

J. S. EGGLESTON.

Improvement in Car-Axle Lubricators.

No. 131,087.

Patented Sep. 3, 1872.

Fig. 7.

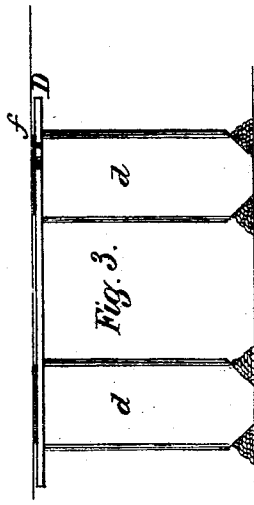
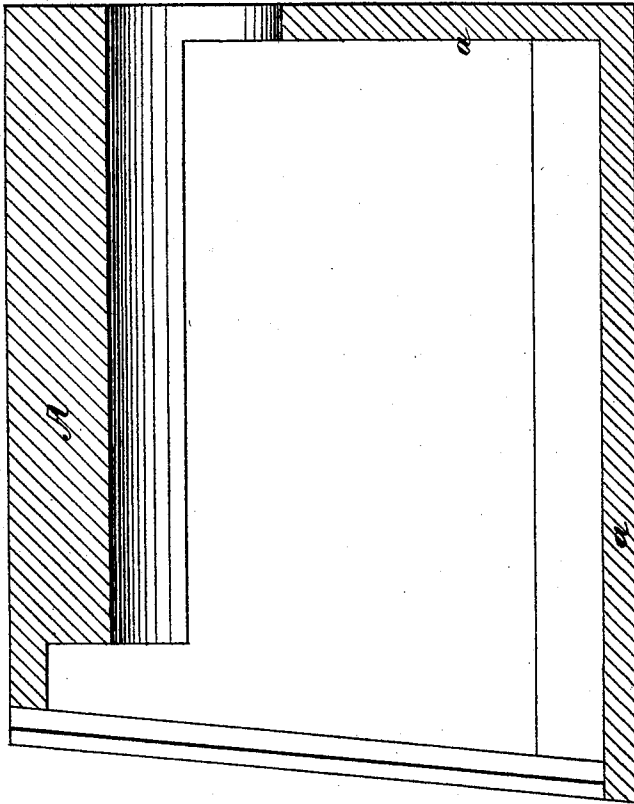
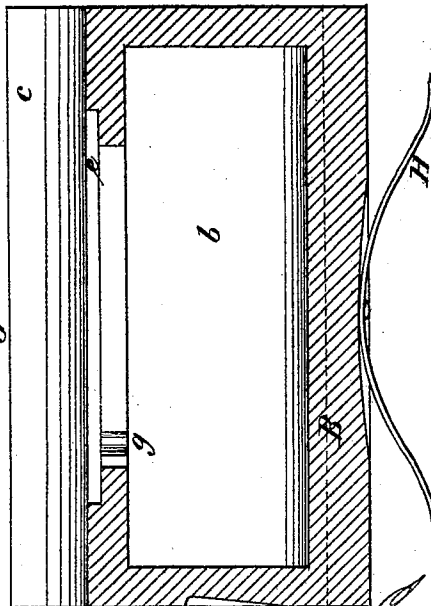


Fig. 3.

Fig. 2.



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Wm. J. Peyton

Inventor:

James S. Eggleston
 By *James L. Torrick* Atty.

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Fig. 5.

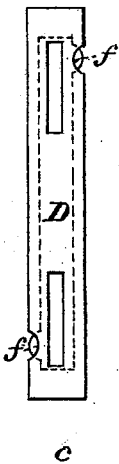


Fig. 6.

