

E. McCOY.
Lubricators.

No. 139,407.

Patented May 27, 1873.

fig. 1.

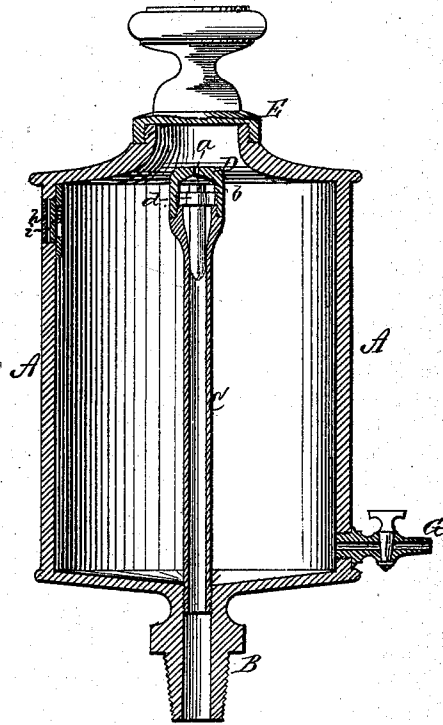
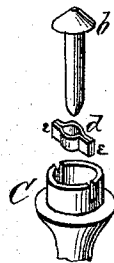


fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

ELIJAH MCCOY, OF YPSILANTI, MICH., ASSIGNOR OF ONE-HALF HIS RIGHT
TO SULLIVAN M. CUTCHEON AND EDWD. P. ALLEN, OF SAME PLACE.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. 139,407, dated May 27, 1873; application filed
April 2, 1873.

To all whom it may concern:

Be it known that I, ELIJAH MCCOY, of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Lubricators; and I do 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, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a steam-cylinder lubricator, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a vertical section of my entire lubricator, and Fig. 2 is a detached view of the valve.

A represents the cup for oil, provided at its lower end with a screw-stem, B, to attach the lubricator where wanted. C represents a tube screwed into the upper end of the hollow stem B, and extending up into the cup A to conduct oil to the cylinder. On the upper end of the tube C is a screw-cap, D, which forms a regulator, to regulate the amount of oil to pass down, and is provided with an aperture, *a*, for the passage of the oil. Within the upper end of the tube C is the valve *b*, the stem of which passes through and is guided by a bridge, *d*. E represents the screw-head, which can readily be removed for filling the cup; and G is a faucet to draw off water.

When steam is on it presses the valve *b* closely against the regulator D, closing the aperture *a* in the same, and prevents the escape of oil. When steam is exhausted the valve *b* drops to the bridge *d*, and allows oil to escape through the tube C to the steam-chest, because neither the valve nor the bridge fill the tube completely, except when the valve is pressed against the regulator D by the steam.

This lubricator oils chiefly when steam is exhausted, which is the time when oil is most needed; but if it is desired to provide for oil when the engine is working, it can readily be accomplished by simply making a channel or groove in the valve.

In the side of the cup A, near the top, is an opening of suitable size, in which are placed two pieces of glass, *h h*, separated so as to leave a chamber, *i*, between them. By this means it can readily be seen when the oil-cup needs filling; and by leaving the chamber *i* between the two glass pieces *h h*, these are prevented from breaking from sudden change of temperature. This may be aided by circulation of air between the glasses through two or more holes on opposite sides of the opening.

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

1. The slotted central tube C, in combination with the bridge *d* having central opening and wings *e e* fitting in the slotted tube, substantially as and for the purpose specified.

2. The central slotted tube C and bridge *d*, constructed as described, in combination with the valve *b*, substantially as and for the purpose herein described.

3. The central slotted tube C and bridge *d*, in combination with the valve *b* and screw-cap D with opening *a*, all constructed and arranged as and for the purpose set forth.

4. The chamber *i*, formed near the top of the cup A by the two pieces of glass *h h* placed in such position as to form the chamber *i* between, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ELIJAH MCCOY.

Witnesses:

S. M. CUTCHEON,
J. BICKFORD.