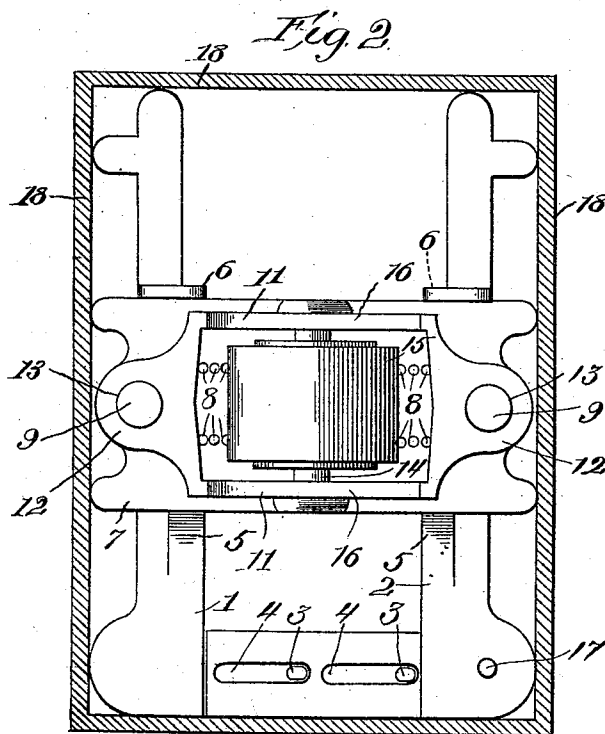
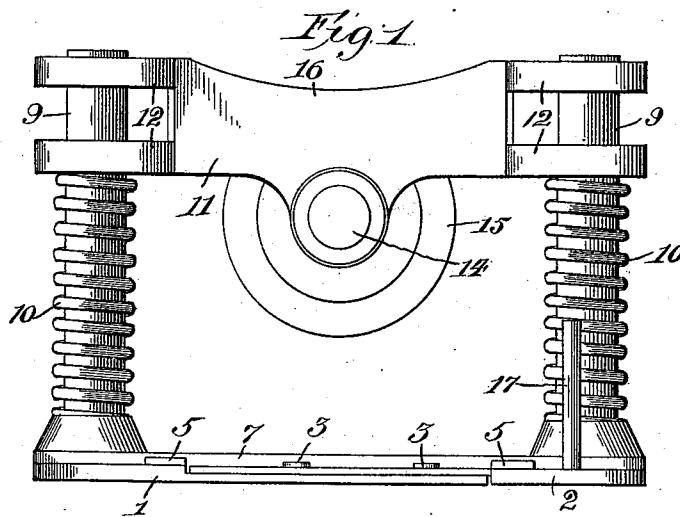


(No Model.)

J. J. BUSENBENZ.
AXLE LUBRICATOR.

No. 549,883.

Patented Nov. 12, 1895.



Witnesses:
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UNITED STATES PATENT OFFICE.

JACOB J. BUSENBENZ, OF CHICAGO, ILLINOIS.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 549,883, dated November 12, 1895.

Application filed March 20, 1895. Serial No. 542,440. (No model.)

To all whom it may concern:

Be it known that I, JACOB J. BUSENBENZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Axle-Lubricators, of which the following is a specification.

My invention relates to that class of axle-lubricators in which a roller is located in the journal-box, having a bearing against the journal-axle, and which rotates sufficiently in a suitable lubricant with which the journal-box is supplied to carry or pass the same upon said journal-axle, such roller being forced or held against said axle-journal by spring-power to utilize the rotation of the journal-axle for rotating said roller; and the objects of my invention are certain improvements in this class of axle-lubricators—that is to say, first, to cause spring-force to be exerted vertically upon the frame or mechanism carrying the lubricating-roller and upon both sides of the roller; second, to so locate the said roller that its axis will be both vertically and longitudinally in line beneath the axis of the journal-axle; third, to provide an extensible base in separable parts which may be placed in a journal-box and the lubricating device secured thereto without displacing the axle-journal, and, fourth, to provide upon the device an indicator for determining the quantity of lubricant to supply the journal-box with for operative purposes and to prevent wastage of the same. I accomplish these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a front view of my device when removed from the journal-box, and Fig. 2 represents a top or plan view of the device.

