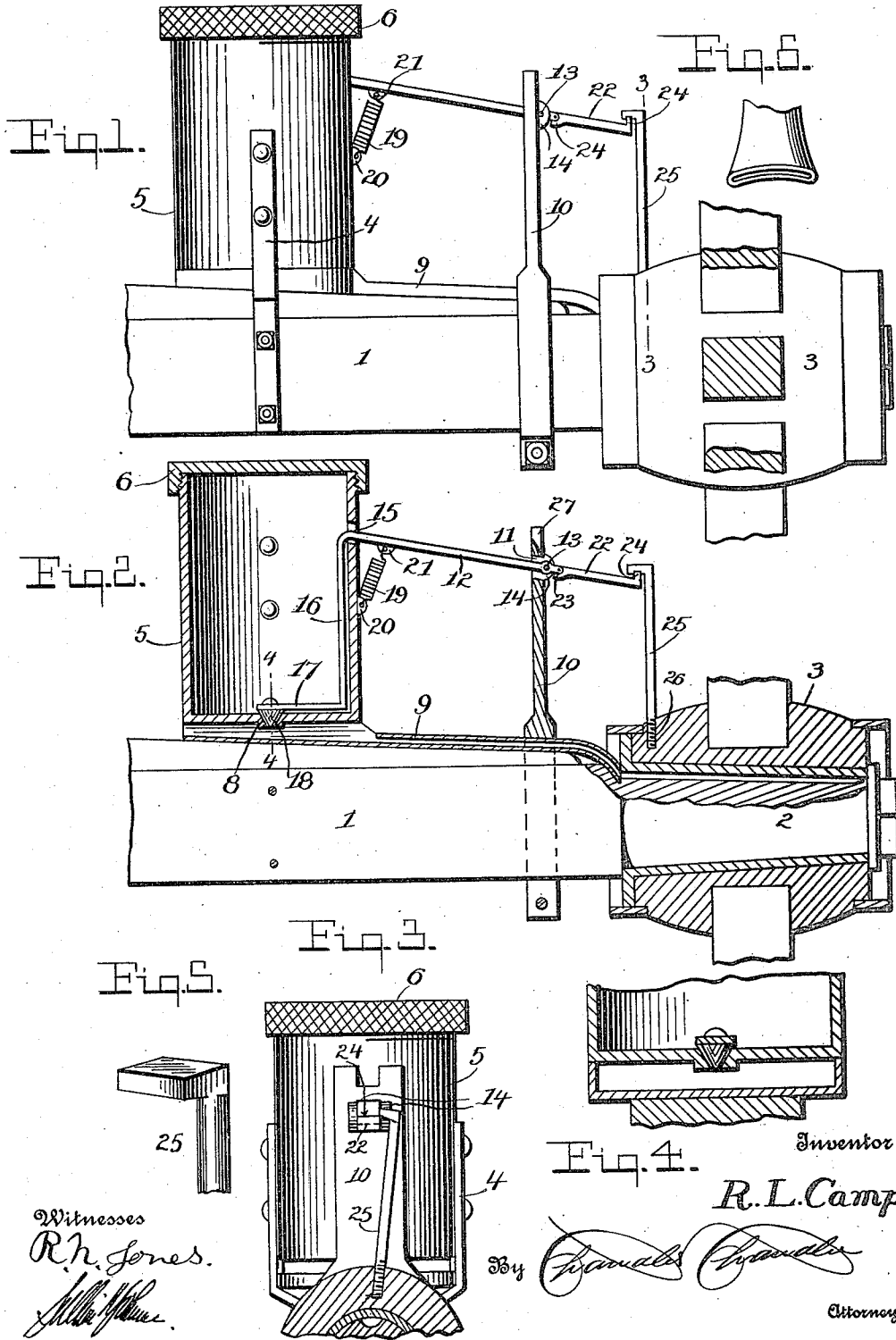


R. L. CAMP.
AXLE LUBRICATOR.
APPLICATION FILED MAY 13, 1912.

1,060,161.

Patented Apr. 29, 1913.



Witnesses
R. H. Jones.
[Signature]

Inventor
R. L. Camp.

By *[Signature]* *[Signature]*
Attorneys

UNITED STATES PATENT OFFICE.

ROBERT L. CAMP, OF RUTHERFORD COUNTY, NORTH CAROLINA.

AXLE-LUBRICATOR.

1,060,161.

Specification of Letters Patent.

Patented Apr. 29, 1913.

Application filed May 13, 1912. Serial No. 696,991.

