

W. R. SHAW.

Improvement in Lubricators.

No. 131,570.

Patented Sep. 24, 1872.

Fig. 1.

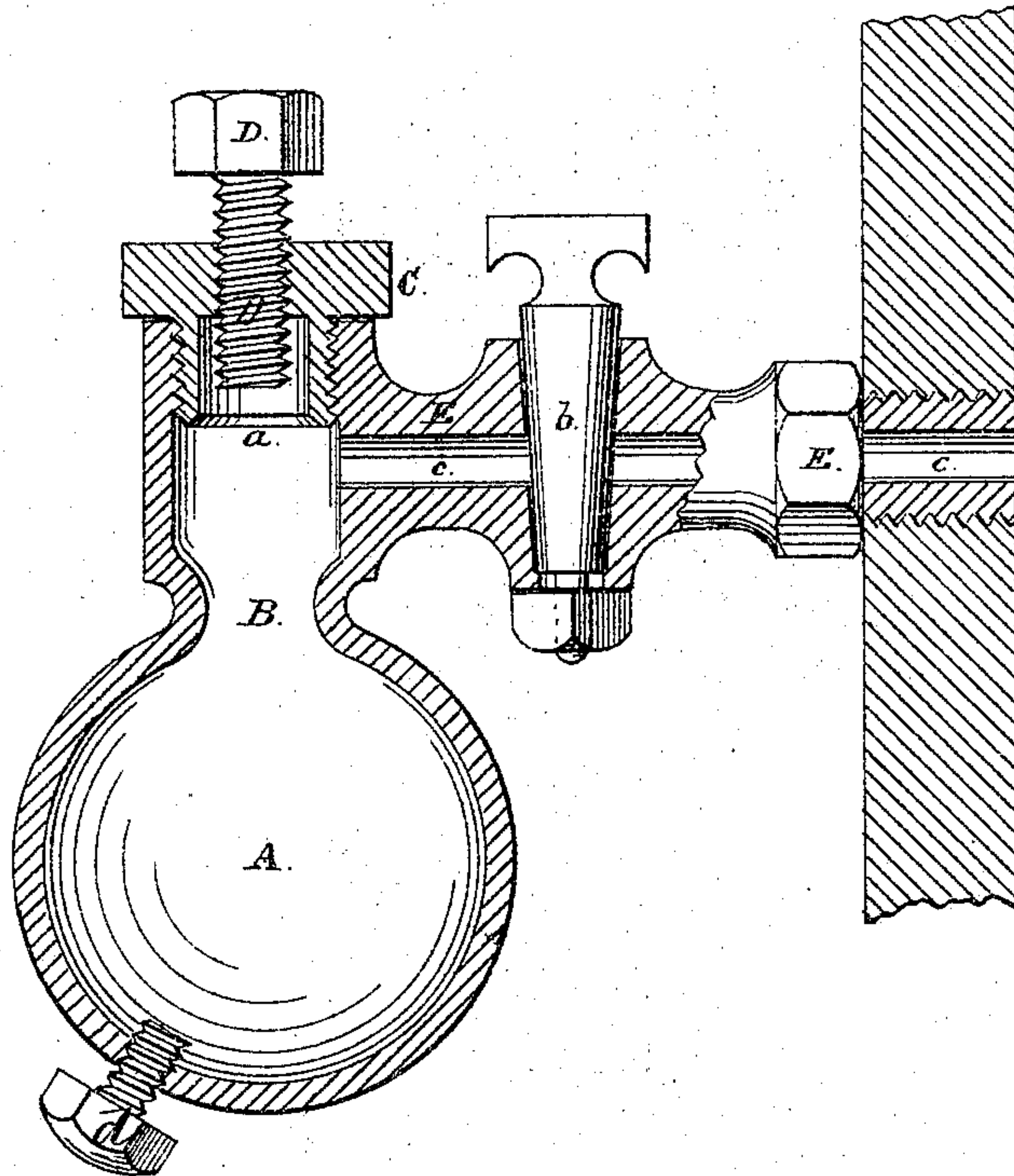
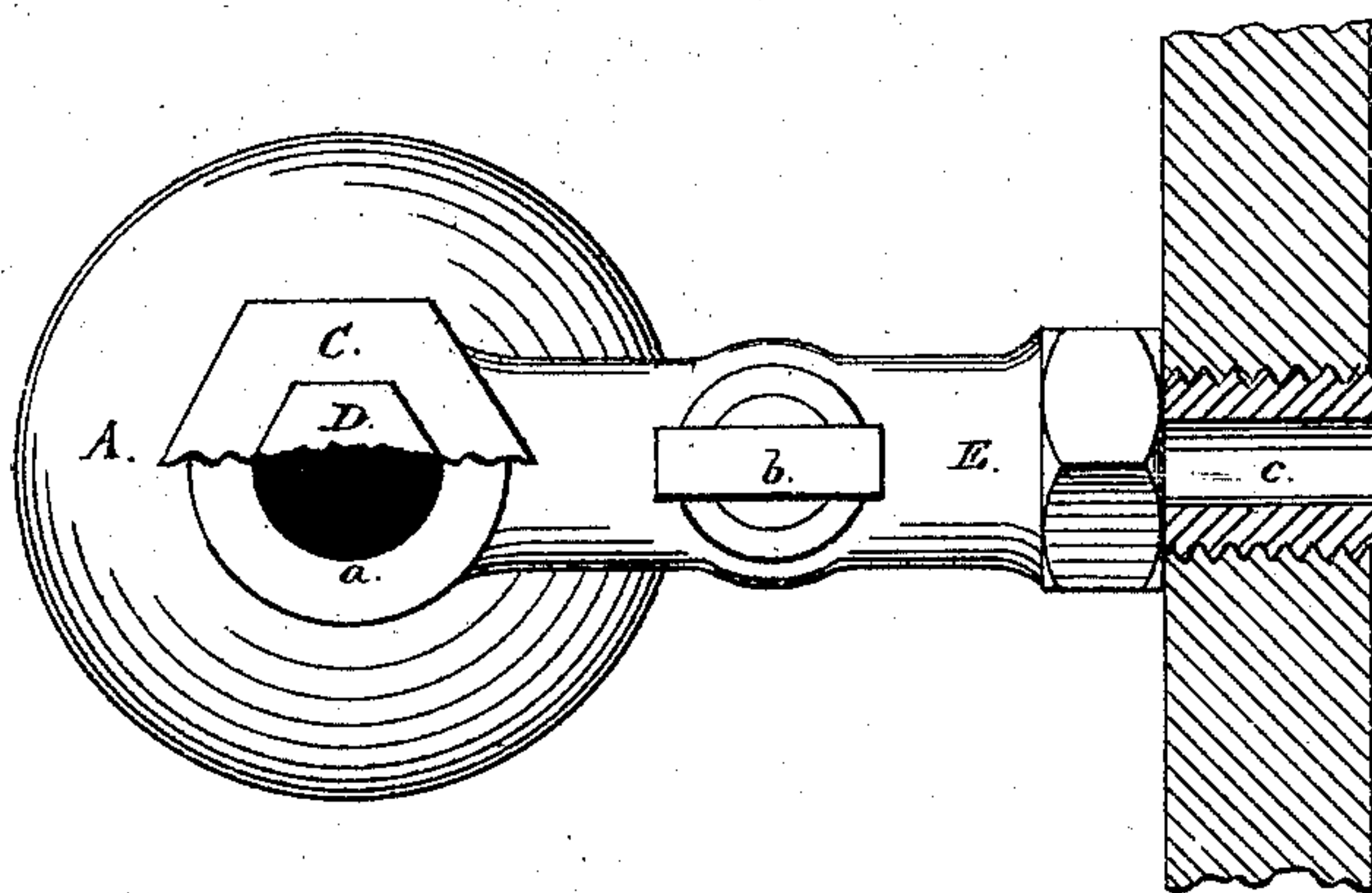


