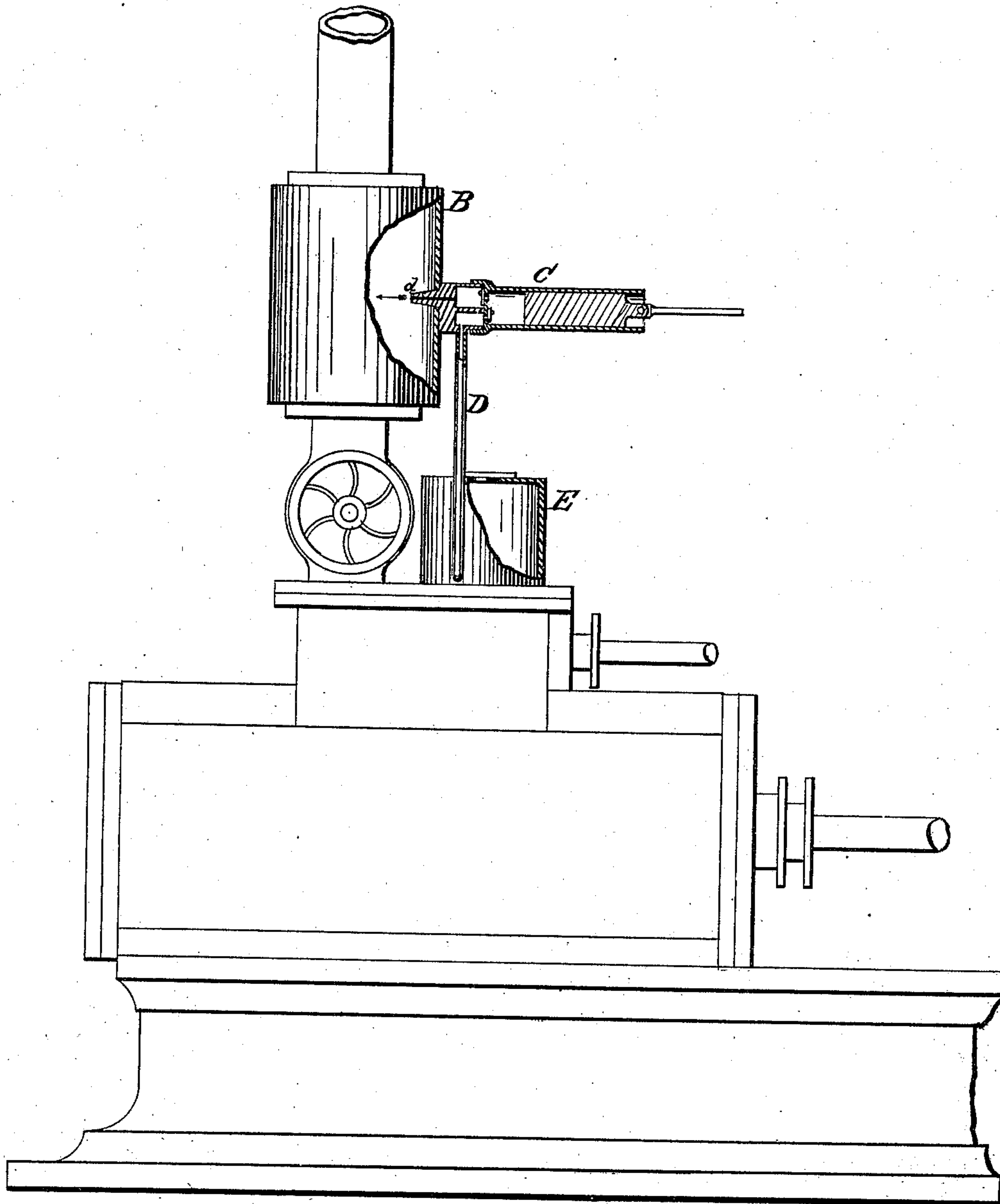


JACOB FOSTER.

Improvement in Steam Engine Lubricators.

No. 124,946.

Patented March 26, 1872.



Witnesses.
Isaac Townsend
Isaac R. Clarkford.

Inventor.
Jacob Foster

124,946

UNITED STATES PATENT OFFICE.

JACOB FOSTER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN STEAM-ENGINE LUBRICATORS.

Specification forming part of Letters Patent No. 124,946, dated March 26, 1872.

Specification describing a certain Improvement in Steam-Engine Lubricators, invented by JACOB FOSTER, of the city and county of Philadelphia and State of Pennsylvania.

My invention consists of a simple device for injecting a constant stream of tallow or other lubricant, in a liquid state, into the steam entering the steam-chest and cylinder; the object of which is to keep the valve and piston thoroughly and constantly lubricated, thus dispensing with the care and attention required in lubricating these parts at intervals.

The difficulty heretofore experienced where the piston is lubricated at intervals through the ordinary tallow-cup is, that the large quantity of tallow or other material supplied at one time is almost directly blown out with the exhaust steam, thus in a short space of time leaving the piston and cylinder comparatively dry.

The accompanying drawing represents a side elevation, partially in section, of my invention as applied to a steam-engine.

B is a small cylinder connected with the steam-pipe leading to the valve-chest, and into which the melted tallow or other lubricant is injected. The liquid becomes thoroughly mixed with the steam within this cylinder, and passes down with it into the valve-chest and also into

the steam-cylinder, effectually lubricating the valve and piston. C is a small pump of any suitable construction, which is attached to the side of the cylinder B, and is provided with an induction-pipe, D, which leads to a vessel, E, containing the tallow. The receiver E is placed in any convenient position on the valve-chest or cylinder, where heat enough can be obtained to keep the tallow in a liquid state.

The melted tallow is drawn from the vessel E and delivered through the orifice *d* in the end of the pump in a small and constant stream sufficient to keep the valve and piston properly lubricated. If desired, the tallow or other lubricant may be injected by means of the pump directly into the steam-pipe, valve-chest, or cylinder.

I claim as my invention—

In combination with the cylinder and valve-chest of a steam-engine, the cylinder B, pump C, tube D, and vessel E, operating substantially in the manner and for the purpose specified.

JACOB FOSTER.

Witnesses:

ISAAC TOWNSEND,
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