N. Seibert's Lubricator.

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PATENTED FEB 14 1871

Fig. 1.

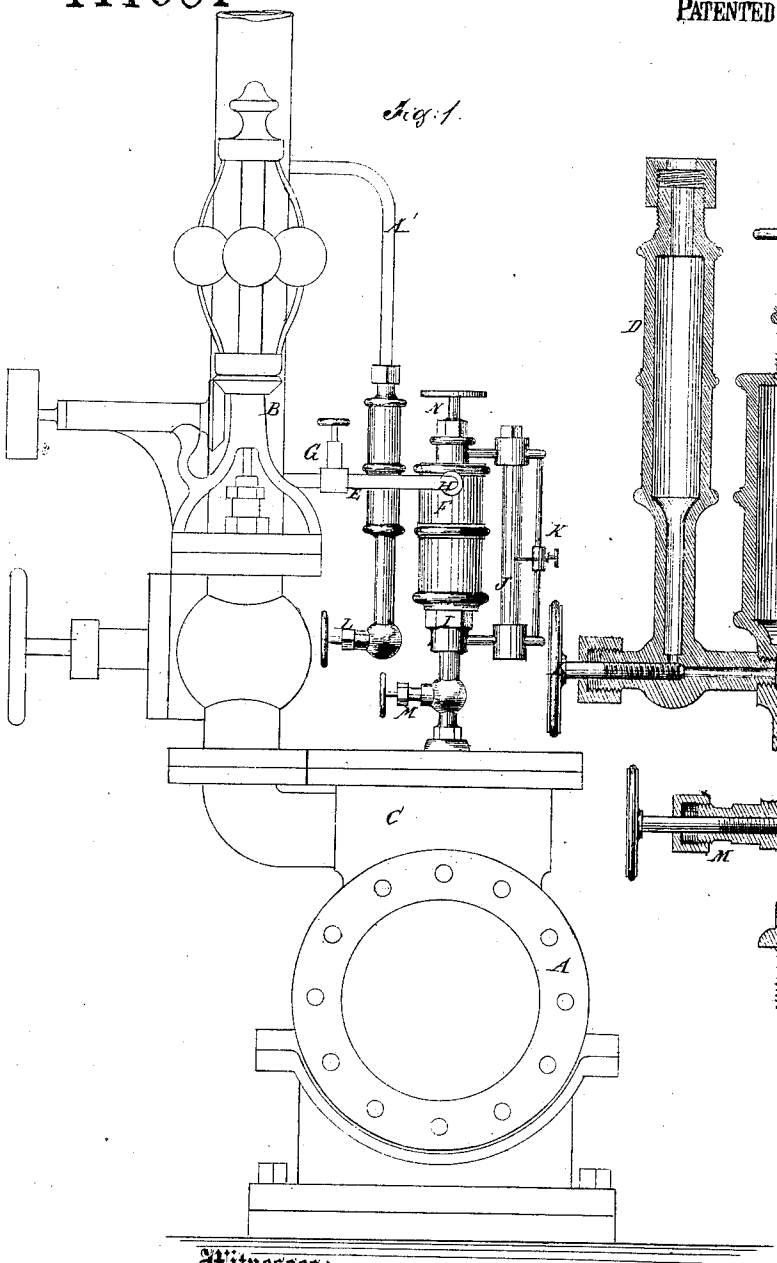
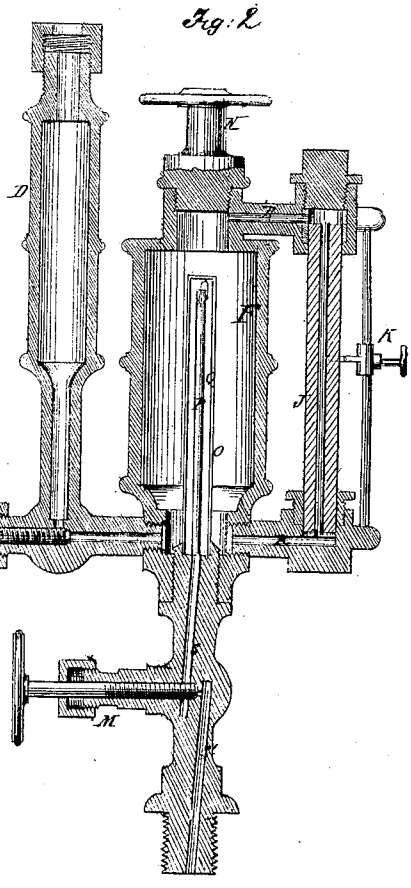


Fig. 2.



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UNITED STATES PATENT OFFICE.

NICHOLAS SEIBERT, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. **111,881**, dated February 14, 1871.

To all whom it may concern:

Be it known that I, NICHOLAS SEIBERT, of San Francisco, in the county of San Francisco and State of California, 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 drawings, forming part of this specification.

This invention relates to an improvement in lubricators for steam-engine cylinders; and it consists in the arrangement of parts, as hereinafter described, and as particularly specified in the claims.

In the accompanying drawings, Figure 1 represents a side view of the lubricator as connected with a cylinder of a steam-engine. Fig. 2 is a central section of the lubricator detached.

Similar letters of reference indicate corresponding parts.

A is the cylinder.

B is the steam-pipe.

C is the steam-chest.

A′ is the condensing-pipe connecting the steam-pipe B and lubricator.

D is a reservoir, which is supplied with water by reason of the steam condensing in the condensing-pipe A′.

E is the oil-pipe leading to the cylinder and valve-chest.

F is the cup or reservoir, which contains the oil or other lubricating material.

G is a stop-cock or valve in the oil-pipe E.

H is a check-valve.

I represents a waste-cock at the bottom of the oil-reservoir.

J is a glass tube.

K is a sliding gage, which indicates the amount of oil used.

L is the regulating feed-valve, which is opened slightly.

The water in the reservoir D being higher and heavier than the oil in the cup F, forces itself under the oil in the cup F and glass tube J, and passes out through the check-valve H and oil-pipe E into the steam-pipe B to lubricate the valves and cylinders.

M is a cock to regulate the admission of steam from the steam-chest into the oil-cup F when tallow is used.

The cock I is used to draw the water off when the cup F is to be replenished.

N is a screw-plug in the top of the oil-cup or reservoir F, through which the oil or other lubricating material is introduced.

O is a vertical tube within the oil-cup F.

P is another vertical tube within O, and *q* is an annular space between the two tubes.

The tube P is in communication with the steam in the steam-chest by means of the passages S S′, so that the space *q* is kept hot by the steam, which enters it as indicated by the arrow.

R R are passages leading from the oil-reservoir F to the glass tube J. The oil in the glass tube will stand at the same height as in the reservoir, so that the quantity contained therein may be always visible to the eye.

The gage K may be set at any time when the machinery is to be put in motion to indicate the height at which the oil stands. When the movement of the machinery has ceased, the distance between the height of the oil and the gage will indicate the precise quantity consumed, (the cubical capacity of the reservoir F being known.)

Whatever amount of steam may condense in the tubes O and P will flow back into the steam-chest C by gravity.

The steam-pressure in tubes D and E is at all times equal. Hence the gravity of the water in the former will determine the direction of the flow of oil.

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

1. The arrangement of the cock M, passages S S′, and tubes O and P, with the oil-reservoir F, and gage J R, as herein shown and described, for the purpose specified.

2. The improved lubricator consisting of the parts herein described, constructed, and arranged substantially as specified.

NICHOLAS SEIBERT.

Witnesses:

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