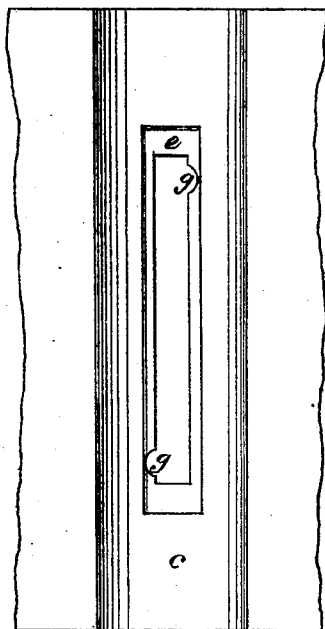
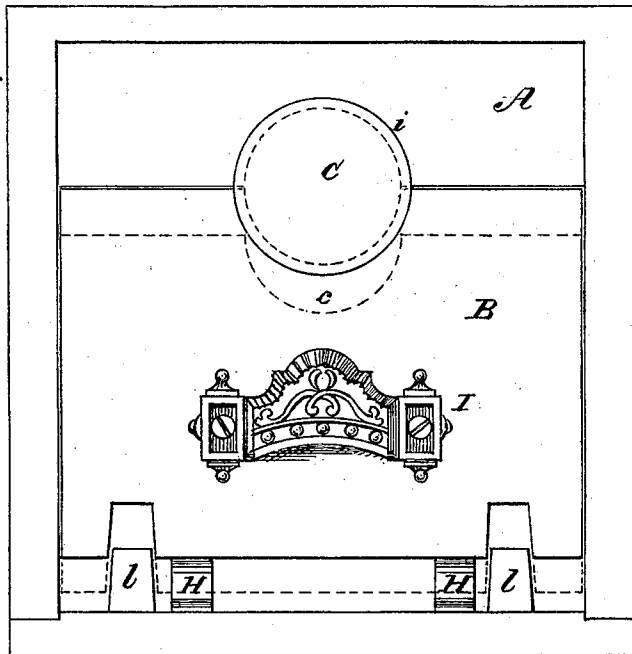


Fig. 4.

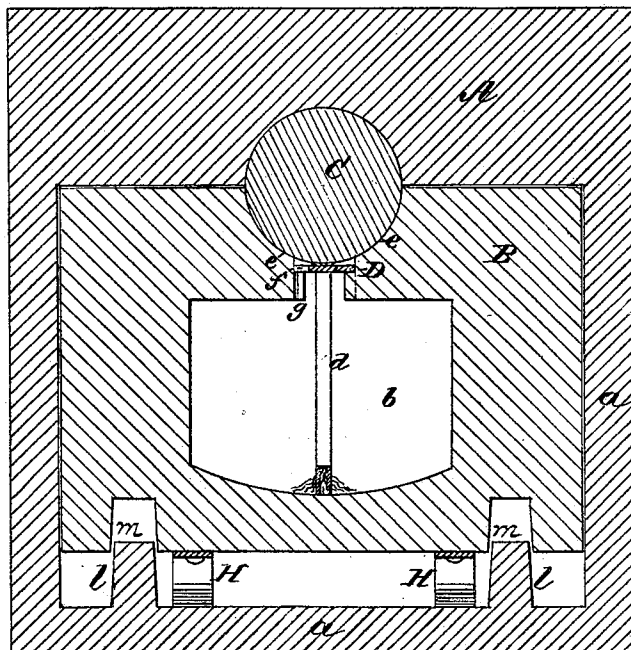


Fig. 7.

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Jesse S. Eggleston.
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Fig. 8

