

J. W. REED & M. V. OSBORN.
Lubricators.

No. 154,418.

Patented Aug. 25, 1874.

Fig. 1.

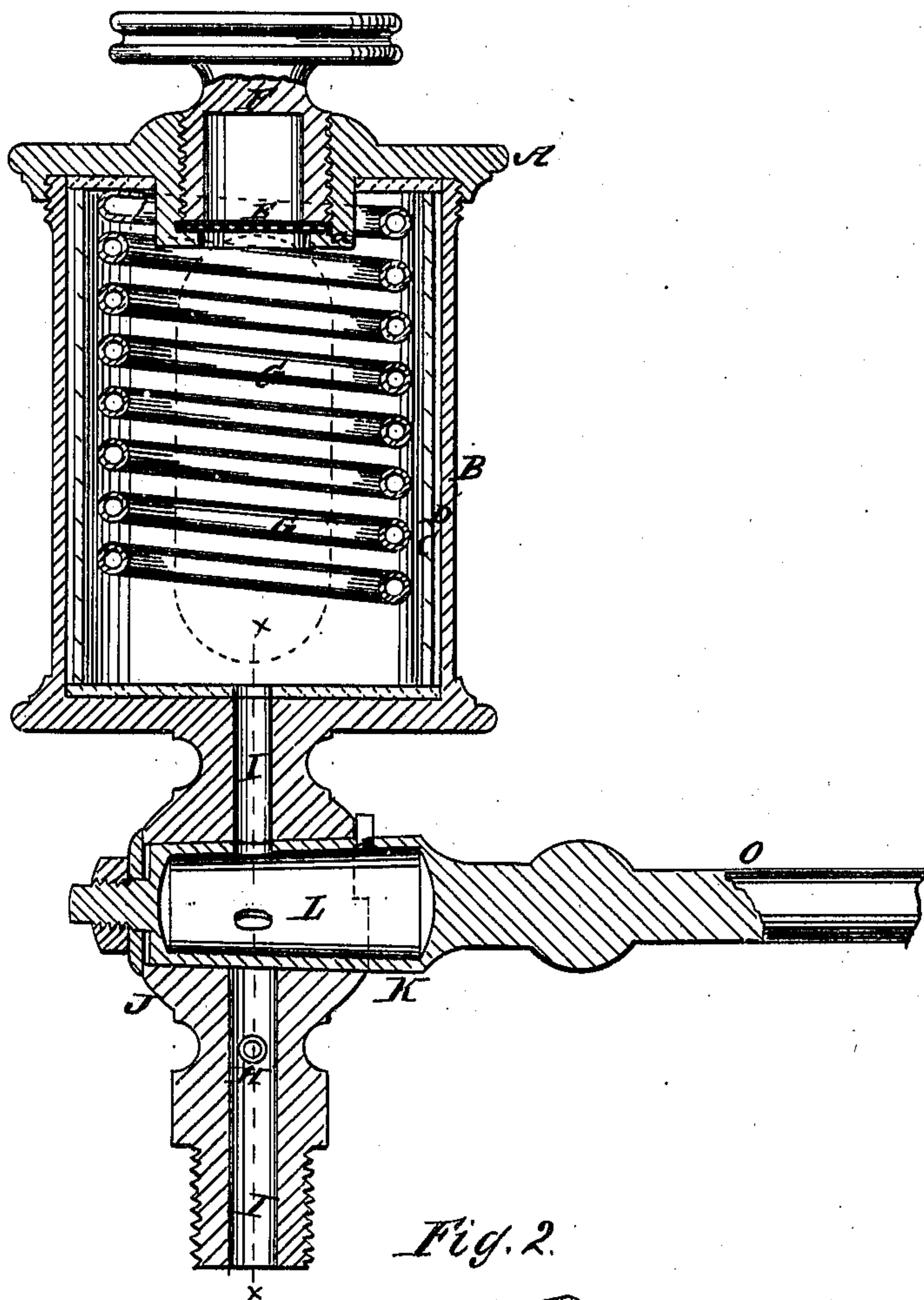
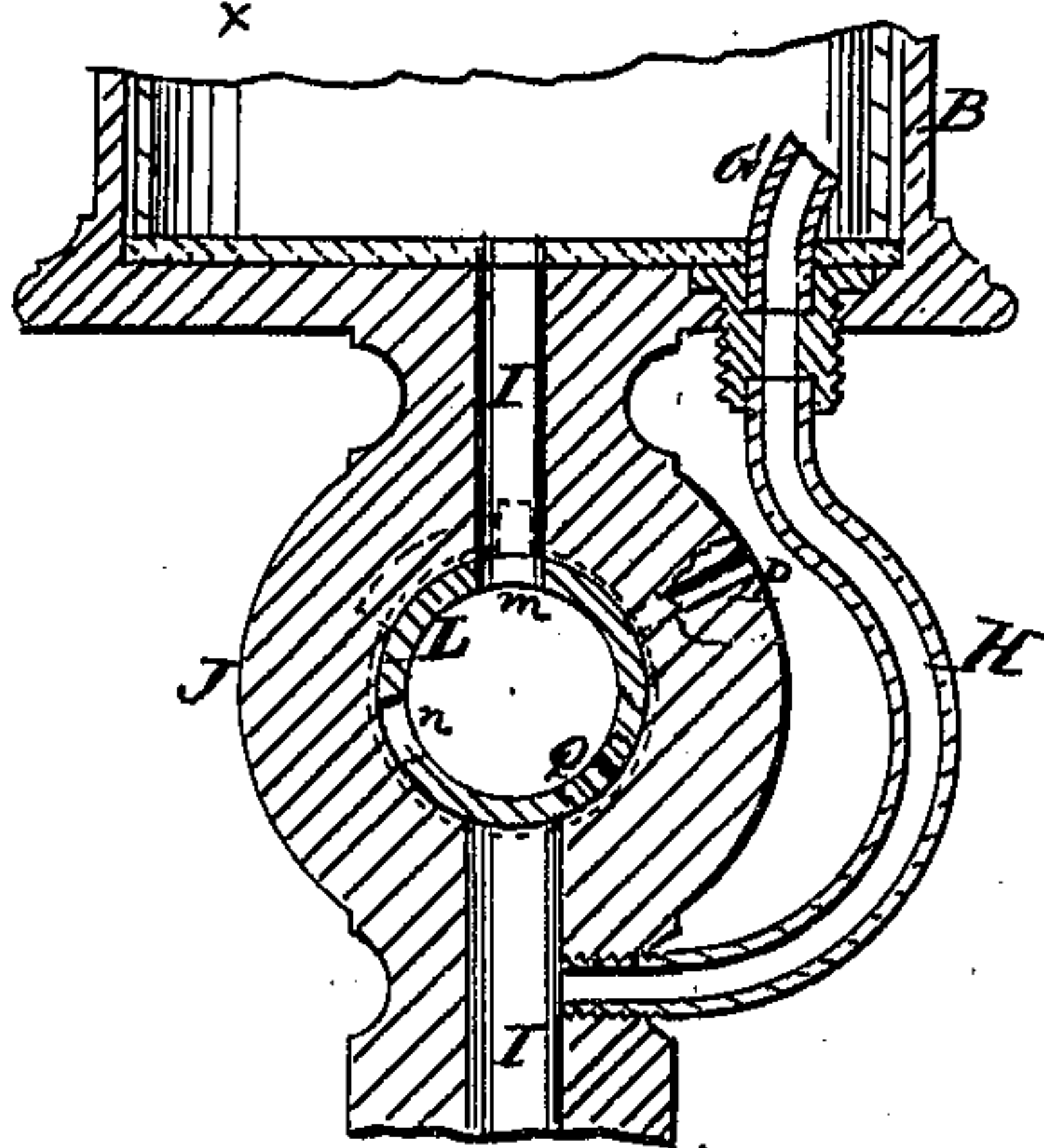


