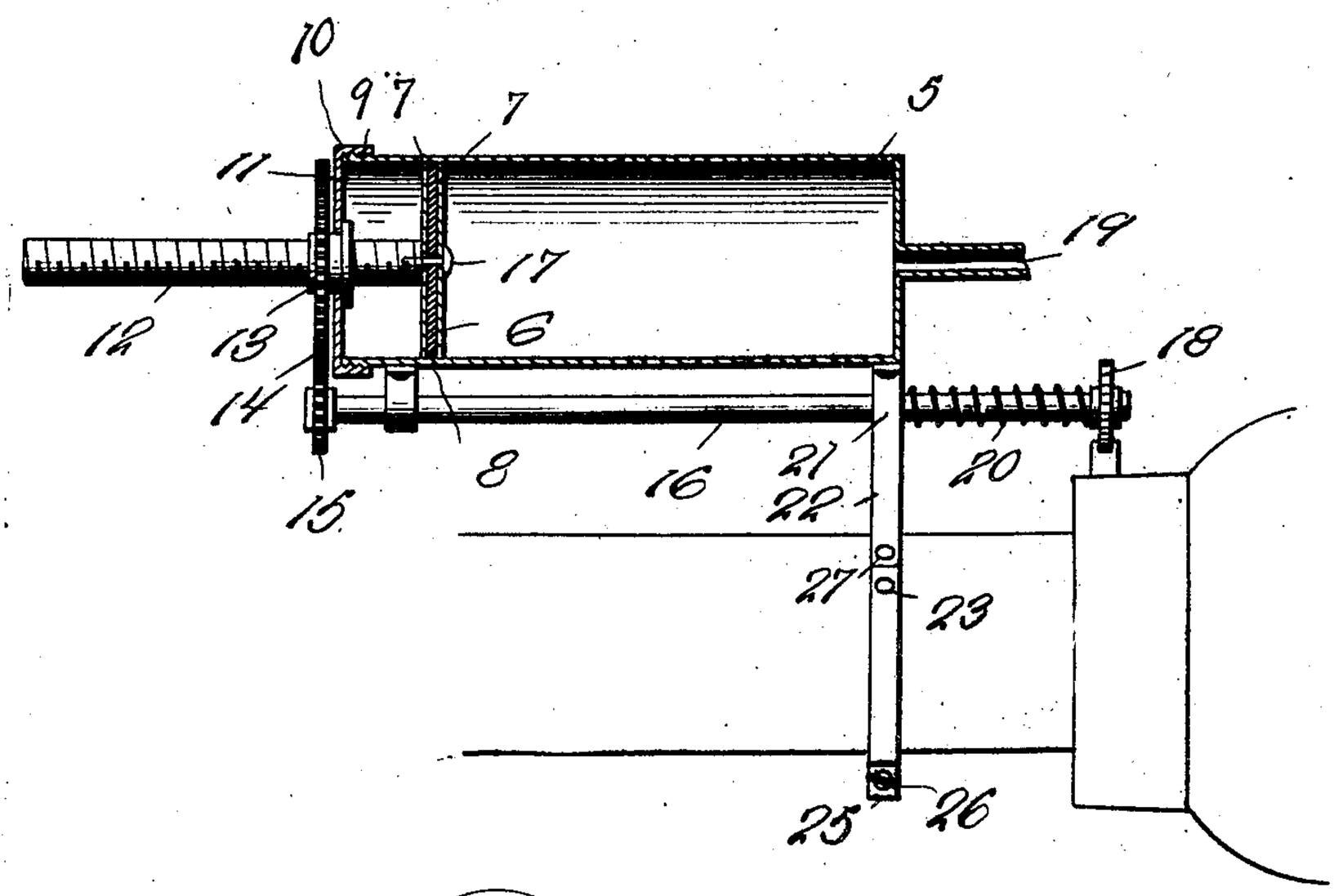
No. 844,149. PATENTED FEB. 12, 1907.

H. LEIDY.

WAGON OILER.

APPLICATION FILED MAY 18, 1906.

Fig. 1.



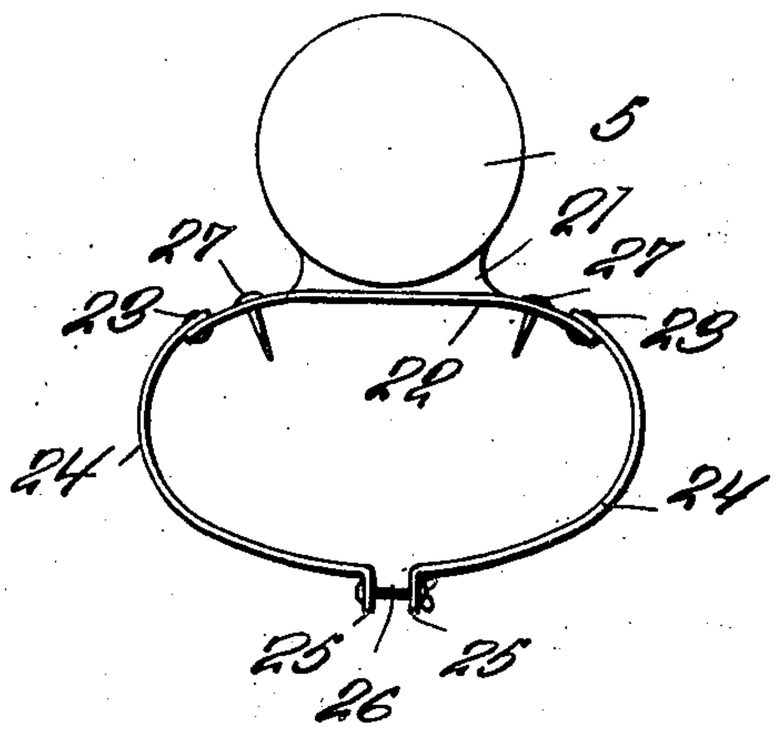


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

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WAGON-OILER.

