

W. MORRIS.
Lubricators.

No. 138,341.

Patented April 29, 1873.

Fig. 1.

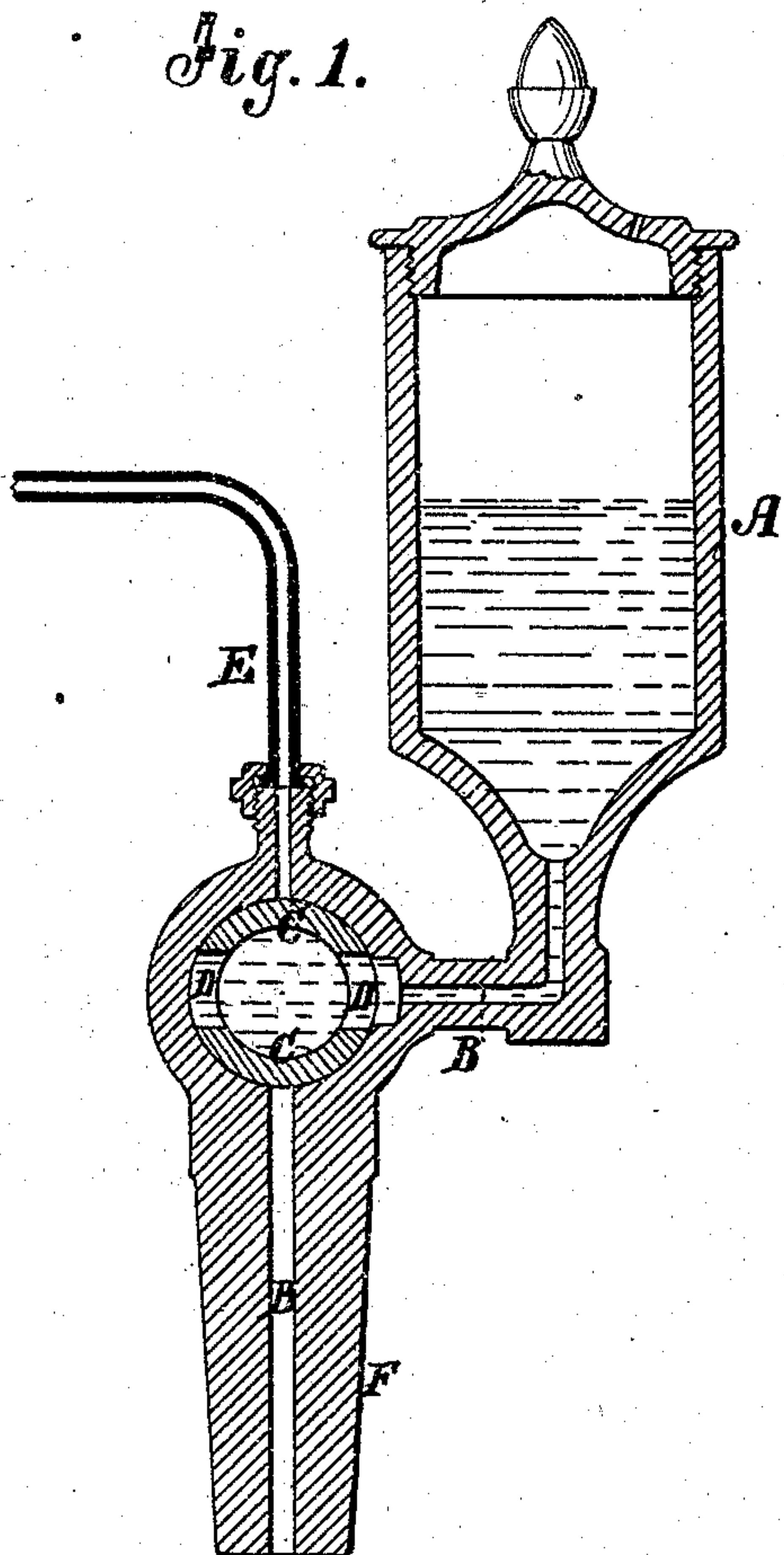
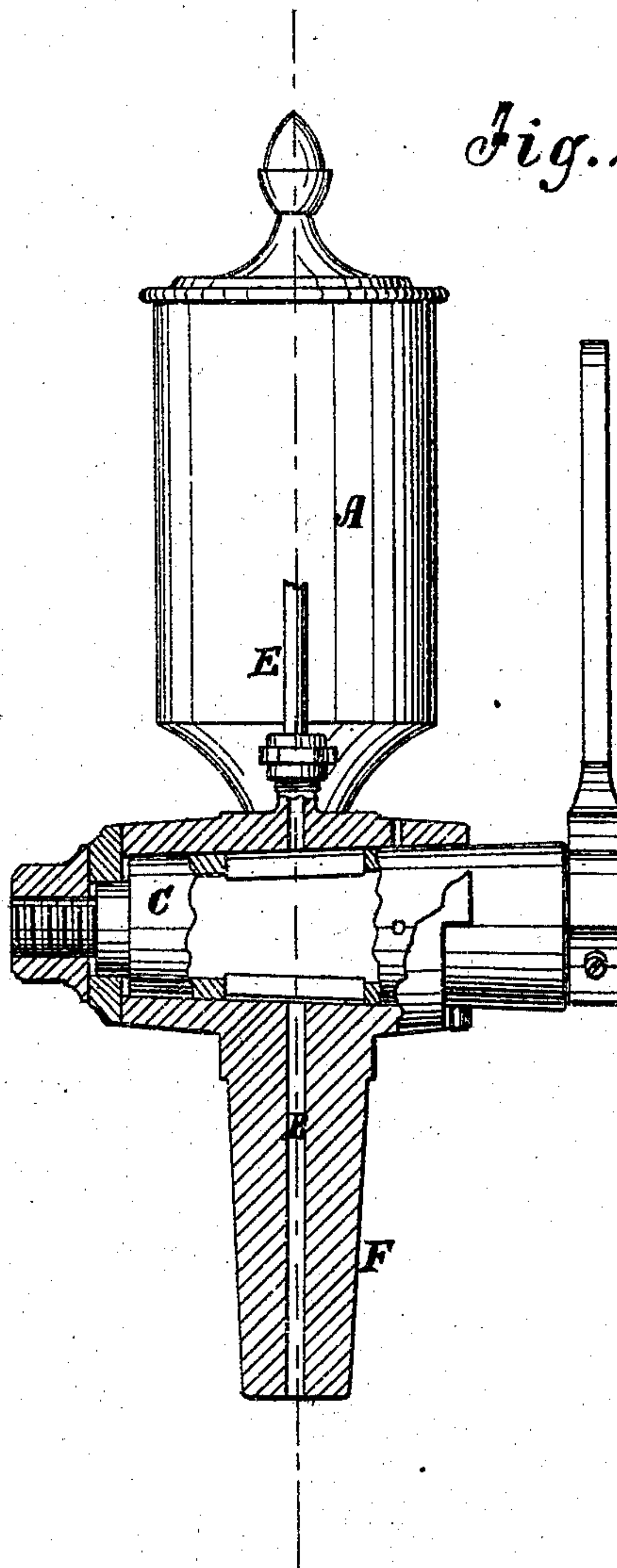


