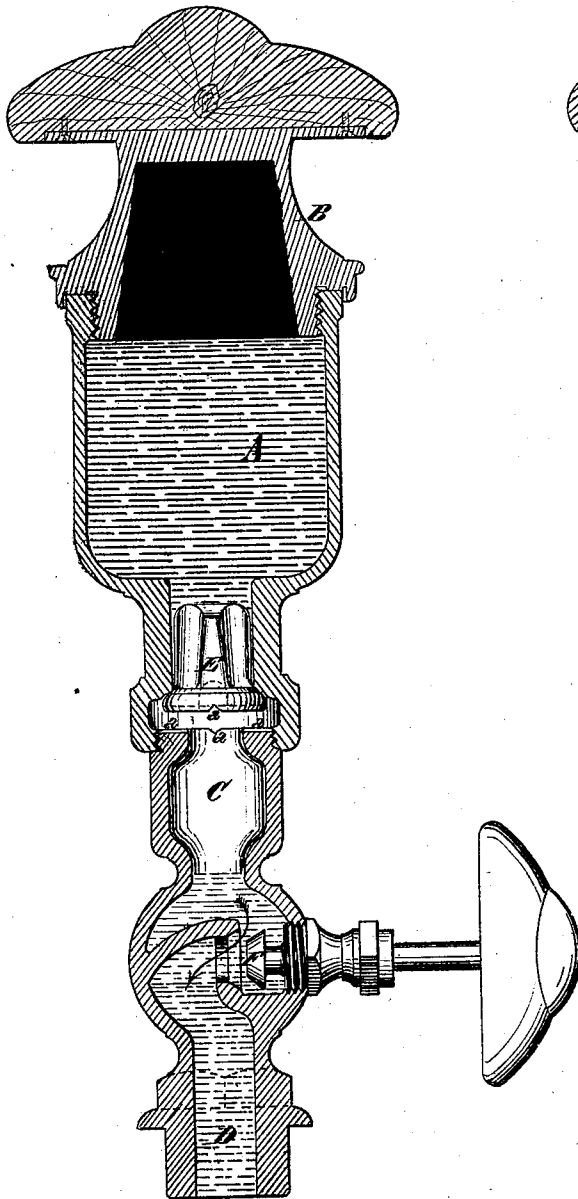
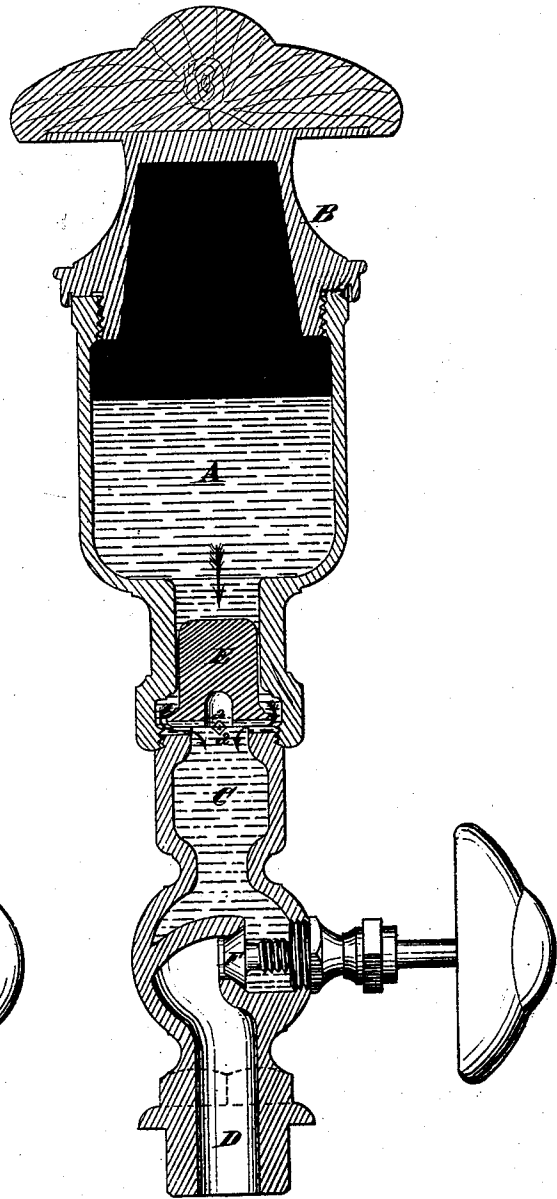


Fig. 2



Attest

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JOSEPH RICHTER, OF CINCINNATI, OHIO.

Letters Patent No. 110,868, dated January 10, 1871.

IMPROVEMENT IN LUBRICATORS.

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, JOSEPH RICHTER, of Cincinnati, Hamilton county, State of Ohio, have invented a certain new and useful Improvement in Tallow Lubricators; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification.

Nature and Objects of Invention.

My invention relates to the class of lubricators which is designed to deliver a small and determinate quantity at each opening of the cock or valve which governs the exit-pipe, and consists, in connection with a chamber, which receives the determinate quantity and the cock or valve aforesaid, of a gravitating-valve located between the charging-chamber and tallow-receiver or cup, which opens by gravity when the discharging-valve below the chamber is closed, and closes by pressure of steam when the discharging-valve is open.

The object of my invention is a simple lubricator adapted for cheap manufacture, in which springs and ports are avoided.

Description of the Accompanying Drawing.

Figure 1 is a vertical section of my lubricator in the position for discharging the tallow from the charging-chamber.

Figure 2 is a vertical section in the position wherein the discharging-valve is closed and the charging-chamber is receiving tallow.

General Description.

A is the tallow-cup or receiver, fitted with the customary cap B.

C is a chamber, which is designed to receive from cup A a limited quantity of tallow and discharge the same into the exit-tube D.

This chamber is governed for supply and discharge by the valves E and F respectively. The valve F is, as shown, of the common globe-valve description, but an ordinary taper faucet or cock of any description

may be used at this point. The valve E is constructed with wings which slide within the neck of the cup A. It seats, in the manner shown, upward against the bottom of the cap A, and rests, when it has fallen to the open position, upon the top of the chamber C.

In order that the tallow may pass into the chamber C when the valve E is open, notches *a* are cut in the lower face of the valve and at the top of chamber C. The valve may, however, be supported so as to leave an opening below into the chamber in many ways, and the notches *a* be thus dispensed with.

Operation.

Fig. 2 represents the position of the parts when the steam is shut off by valve F from the steam-cylinder or other apparatus to which the lubricator may be attached. The valve E is then open and the tallow is permitted to fill the chamber C by flowing past the wings of the valve E and the notches *a*. When it is necessary to discharge the quantity contained in chamber C the valve F is opened. The steam then bubbles through the tallow, and the pressure of the same instantly closes the valve E, the tallow at the same time being permitted to flow freely into the exit D.

The action of this lubricator is so rapid, positive, and efficient that, if the cap B is omitted, no steam escapes from it. The use of the cap is, however, preferred for cleanliness, appearance, &c., and for the reason that it serves to retain the heat imparted by the steam and conduction to the tallow.

Claim.

I claim—

In the described connection with the chamber C and the valve F, the valve E, when the same is constructed to open by gravity and close by the pressure of steam, as and for the purpose explained.

In testimony of which invention I hereunto set my hand.

JOSEPH RICHTER.

Witnesses:

I. L. WARTMANN,
E. F. LAYMAN.