To all whom it may concern:

Be it known that I, ROBERT L. CAMP, a citizen of the United States, residing in the county of Rutherford, State of North Carolina, have invented certain new and useful Improvements in Axle-Lubricators; 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 relates to improvements in lubricators for vehicle axles, and has for its object to provide a device of this character which may be easily placed upon the axle of a vehicle and is so constructed that oil may be fed to the spindle in any desired quantity and at such times as needed.

With these and other objects in view, this invention resides in the novel features of construction, formations, combinations and arrangements of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which:—

Figure 1 is a portion of an axle and hub showing the lubricator in place thereon. Fig. 2 is a vertical sectional view. Fig. 3 is a sectional view on line 3—3 of Fig. 1. Fig. 4 is a similar view on line 4—4 of Fig. 2. Fig. 5 is a detail perspective view of the trip bar. Fig. 6 is a fragmentary end elevation of the feed tube.

Referring to the accompanying drawing, the numeral 1 designates the axle, having mounted upon the spindle 2 thereof the hub 3, all of which are of the usual construction.

Rigidly supported upon the axle 1 by the brace bars 4 is the oil cup 5, the upper end of which is provided with a closure 6. The bottom 7 of the cup 5 is held spaced above the upper surface of the axle 1, and is provided with a central aperture 8, the purpose of which will appear later.

Extending longitudinally of the axle 1 is a feed tube 9, the inner end of which is flared so as to provide a cup for oil which passes through the aperture 8. The outer end of the feed tube 9 is turned downwardly and is flattened transversely as clearly shown in Fig. 6, the end of which is so positioned in respect to the hub that the oil which feeds through the tube 9 will be directed to said spindle.

Mounted upon the axle 1, and adjacent the spindle 2 is a plate 10, said plate being

provided near its upper edge with a slot 11, and through which is passed the arm 12. The arm 12 is pivotally mounted in the slot upon the pin 13, which has its opposite ends secured in the oppositely disposed ears 14 carried by said plate. The inner end of the arm 12 passes through a slot 15 formed in the wall of the oil cup 5 and terminates in a vertical portion 16 which has its lower arm formed with an extension 17, which is disposed horizontally and has formed upon its outer end a conical valve plug 18 which engages in the aperture 8 formed in the bottom 7 of the cup. To positively hold the valve 18 seated a coil spring 19 is provided, the lower terminal of which is secured to an ear 20 formed on the cup and the upper terminal of said spring is secured to an ear 21 formed near the inner ends of the arms 12.

Pivotally connected to the extreme outer end of the arm 12 is a finger 22, the inner end of which is provided with a shoulder 23 which prevents the downward breaking of the finger 22 but readily permits the same to be swung upwardly and out of the way. The outer end of the finger 22 is provided with a projection 24, which is engaged by the beveled end of the trip bar 25. The trip bar 25 is provided at its lower end with screw threads 26, whereby the same may be screwed into the hub 3.

From this construction it will be seen that when it is desired to lubricate the axle, it is only necessary to position the finger 22 in the path of travel of the trip bar 25, and as the vehicle moves forwardly, the trip bar 25 is rotated with the hub thus intermittently contacting with the projection 24, whereby the arm 12 is rocked, thus raising the valve 18 sufficiently to allow a small quantity of oil to be fed through the tube 9 to the spindle, the spring 19 serving to turn said valve to its closed position. After the axle spindle has been thoroughly oiled, the finger 22 may be swung upwardly, and at which time, the said finger will rest in the notch 27 formed in the upper edge of the plate 10.

What is claimed is:—

The combination with an axle and its spindle, of a hub rotatably mounted upon said spindle, an oil cup mounted upon the axle, a bottom for said cup having an aperture formed therein, a feed tube extending longitudinally of the axle, and having its

inner end flared and arranged beneath said
bottom, the outer ends of the tube being ar-
ranged adjacent the spindle, a plate sup-
ported by the axle, a notch formed in the
5 upper edge thereof, an arm pivotally sup-
ported by the plate, said arm having its
inner end passed through the cup, a valve
carried by the inner end of the arm and
adapted to coact with the bottom aperture,
10 means for holding the valve in said aper-
ture, a finger pivotally connected to the ex-
treme outer end of the arm and having a
projection formed upon its upper surface, a
trip bar carried by the hub, said bar having

its outer end beveled and adapted to engage 15
the upper surface of the projection, where-
by said arm is rocked to unseat the valve to
permit oil to pass from the cup through the
feed tube to said spindle, said finger being
adapted to be swung upwardly in engage- 20
ment with said notch when in its inoperative
position.

In testimony whereof, I affix my signa-
ture, in presence of two witnesses.

ROBERT L. CAMP.

Witnesses:

E. F. WALL,

THOMAS EARLE JOHNSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."