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Fig:1.

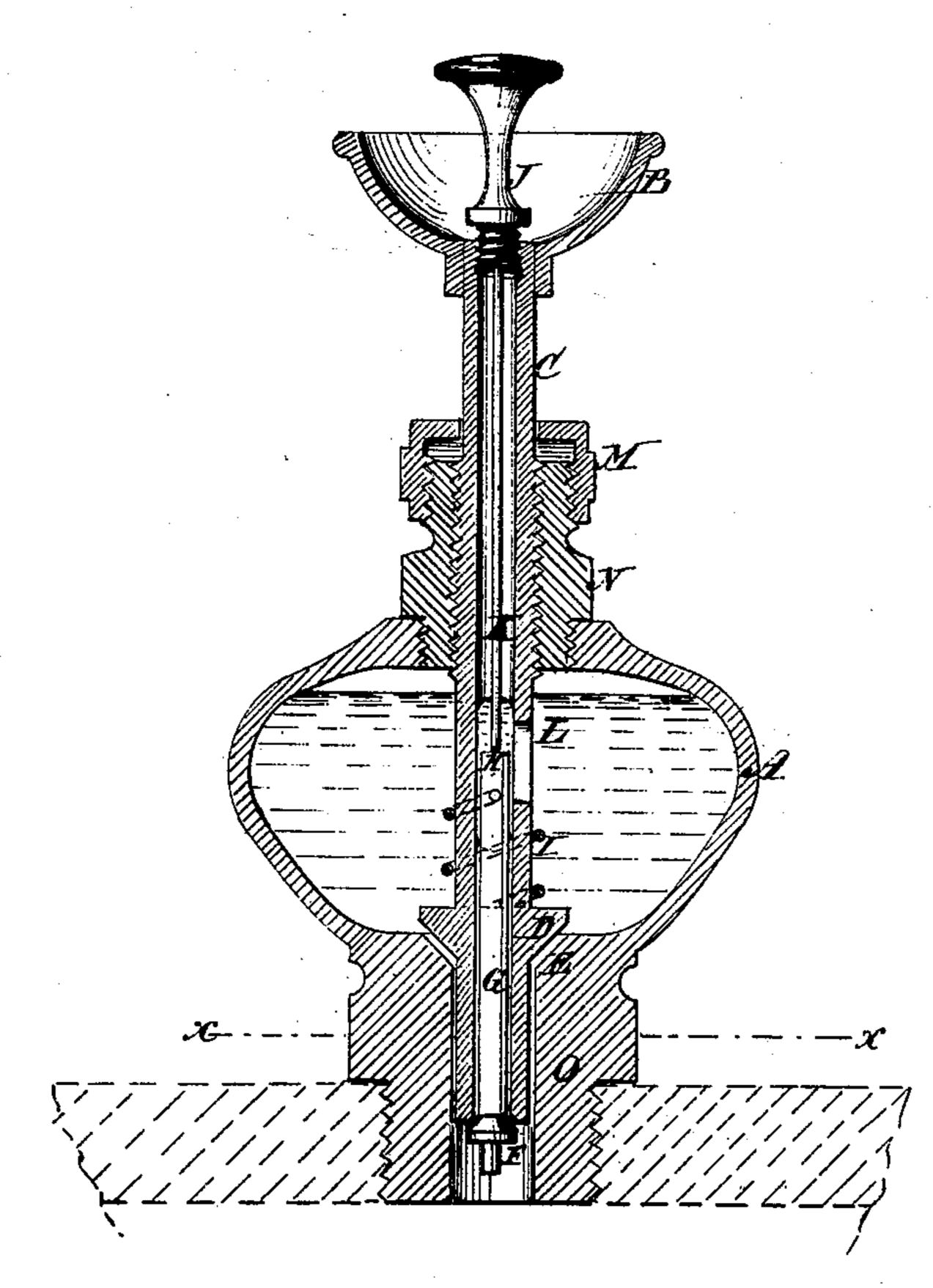
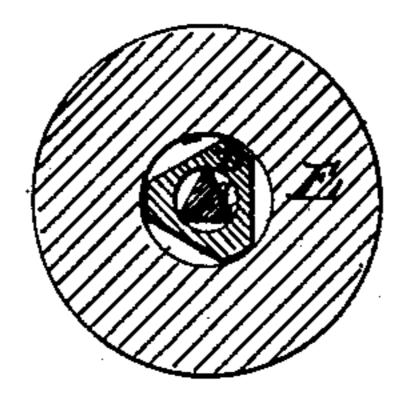


Fig.2



Mitmoccoc.

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PER

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## Anited States Patent Office.

## JOSEPH L. DICKINSON, OF DUBUQUE, IOWA.

Letters Patent No. 110,215, dated December 20, 1870.

## IMPROVEMENT IN LUBRICATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Joseph L. Dickinson, of Dubuque, in the county of Dubuque and State of Iowa, have invented a new and useful Improvement in Lubricators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The object of this invention is to provide suitable and convenient means for introducing oil or other lubricating material into steam-cylinders and other places under pressure of steam or other fluids; and

It consists in the mode of introducing the oil into the oil reservoir, and discharging it into the cylinder under pressure, as will be hereinafter more fully described.

Figure 1 in the accompanying drawing represents a vertical central section of my improved lubricator.

Figure 2 is a cross-section on the line x x of fig. 1. Similar letters of reference indicate corresponding parts.

A is the oil-reservoir.

B is the oil-cup, which is attached to the top of the tube C.

D is a valve on this tube, whose seat is in the bottom-of the reservoir A, as seen at E.

F is a valve on the bottom of the stem G, whose seat is on the bottom of the tube C. The stem G nearly fills the tube, and extends up to the point H.

I is a spring, which is attached to the stem and arranged to press upward and close the valve F.

J is a thumb-screw, in the bottom of the receivingcup B, attached to the bottom end of which is a long

stem, K, which passes down through the tube C until it strikes the top end of the valve-stem G, as seen in the drawing.

The cup B gives a hand-hold for operating the valve D.

The valve F is opened by screwing down the thumb-screw J.

L is an orifice in the side of the tube C.

M is a stuffing-box on the screw section N, through which the tube C works.

The base O of the reservoir is screwed into the cylinder-head, or into any vessel which is designed to be used under pressure, as seen in the drawing.

The introduction of the oil is as follows:

The thumb-screw J is taken out and oil is poured into the cup B, which finds its way into the reservoir through the orifice L. The thumb-screw is then replaced and screwed down, thus opening the valve F, thereby permitting the steam to pass upward through the tube into the reservoir above the oil, thus producing an equilibrium of pressure above and below. Then by turning the cup B, the valve D is opened, and the oil flows out by its own gravity.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The tube C, with the orifice L and valve D, the stem G and valve F, and the thumb-screw J, with the stem K, in combination with the reservoir A, arranged to operate substantially as and for the purposes herein shown and described.

JOSEPH L. DICKINSON.

Witnesses:

WM. M. HAMLIN, A. J. PATCH.