No. 844,149. Specification of Letters Patent. Patented Feb. 12, 1907.

Application filed May 18, 1906. Serial No. 317,570.

To all whom it may concern:

Be it known that I, HARVEY LEIDY, a citizen of the United States, residing at Carrington, in the county of Foster, State of North Dakota, have invented certain new and useful Improvements in Wagon-Oilers; 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 appertains to make and use the same.

This invention has relation generally to devices for lubricating surfaces that it is necessary to keep oiled, and it has special reference to lubricators for wagon-axles.

It is the object of the invention to provide improvements in lubricators for vehicle-wheels that will enhance their efficiency by simplifying their construction and mode of operation, making them less expensive to manufacture, giving less trouble to apply, adjust, and keep in order than heretofore, and also making them entirely certain in their operations, so that they can be relied upon to perform their functions in point of time of delivery of the lubricant, amount delivered, &c.

The invention consists of a reservoir for the lubricant, a suitable duct for conveying it to the surfaces to be lubricated, and a plunger in the reservoir that is adapted to be moved intermittently to apply the oil in a drop-by-drop manner as nearly as possible.

The invention will first be described in connection with the annexed drawings, forming a part of this specification, and then be pointed out with particularity in the subjoined claim.

Of the said drawings, Figure 1 is a central sectional side elevation of my invention. Fig. 2 is an end view of certain parts, indicating a way of applying the device to a wagon.

The same figures of reference designate the same parts or features, as the case may be, wherever they occur.

In the drawings, 5 designates the grease-cup or oil-reservoir, which may be arranged horizontally or vertically, as circumstances may dictate as best. In the said reservoir there is arranged a plunger 6, so as to have a perfect fit therein, and to this end it may be composed of two disks 7 7, of thin steel of a diameter that will allow their free movement in the reservoir, with a disk of leather 8 or similar substance clamped between them to insure a perfect fit. The outer surface of the margin of one end of the reservoir is screw-threaded, as at 9, so as to enable the flange 10 of the cap 11 to be screwed on the reservoir with an oil-tight fit.

An externally-screw-threaded stem 12 extends through the internally-screw-threaded sleeve-hub 13 of the toothed wheel 14 outside of the cap 11, which gear 14 is engaged by a cog-wheel 15, keyed or otherwise secured to the outer end of the counter-shaft 16, supported in suitable bearings connected with the reservoir. The inner end of the stem 12 rests on the center of the plunger 6, which latter is held in place thereon by means of a screw 17, whose threaded end extends through an opening formed in the plunger and is engaged in a threaded socket formed in the stem end.

The shaft 16 has a sprocket-wheel 18 secured on its outer end, the radially-projecting teeth or pins on which are adapted to be engaged by a laterally-projecting pin from the hub of the wagon-wheel at each revolution of the latter and rotated to a certain extent. This rotation of the sprocket-wheel turns the shaft 16 to the same extent, which operates the shaft 12, through the intervention of the cog-wheels 14 and 15, moving the plunger 6 inward to a sufficient extent to force a small amount of the lubricant in the reservoir through the duct 19, leading to the surfaces (not shown) to be lubricated. A spring 20 surrounds the outer end of the shaft 16 between the hub of the sprocket-wheel 18 and the outer bearing 21 of said shaft. This spring is of just the right length to keep the wheel well up to position and allow the shaft to be pressed back to permit the lid to be removed to fill the cup or reservoir.

In Fig. 2 the reservoir or cup 5 is shown as provided with a base 22, to which are secured by screws 23 clamping-plates 24, flanged, as at 25, to receive a clamping-screw 26, so that the device may be clamped on the axle or other suitable part of the wagon. In addition to the clamps screws 27 may also be used, if desired.

It is to be noted that, as stated at the outset, the device is so organized as to be certain in its mode of operation, and there being relatively few parts it is not liable to get out of order or to require unnecessary time to keep it in order.

What is claimed as the invention is—

A lubricator for wagon-axles comprising, in combination, a grease or oil cylinder.

vided with a plunger, a cap, an externally-threaded stem extended through the cap, an internally-threaded sleeve in the cap surrounding the stem, a cog-wheel on the sleeve, bearings secured to said cylinder, a counter-shaft journaled in said bearings and extending at one end beyond its bearing, a sprocket-wheel mounted on said extended end, a spring surrounding the counter-shaft and interposed between the sprocket-wheel and the said outer bearing, a cog-wheel on the opposite end of said counter-shaft in mesh with the cog-wheel on said sleeve, a base connected with said cylinder, and detachable clamps secured to the base for attaching the base to a part of the wagon or other contrivance.

In testimony whereof I affix my signature in presence of two witnesses.

HARVEY LEIDY.

Witnesses:-
ROBT. R. PRYOR,
W. F. MOORE.