

W. GEE.
Lubricator.

No. 106,150.

Patented Aug. 9, 1870.

Fig. 1.

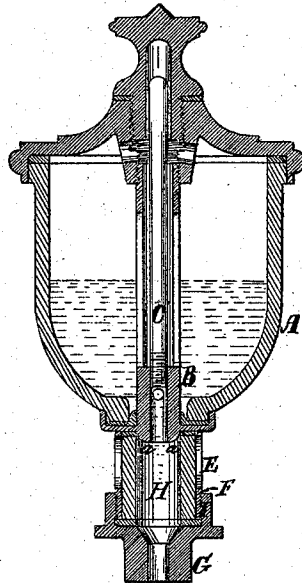
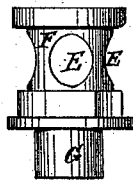


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM GEE, OF NEW YORK, N. Y.

IMPROVED LUBRICATOR.

Specification forming part of Letters Patent No. **106,150**, dated August 9, 1870.

To all whom it may concern:

Be it known that I, WILLIAM GEE, of the city, county, and State of New York, have invented a new and useful Improvement in Self-Feeding Lubricators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings.

The want of some means of observing the operation of self-feeding lubricators has long been recognized. With a view to provide for this want, and to facilitate the proper adjustment of the feed-regulating device, the reservoirs have been made of glass or with glass sides, through which the quantity of oil contained therein might be seen; but the facility thus afforded for ascertaining whether the lubricator was feeding properly was very imperfect, as the action could only be determined by watching the gradual diminution of the level of the oil in the reservoir, which was necessarily tedious.

The object of this invention is to provide for the better observation of the operation; and to this end it consists in the provision, below the reservoir and the feed-regulating device and the contracted orifice through which the oil escapes from the reservoir, of a chamber of such capacity that the oil or other lubricating material drips through the said chamber, instead of trickling down over the surface of the passage leading from the reservoir and feed-regulating device to the bearing or other device to be lubricated, such chamber having openings in its sides, or being partly constructed of glass, and thereby enabling the dripping of the oil within or through it to be distinctly seen.

In order to insure the dripping, instead of the trickling, of the oil or lubricating material from the reservoir through the said chamber, one feature of this invention consists in providing a teat around the orifice, through which the oil or lubricating material passes into the said chamber.

Figure 1 in the drawings is a central vertical section of a lubricator with my improvement. Fig. 2 is an elevation of the drip-chamber detached from the reservoir and feed-regulating device.

Similar letters of reference indicate corresponding parts in both figures.

A is the reservoir, B the feed-tube, and C the adjusting valve or plug for regulating the feed. These are represented of a well-known construction, serving as well as any other to illustrate the application of my invention; but the reservoir and feed-regulating device may be of any other known or suitable construction whereby a contracted orifice is provided at the bottom of the reservoir for the escape of the oil or other lubricating material.

F H I is the drip-chamber arranged below the reservoir and feed-regulating device and between the said device and the hollow stem G, which is inserted into the support for the lubricator. This chamber is formed in part of a hollow cylindrical shell of metal, F, which is made in the same piece with or attached to the bottom of the feed-tube B, and in part by a socket, I, provided on the stem G, the shell F screwing into this socket. To render the interior of the said chamber visible, holes E E of suitable size are provided in the sides of the cylindrical shell F, and to prevent the entrance of dust, while still permitting the interior to be seen, the said shell is lined with a glass tube, H; or small plates of glass may be fitted to the holes E E for the same purpose. At the top of the said chamber, surrounding the lower orifice of the feed-tube, is the teat *a*, on which the oil or lubricating material collects to form the drip.

The operation is as follows: The oil or other lubricating material passing the feed-regulating valve or plug C collects in the lower part of the feed-regulating tube until there is a sufficient accumulation at the lower orifice of the said tube to form a drip, which drips through the chamber F H I to the bottom thereof, whence it passes through the hollow stem G to the place to be lubricated. The dripping taking place frequently can be observed through the openings E E of the chamber, and the quantity supplied can be so easily determined as to enable the feed-regulating device to be properly adjusted. The delivery of the oil in drips is better insured by the teat *a*, formed around the lower orifice of the feed-tube, or by what would be equivalent by the making of the interior of the upper part of the chamber or convex form.

This invention differs from all other lubri-

cators not in allowing the oil to be seen, but in feeding with a visible drip, the frequency or cessation of which can be ascertained.

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

1. The open or transparent drip-chamber arranged below the reservoir and feed-regulating device, and in combination with the contracted opening through which the oil or lubricating material escapes from the reservoir,

substantially as herein described, to provide for the dripping of the said material and the view of the drip.

2. In combination with the drip-chamber and reservoir, the teat *a*, substantially as and for the purpose specified.

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Witnesses:

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