Fig. 2.



Witnesses:

A Bennekenhof.
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UNITED STATES PATENT OFFICE.

WILLIAM MORRIS, OF DAYTON, OHIO.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. **138,341**, dated April 29, 1873; application filed April 5, 1873.

To all whom it may concern:

Be it known that I, WILLIAM MORRIS, of Dayton, in the county of Montgomery and State of Ohio, have invented a new and Improved Lubricator, of which the following is a specification:

My invention consists of a hollow stop-cock in the passage from the oil-chamber to the steam chest or pipe, into which a quantity of oil is received when the cock is turned so as to shut the passage to the steam chest or pipe and open the passage from the oil-chamber, and from which it is discharged by steam pressure when the cock is turned to open the passage to the steam chest or pipe and shut the passage to the oil-chamber, the steam for expelling the oil from the cock being admitted to it by a small pipe connecting it with the steam-pipe so that a current will pass through the cock and back into the steam-pipe or into the steam-chest, according to which the lubricator is attached, and carry the oil in the hollow plug along with it.

Figure 1 is a sectional elevation of my improved lubricator taken on the line *xx* of Fig. 2. Fig. 2 is partly a side elevation and partly a section, the section being taken on a plane at right angles to that of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the oil-holder; B, the passage therefrom to the steam-chest or the steam-pipe, into which it is desired to discharge the oil. C is a large hollow stop-cock, arranged in this passage to open or close it, at a point where it makes a right-angled turn. There is a large passage, D, through the cock, which together with the hollow space receives a considerable charge of oil with which to lubricate the en-

gine. E is a small steam-pipe connecting the cock at the side opposite to the part leading from it to the engine with the steam-pipe between the throttle-valve and the boiler.

To lubricate the engine, the cock is first turned to the position represented in Fig. 1, which opens the chamber of the cock to the oil-chamber and shuts off both passages to the steam-pipe, or the one to the steam-pipe and the other to the steam-chest, and allows the cock-chamber to fill; then the cock is turned so that it closes the passage to the oil-chamber and opens communication through it from pipe E to the part of B which enters the steam-chest, by which the steam will pass through and carry the oil with it.

If the pipe E connects with the steam-pipe between the throttle-valve and the boiler, and the nozzle F connects with it at the other side or to the steam-chest, a current of steam will be caused by the greater pressure at the side next to the boiler or where pipe E connects. There will also be a current through it if nozzle F is connected to the steam-pipe between the throttle-valve and boiler, which I propose to do for oiling the valve, simply by the current of steam in the steam-pipe.

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

The combination of the oil-holder A, pipe B, nozzle F, hollow cock C, and the pipe E, combined and arranged with the steam-pipe and steam-chest, or the pipe only of a steam-engine, substantially in the manner described.

WILLIAM MORRIS.

Witnesses:

JOHN H. PATTERSON,
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