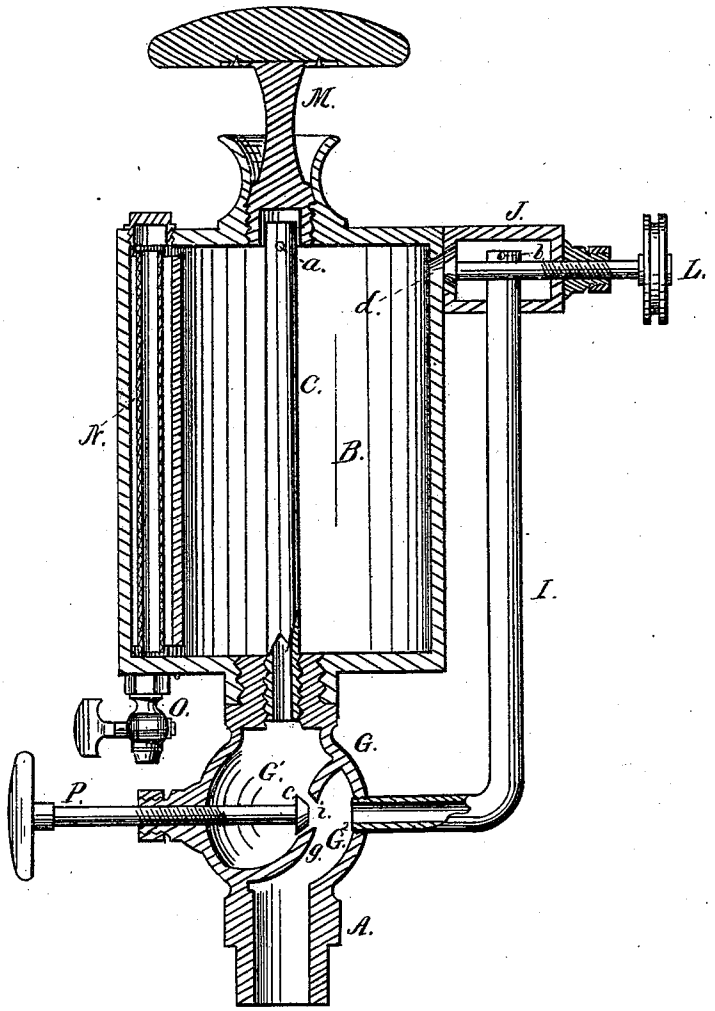
C. H. PARSHALL.

LUBRICATOR.

No. 170,296. Patented Nov. 23, 1875.



WITNESSES

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CHARLES H. PARSHALL, OF DETROIT, MICHIGAN.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. **170,296**, dated November 23, 1875; application filed October 28, 1875.

To all whom it may concern:

Be it known that I, CHARLES H. PARSHALL, of Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Lubricators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to lubricators for steam-engines, &c.; and consists in certain improvements in the construction of the condensing-chamber attached to the top of oil-chamber, and in the construction of stem, all as and for the purposes as hereinafter more fully and at large will appear.

In the drawing is represented a vertical transverse section of my lubricator complete.

A is the screw-stem; B, the oil-reservoir; C, the oil-supply pipe united to stem A, and extending to the top of reservoir B, closed at top end, and provided with inlet-openings *a*. I is the steam-pipe, extending from chamber in bulb G up to top of condensing-chamber J, closed at top, and provided with openings *b*. M is the screw-stop; N, the glass indicating-tube, and O the waste-cock.

The arrangement of these several parts above mentioned is substantially the same as that shown in another application filed October 13, 1875. I will now proceed to point out and describe the points that are new.

Within the bulb G of stem A is a partition, *g*, provided with valve-opening *i*, dividing the bulb into two chambers, G^1 G^2. P is a hand-valve stem, with a valve, *c*, operating to close opening *i*. The condensing-chamber J is secured to the top side of the reservoir B, and provided with an inlet-opening, *d*, entering reservoir B. L is a feed-valve operating to close opening *h*.

The operation of these parts is as follows: Valves P and L are closed and the lubricant placed in the cup, filling the same to near opening *a*. The valves are then opened, P freely, and L slightly, when water, passing from the condenser, through L, settles below into the oil, and floats the oil up to and through the opening *a*, whence it passes down the tube and stem to the parts below. When desired to have more water the valve P is closed, which allows steam to enter chamber J through pipe I, where it is condensed, and passes through opening *d* into reservoir B. When sufficient water is obtained valve L is closed and valve P opened, which allows oil to escape through stem A.

Thus an even, steady, and automatic flow of oil is at all times delivered to the machinery, as is apparent.

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

1. In combination with the stem A, constructed with partitioned bulb G G^1 G^2, and hand-valve *c* P, the steam-pipe I, closed at top, and provided with opening *b*, communicating from steam-stem A G to top inside of condensing-chamber J, at the top outside of oil-reservoir B, as and for the purposes described.

2. In combination with the stem A G, reservoir B, and steam-pipe I, communicating from stem A G to top of condenser J, the condensing-chamber J, provided with hand-valve L, placed at the outside top portion of reservoir B, and communicating therewith at the top edge through opening *d*, as and for the purposes described.

3. The improved lubricator consisting of reservoir B, oil-pipe C *a*, stem A, constructed with partitioned chamber G G^1 G^2, steam-pipe I *b*, communicating from stem A G to top inside of condensing-chamber J, and separate condensing-chamber J, placed at top outside of reservoir, communicating therewith by opening *d*, and provided with valve L, all constructed and arranged as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of October, 1875.

CHARLES H. PARSHALL.

Witnesses:
EDWARD CLARKE,
SIDERA CHASE.