(No Model.)

H. KELLER.

AXLE LUBRICATOR.

No. 306,259. Patented Oct. 7, 1884.

Fig. 1.

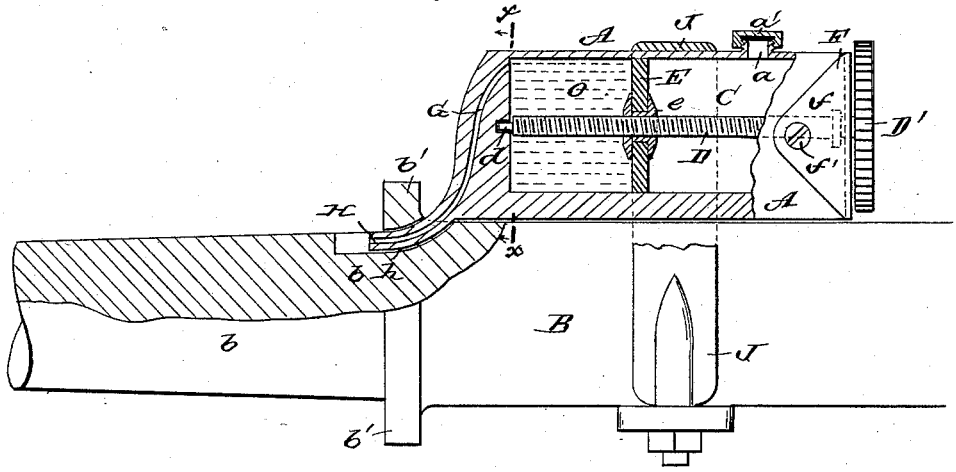


Fig. 3.

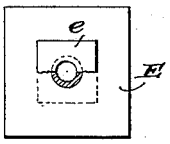


Fig. 2.

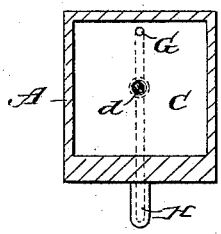


Fig. 4.

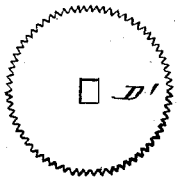
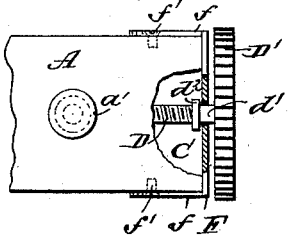


Fig. 5.



WITNESSES:

H. Keller

C. Sedgwick

INVENTOR:

H. Keller

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY KELLER, OF CORPUS CHRISTI, TEXAS, ASSIGNOR TO HIMSELF AND PEYTON SMYTHE, OF SAME PLACE.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 306,259, dated October 7, 1884.

Application filed June 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY KELLER, of Corpus Christi, in the county of Nueces and State of Texas, have invented a new and Improved Axle-Lubricator, of which the following is a full, clear, and exact description.

My invention relates to improvements in axle-lubricators; and it consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of my improved lubricator as applied to an axle. Fig. 2 is a cross-section of the lubricator taken on the line *x x*, Fig. 1. Fig. 3 is a partly broken face view of the piston or plunger of the lubricator. Fig. 4 is a face view of the feed-wheel, and Fig. 5 is a sectional plan view of the back end of the lubricator.

The letter A indicates the barrel or cylinder, which serves as a reservoir for the oil or other lubricant to be fed to a friction-bearing—as, for instance, the arm *b* of the axle B, on which a vehicle-wheel runs. In the interior chamber, C, of the barrel A is held centrally, by suitable end bearings, the screw D, on which is placed by a threaded nut, *e*, the piston or plunger E, which is fitted liquid-tight to the side walls of the chamber C, so that none of the oil can escape behind the piston. One end bearing of the screw D consists of a pin, *d*, which enters a recess in that end wall of the chamber C, and at the other end the screw is journaled at *d'* in the removable end cap or cover, F, and a collar, d^2, fixed on the screw inside the cap F, holds the screw against endwise movement as it is turned by its fixed hand-wheel D' to force the piston F out toward the axle-arm *b*, and thereby force some of the oil O out into the channel G opening into the end of the barrel A, and along said channel into the tube or pipe H, which passes through the axle-collar *b'*, and lies in a cavity, *h*, of the axle-arm. The cap F is secured to the oil-barrel A by screws *f'* passing through side flanges, *f*, of the cap. This removable cap F permits insertion of the piston E within the chamber C of barrel A, and access to the piston for repair or removal at any time required. There is a suitable opening, *a*, in the top of the barrel A, through which the oil or other lubricant may be filled into the barrel, and said opening has a screw or other cap, *a'*, for tightly closing it. The lubricator is secured to the vehicle-axle by a suitable strap or clip, J, which may at the same time serve to secure the tongue, hounds, or other part of the running-gear to the axle.

The operation is as follows: The lubricator being secured on the axle, the screw D is turned to carry the piston E back as far as it will go. The cap *a'* is removed and the lubricant is filled into the barrel and the cap again applied. By reversing the motion of the screw D at any time required the piston E will be forced forward more or less, and will drive some of the lubricant before it through the passage G and pipe H to the exterior surface of the axle-arm *b*, and thus lubricate the bearing of the wheel-hub on the axle. I open the channel G into the reservoir-chamber C at or near the top of the chamber, so that no oil will flow therefrom except as it is forced out by the forward movement of the piston.

The size of the lubricator may vary with the work required of it in oiling the axles of lighter or heavier vehicles, a single filling of the cup being intended to last for a long time, and the lubricator may receive any suitable plain or ornamental finish.

The lubricator may also be used for oiling a large variety of friction-bearings, as will readily be understood.

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

The combination, with the barrel or reservoir A, its piston E, and screw D, of the passage G, leading from the top of the barrel-chamber C, and the tube H, passing through the axle-collar *b'* and into a cavity, *h*, of the axle-arm *b*, substantially as shown and described.

HENRY KELLER.

Witnesses:
G. R. SCOTT,
J. M. DAVIDSON.