

T. J. MOOERS.

Lubricator.

No. 107,192.

Patented Sept. 6, 1870.

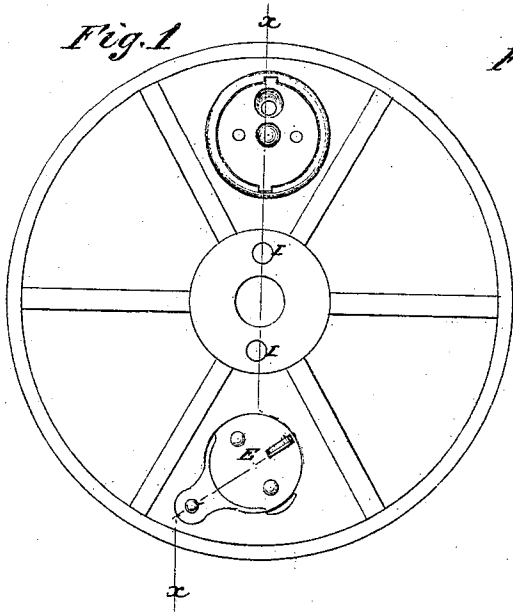


Fig. 1

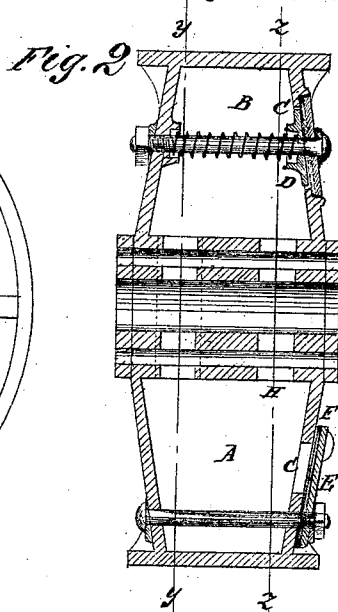
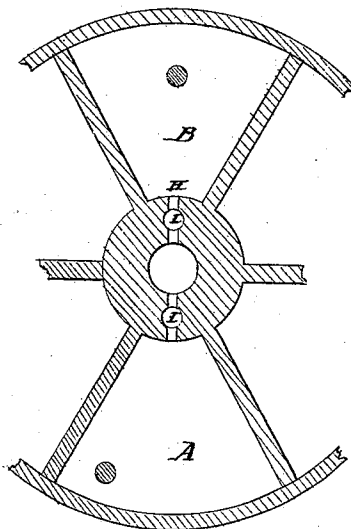
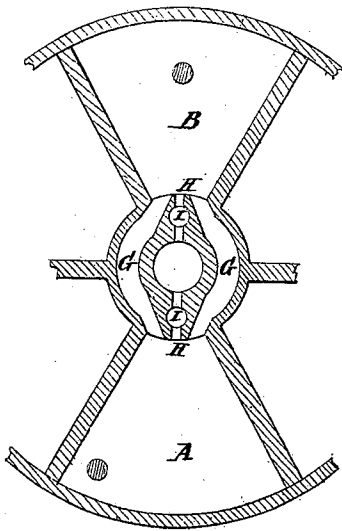


Fig. 2

Fig. 3

Fig. 4



Witnesses:

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THOMAS J. MOOERS, OF BLOSSBURG, PENNSYLVANIA.

Letters Patent No. 107,192, dated September 6, 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, THOMAS J. MOOERS, of Blossburg, in the county of Tioga and State of Pennsylvania, 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.

This invention relates to improvements in lubricating car-wheels, pulleys, and other wheels; and consists in the application to the wheels of two chambers, one opposite the other, across the axle, for holding the oil, with passages between each, and small passages to the axle and to the collars at the ends, the latter for allowing the oil to feed into the journal, and the former to allow the oil to always stand below the passages to the axle, when not running, so as not to feed, as would be the case if only one reservoir was used, when the wheel should stop with the reservoir higher than the axle.

Figure 1 is a side elevation of a wheel provided with my improved lubricating arrangement;

Figure 2 is a transverse section of the same, taken on the line *x x* of fig. 1;

Figure 3 is a section, on the line *y y*, of fig. 2; and

Figure 4 is a section, on the line *z z*, of fig. 2.

Similar letters of reference indicate corresponding parts.

A is one reservoir, and

B, the other.

Both have openings, C, leading into them through the sides, for admitting the oil, one of which is closed by the spring actuated valve D, and the other by a plate, E, clamped against a packing, F, of leather or other substance of elastic nature, which will pack against the surface around the hole oil-tight.

G represents the passages leading from one reservoir to the other, to allow the oil to stand below the journal when the wheel is not running.

In order that this will be the case when the two happen to stand equally high on opposite sides of the

axles, the quantity will be such as not to fill the two quite as high as the center of the axle.

H represents the small passages leading to the axle; these also connect with small holes, I, extending through the hub lengthwise, to allow the oil to flow to the collars or end bearings.

In these holes I propose to place wicking or other substance to prevent the oil from feeding too freely, and to prevent the admission of dirt or other matter to the reservoir.

These reservoirs balance each other, so that the wheels will run even.

As the wheels turn and the oil flows toward the axle, it will of course flow into the passages H and into the journals, in considerable quantity, but as soon as the passages pass below the horizontal axis, it will run back again, leaving only what may adhere to the surfaces. The arrangement is therefore such that the lubrication will go on self-actingly when the wheels are turning, and cease when they stop, and the holes H I, being properly packed, the oil will be economically used.

When the oil is to be poured into the reservoirs through the one having the closing plate E, the nut is to be unscrewed sufficiently to allow it to turn freely, and it is screwed up again afterward.

Having thus described my invention,

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

1. The opposite oil-reservoirs A B, combined with a hub having channels, G H I, arranged as and for the purpose described.

2. The reservoir A on a loose wheel, combined with the plate E, elastic packing F, and their clamping bolt, as and for the purpose described.

3. The reservoir B, combined with the spring oil-tight valve D at the side thereof, as and for the purpose described.

THOMAS J. MOOERS.

Witnesses:

W. STEWART,

ABRAHAM WESSELS.