Fig. 2.



WITNESSES:

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JOSEPH W. REED AND MARTIN V. OSBORN, OF KALAMAZOO, MICHIGAN.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. 154,418, dated August 25, 1874; application filed June 20, 1874.

To all whom it may concern:

Be it known that we, JOSEPH W. REED and MARTIN V. OSBORN, of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented a new and useful Improvement in Lubricators, of which the following is a specification:

The invention relates to providing air-openings in connection with the discharge-pipe and regulating-cock or plug; and also to a non-heat-conducting substance interposed between the case or cylinder and its lining as hereinafter set forth.

In the drawing Figure 1 is a vertical section of the lubricator complete, showing the construction. Fig. 2 is a section of Fig. 1 on the line *xx*, showing more plainly the ports in the globe, and the mode of conveying steam to the coil in the reservoir.

Similar letters of reference indicate corresponding parts.

The case A of the lubricator has a glass lining, C, with an intermediate non-heat-conducting substance, D. It is also provided with a screw-plug, F, in the top, and a strainer, E, like other lubricators heretofore patented. The oil may be warmed by admitting steam to the coil G, from the pipe H I below the globe J. Said globe is bored transversely to receive the plug K, which is formed on the shaft or stem. This plug is cast with a cavity, L, sufficiently large to contain oil to lubricate the steam-cylinder once. This plug has two ports, one for receiving the oil into the cavity L, marked *m*,

and one for discharging it from the cavity L, marked *n*. When the port *m* is open, as seen in Fig. 2, the port *n* is closed, and vice versa, as the plug is turned. On the shank O of this plug is an arm to which is attached a rod, which extends to the cab, or within reach of the engineer, so that he may, without leaving the cab, lubricate the cylinders. P is an air-passage through the globe, and Q is an air-passage through the plug. When the plug has been turned for lubricating, the oil descends into the cylinder by its own gravity as the plug is turned to open the ports, and bring the air-passages P and Q to register with each other to admit air to the cavity. Steam is discharged into the coil G from the point I.

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

1. The combination with the pipe H I, globe J, and hollow plug K, having supply and discharge orifices, as specified, of the air-openings P Q, as shown and described, to operate as set forth.

2. The combination with the case A, of the concentric lining C, and intermediate non-heat-conducting substance, as shown and described.

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Witnesses:

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