

H. Pringle,

Lubricator.

NO. 106,959.

Patented Aug. 30, 1870.

Fig. 1.

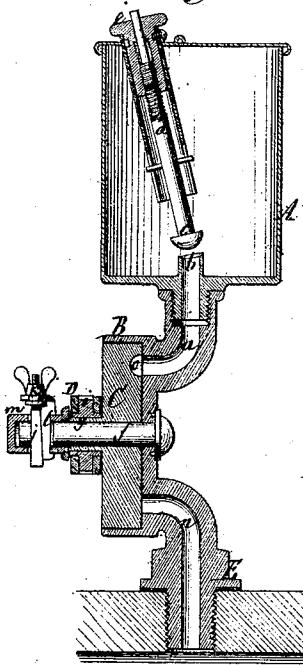


Fig. 4.

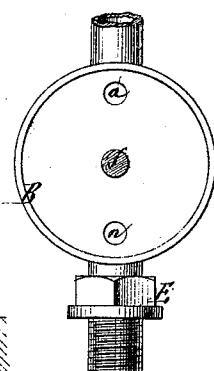
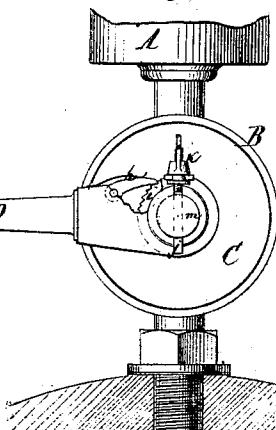


Fig. 2.



Witnesses:

C. Wahrle
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Inventor:

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Aug 30, 1870

United States Patent Office.

HUGH PRINGLE, OF GREEN POINT, NEW YORK.

Letters Patent No. 106,959, dated August 30, 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, HUGH PRINGLE, of Green Point, in the county of Kings and State of New York, have invented a new and improved Lubricator; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a vertical central section of this invention.

Figure 2 is a front view of the same.

Figure 3 is an inside view of the distributing-disk detached.

Figure 4 is a similar view of the distributing-chamber.

Similar letters indicate corresponding parts.

This invention relates to a lubricator, which is intended particularly for steam-chests, but which may also be used for steam-cylinders and otherwise.

It consists of an oil-cup, which communicates through a suitable channel with a distributing-chamber, in which moves the distributing disk, and which communicates through a channel with the interior of a steam-chest or other article to be oiled, in such a manner that, by imparting to the distributing-disk a rotary motion, a small quantity of lubricating material is discharged into the delivery-channel once for every revolution of said disk. The motion of the distributing-disk is produced by a ratchet-lever, which connects with the valve-rod, or any other moving part of the engine, in such a manner that the motion of the disk is made dependent upon the motion of the engine, and that the delivery of lubricating material stops when the engine stops.

In the drawing—

The letter A designates an oil-cup, which communicates by means of a channel, a, with the distributing-chamber B.

On the upper end of the channel a is formed a seat, b, for a valve, c, which is attached to a screw-spindle, d, extending up through the top of the oil-cup, as shown in fig. 1.

A nut, e, serves to raise and lower the valve c, and, if desired, the supply-channel a can be closed by means of said valve.

The distributing-chamber B forms the seat for the distributing-disk C, which is mounted on a stud, f, and provided with a hub, g, on which swings a lever, D.

This lever carries a click, h, which engages with the teeth of the ratchet-wheel i, that is firmly secured on the hub g of the distributing-disk, so that, by im-

parting to the lever D a vibrating motion, an intermittent rotary motion is imparted to the disk C.

To prevent the disk from turning back when the lever D is depressed, it (the disk) is pressed up against its seat with sufficient pressure to produce the required friction, said pressure being regulated by a key, j, nut k, and gib l.

The gib and key are made to pass through a slotted cap, m, which fits over the end of the stud f, and through a slot in said stud, the cap being made to bear on the end of the hub g.

The forked end of the gib catches in a neck in the nut k, and, by turning this nut in the proper direction, the key is drawn up and the disk is forced up against its seat.

From the lower part of the distributing-chamber extends the delivery-channel n through the screw-shank E, which serves to secure the lubricator in the desired position.

In the face of the disk is a cavity, o, and as said disk revolves this cavity sweeps over the mouth of the supply-channel a, and fills with lubricating material, and, as the motion of the disk progresses, said cavity is made to sweep over the mouth of the delivery-channel n, and the lubricating material contained therein discharges.

The quantity of the lubricating material transferred to the delivery-channel for each revolution of the disk C depends upon the size of the cavity o, and if the motion of the disk is rapid, a larger quantity of lubricating material is transferred to the delivery-channel than if the motion of the disk is slow.

The lever D is connected to the main valve-rod, or to any other moving part of the engine, so that the speed of the disk is always in proportion to the speed of the engine, and the stroke of the lever D may be regulated by increasing or decreasing its length, or in any desirable manner.

When the engine stops, the disk C remains stationary, and no lubricating material is wasted.

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

1. The distributing-disk C, provided with a cavity, o, in combination with the cup A, distributing-chamber B, and channels a n, substantially as shown and described.

2. The ratchet-lever D, in combination with the disk C, cup A, distributing-chamber B, and channels a n, substantially as set forth.

HUGH PRINGLE.

Witnesses:

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C. WAHLERS.