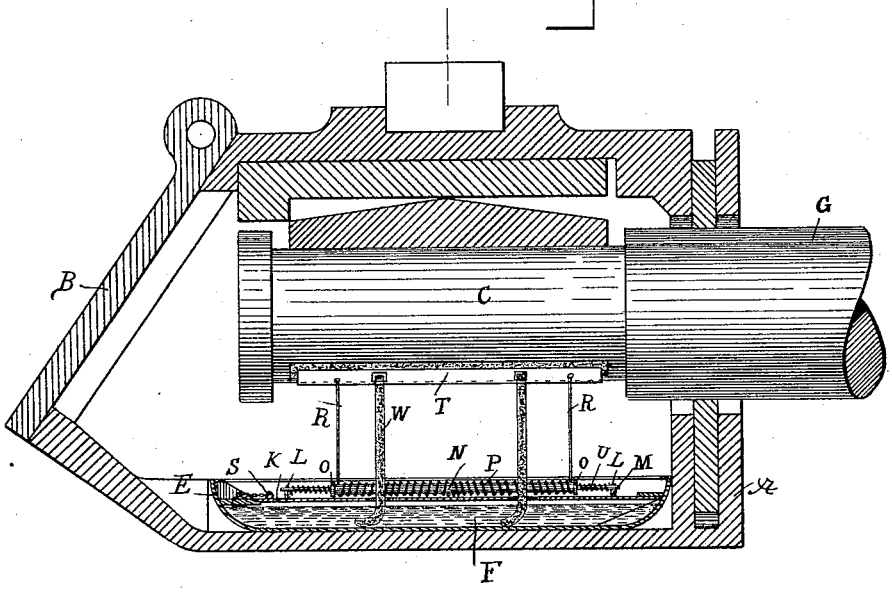
(No Model.)

L. J. PHELPS.

LUBRICATOR FOR CAR AXLES.

No. 454,763. Patented June 23, 1891.

Fig. I.



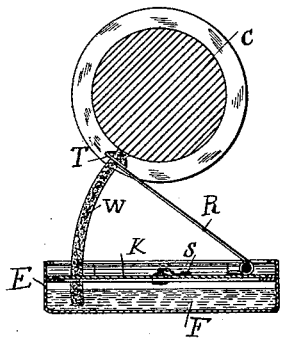


Fig. II.

Witnesses

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LUBRICATOR FOR CAR-AXLES.

SPECIFICATION forming part of Letters Patent No. 454,763, dated June 23, 1891.

Application filed March 14, 1891. Serial No. 385,089. (No model.)

To all whom it may concern:

Be it known that I, LUCIUS J. PHELPS, of Passaic, county of Passaic, and State of New Jersey, have invented certain new and useful Improvements in Lubricators, of which the following is a specification.

My invention relates to that class of lubricators which are adapted for and intended to lubricate the axles of railway-cars.

The novelty in the particular construction which I have now devised consists in the construction or formation of a wick and the means for supporting the same and keeping it in the proper position relative to the journal of the axle and to other minor details, which will be hereinafter described, and specifically pointed out in the claims.

Referring to the accompanying drawings, which form a part of this specification, Figure I represents a longitudinal section of the journal-box of the car-axle journal with my invention applied, and Fig. II represents a detail view on the same scale of the wicking contrivance.

In the drawings, A represents the journal-box of the car-axle lubricator, and B the usual cap hinged thereto, whereby access can be easily had to the interior of the box.

C represents the journal of the axle G.

E represents the pan or receiver for holding the oil or lubricating material F. This pan or receiver is provided with a cover K, which can be removed from and replaced on the pan by means of a staple S in the following manner: The cap B is lifted up or thrown back, and the operator by thrusting in his hand can grasp the cover K at S, and by drawing it toward him remove the cover, which carries the wicking contrivance, as will be described. Two uprights L are provided, which carry a cross-bar M, around which is placed a sleeved sliding collar or tube N, having shoulders O at both ends. Two spiral springs P are located upon the exterior of the collar N and abut against each other in the center of the pan and are wound spirally in opposite directions, terminating in upright supporting spring-pieces R, which carry at their upper ends a keeper T, which constitutes the wick-holder for the wick W. The wick W is formed all of one piece, and extends longitudinally along the journal C and downwardly into the oil or other lubricating material in the pan or receiver. It will be seen that the operator in removing the wick can press the spring-supporters R downwardly and against the cover of the pan, in which position the wicking contrivance can be easily removed and renewed, replaced, or repaired, as the case may be. Auxiliary springs U are employed, which abut against the collars O and which serve to keep the wicking contrivance in its proper central longitudinal position.

It will be seen that my oil-pan is removable from the car-axle box, and that the cover of the oil-pan is independently removable—that is, the cover carrying the wicking contrivance can be removed from the oil-pan without disturbing the said pan by means of the collapsible wick-supporting device arranged with and connected to the pan-cover, as set forth and shown. Forms of wick-supporting devices embodying my invention may, however, be devised, in which the oil-reservoir, instead of being removable, shall be formed in the bottom of the journal-box. For example, a wick, instead of being supported and automatically regulated, as described, by springs attached to a plate which serves as a cover to a movable pan, may also be used in connection with a shallow reservoir for oil formed out of the lower part of the journal-box, with a division-plate between such reservoir and the remainder of the journal-box. The said springs may be attached to such division-plate or to a plate which shall be over the division-plate, or they may be attached to a side of the journal-box by any convenient method of attachment.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In a car-axle lubricator, the combination of the car-axle box, the removable oil-pan, the independently-removable cover for said oil-pan, the collapsible wicking contrivance mounted thereon, and springs for keeping the wick against the axle-journal, and auxiliary

springs for retaining the wick in a central longitudinal position, as and for the purpose set forth.

2. In a lubricator, the combination of a removable oil-pan adapted to seat in a car-axle journal-box, an independently-removable cover K, the uprights L, cross-bar M, sliding tube N, spiral springs P, and wick W, all arranged substantially as and for the purpose set forth.

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