Similar numerals of reference refer to similar parts throughout both the views.

I form a base of two L-shaped bars 1 and 2, lapping the short end bar 2 over the short end of bar 1, the latter being provided with two short pins 3, and bar 2 with two elongated perforations 4 constructed so the pins 3 may pass through the elongated perforations 4. By this means the longer sides of the L-shaped bars may be drawn apart or extended to fit the journal-box, and by riveting the heads of the pins the two L-shaped bars of

the base may be secured together. Each of the L-shaped bars upon its longer side is provided with lugs 5 and 6.

The cross-plate 7 is of such width as to fit snugly between the lugs 5 and 6 upon the L-shaped bars, and is provided with a series of holes 8, and by means of pins driven therein snugly and against the inner edges of the longer sides of the L-shaped bars, the plate and bars are held together—that is, when the pins 3 have been headed or riveted—in connection with the brace formed by means of the roller against the journal-axle, as will be hereinafter explained.

Instead of using pins in the holes 8, the plate 7 may be provided upon its under side with suitable lugs, which may be so constructed at proper distances as to fit snugly between the inner edges of the longer sides of the L-shaped bars.

The cross-plate 7 at or near either extremity is provided with a vertical post 9, and each post is surrounded by a coiled spring 10.

The roller-frame is composed of the two parallel bars 11, connected at each of their extremities by a cross-piece 12, each of which is provided with a suitable vertical perforation 13, through each of which the upper end of a post 9 passes, so that the roller-frame is supported by the upper ends of the coiled springs. The parallel bars 11 are also provided with suitable cross-perforations to receive and sustain the cross-shaft 14, and upon which shaft between said parallel bars the oiling-roller 15 is loosely mounted. The circular portion 16 on the upper edge of the parallel bars 11 are to accommodate the journal-axle.

I use an indicator which consists of a vertical post 17, secured in or to one of the L-shaped bars near a corner thereof, and construct the same of such height as will be desirable to fill the journal-box with the lubricant properly for operative purposes.

The exterior rectangular lines shaded with oblique parallel lines, (shown at 18 in Fig. 2,) represent the vertical walls of a railroad-car journal-box, broken away below the point where the axle-journal enters such journal-box, for the purpose of showing the position of my device when secured within the journal-box, as it will be readily understood that

the journal-axle comes in contact with the roller 15, bearing its frame against the springs, making a neat fit with the circular portion 16 cut out of the parallel bars 11.

5 After my device has been suitably secured in the journal-box and such box suitably supplied with the lubricant, it will be seen that the springs 10 will force the roller-frame upward, exerting force on each side of the roller
10 substantially equal, so that said roller is held steadily against the axle-journal, its contact being such that the rotation of such axle-journal will cause the roller to rotate, and the surface of such roller passing or rotating
15 in the lubricant carries the latter and distributes it upon the axle-journal.

It will also be observed that the curvature or cut-out portions 16 in the bars 11 for the journal-axle form lubricating deflectors and
20 prevent the lubricant from being thrown out in the journal-box.

I do not claim broadly axle-lubricators in which a roller is located in a journal-box having a bearing against the journal-axle, and
25 which roller rotates in a suitable lubricant in the journal-box, and where such roller is held against the journal-axle by spring-force, as these features are old.

I am also aware that it is old to provide the
30 base-plate with upright posts and surround

each post with a coiled spring and provide the roller-frame with suitable perforations, so that the ends of each upright post may enter such perforations and thus sustain the roller-frame on such coiled springs. I do not, 35 therefore, broadly claim such construction, but confine myself to the improvements in such class of axle-lubricators as I have herein described and shown and such substitution of equivalent members and forms and pro- 40 portions as may be made without departing from the scope of my invention.

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

In an axle lubricator, in combination with 45 a frame, in which a lubricating roller is mounted and held against the journal axle, the L shaped bars forming a base, constructed so the shorter arms lap, one upon the other, one having formed in it elongated perfora- 50 tions, and the other suitable pins whereby the two may be secured together in a desirable position, and means for attaching the frame to such base, substantially as described and for the purpose set forth.

JACOB J. BUSENBENZ.

In presence of—

M. J. FROST,

J. H. LEE.