Fig. 2.



Witnesses

H. W. Dopp.

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Wm R. Shaw

UNITED STATES PATENT OFFICE.

WILLIAM R. SHAW, OF BUFFALO, NEW YORK, ASSIGNOR TO HIMSELF,
PETER EBY, AND ANNA WILSON, OF SAME PLACE.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. 131,570, dated September 24, 1872.

To all whom it may concern:

Be it known that I, WILLIAM R. SHAW, of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Lubricators, of which the following is a specification:

The nature of my invention consists, first, in the manner in which the lubricant is stored and carried to the places of lubrication; second, in the simplicity of construction, all parts being of easy access and control; third, in the economy and certainty of its action.

I refer to the accompanying drawing, with letters of reference marked thereon, which makes part of this specification and explains my invention more fully.

The drawing represents my automatic continuous lubricator in a partial section and in a plan view.

A is a globe or chamber having a neck, B, which is fitted with a screw-head, C. Said screw-head C is provided with a screw-plug, D, fitting screw-head C, and leaving a cavity, *a*, in the bottom of same, as shown. Attached to the side of neck B is a projection or shank, E, which screws into a steam-chest, pump, or other part where lubrication is to be applied. Said shank E is provided with a stop-cock, *b*, to stop lubrication whenever desirable; it is, however, not a necessary part in the construction of my lubricator, but a mere matter of convenience. *c* is a channel running throughout the entire length of shank E, terminating in cavity *a* of neck B, as plainly shown. *d* is a plug for drawing off the condensed water and residue of the lubricant absorbed.

The operation and action of the above-described apparatus are as follows: The screw-head C is taken out and globe A filled with oil, tallow, or like; the plug D is then set to regulate the flow of oil. The cavity *a*, by being made larger or smaller, causes the oil to flow in a larger or smaller quantity, as here-

inafter described. The head C is then inserted and the stop-cock *b* opened, which allows the steam to pass into the neck B, and, condensing there, continually falls down upon the oil, and of course sinks to the bottom, thus displacing its equal in oil, which causes the oil to rise and gradually flow through channel *c* into the steam-chest, where it becomes heated by steam, converting it into a vapory state, and, commingling with the steam, is carried to all the parts to be lubricated.

The steam passing through the channel *c* into the cavity of neck B and cavity *a* does not interfere with the flow of oil through channel *c*, because steam, being of much less density, by enlarging the cavity *a* a greater volume of steam is condensed, because the volume and radiating surface of cavity *a* is increased, and in consequence a larger and continual flow of oil is obtained.

Claims.

Having thus fully described my invention, I desire to secure by Letters Patent—

1. In combination with the head C, with or without its screw-thread, the regulating-screw D, recess or cavity *a*, neck B, and globe or chamber A, substantially as set forth.

2. The globe or chamber A, plug *d* or its equivalent, neck B, head C, and recess or cavity *a*, in combination with a channel, *c*, shank or projection E, and plug *b*, as specified.

3. The regulating-screw D or its equivalent for controlling the volume of steam to be condensed by varying the size of cavity *a* and the flow of oil through the channel *c*, in combination with channel *c*, to operate as described, and for the use and purpose set forth.

WILLIAM R. SHAW.

Witnesses:

H. WM. DOPP,
MICHAEL J. STARK.