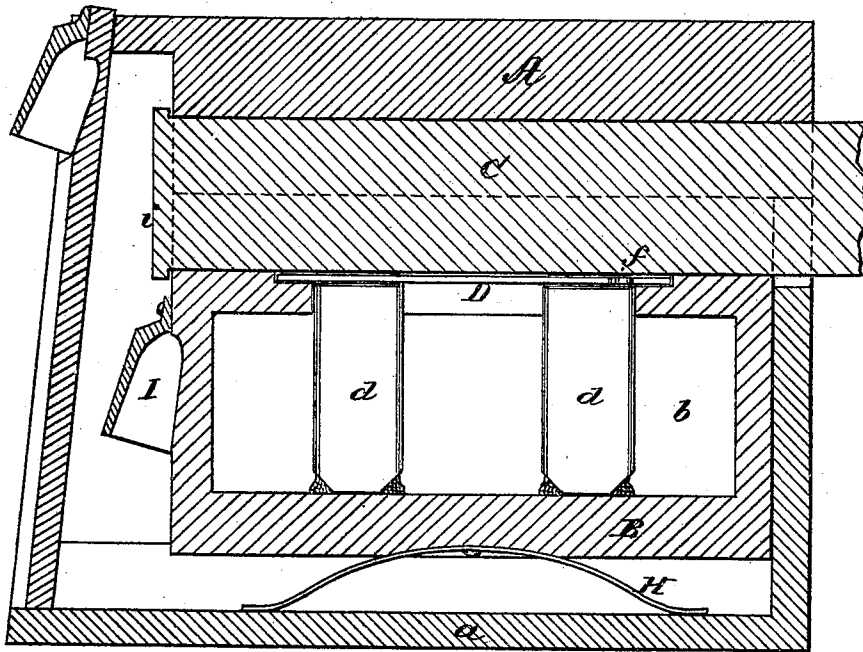
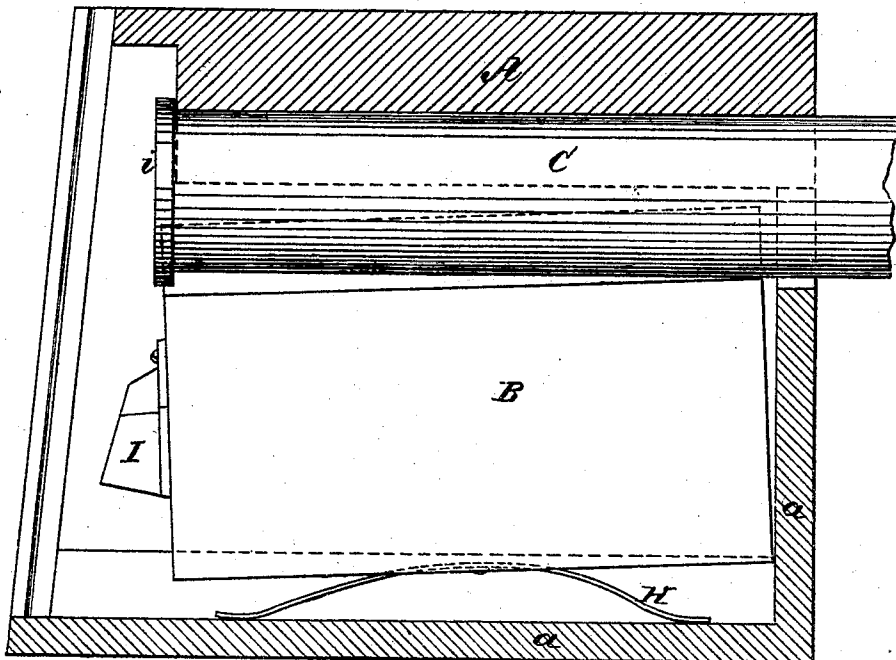


Fig. 9.



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UNITED STATES PATENT OFFICE.

JESSE S. EGGLESTON, OF AUBURN, ASSIGNOR TO HIMSELF, G. J. LETCHWORTH, OF SAME PLACE, AND E. H. KELLOGG, OF NEW YORK, N. Y.

IMPROVEMENT IN CAR-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. 131,087, dated September 3, 1872.

Specification describing certain Improvements in Car-Axle Lubricators, invented by JESSE S. EGGLESTON, of Auburn, county of Cayuga and State of New York.

This invention relates to the means employed for lubricating the axles of railroad cars and like journals, and is especially adapted to that class of bearings in which the weight is superimposed, the shaft or axle revolving and the box or bearing fixed.

The first feature of the invention consists of a plate provided with one or more wick-tubes, said tubes being of such length that they shall extend down sufficiently far into the reservoir, formed in the lower portion of the box or bearing, to rest upon the bottom of the reservoir or upon the wick interposed between the tube and bottom of the reservoir, whereby all liability of displacement is avoided; the plate carrying the wick-tubes being seated within a recess formed within the journal, over the reservoir at a point beneath the axle, said recess being sufficiently deep to form a secondary chamber above the plate and between it and the axle, for the reception of the surplus oil fed up by the wicks, which surplus oil is returned to the reservoir through small openings in the plate forming the bottom of the secondary chamber. The second feature of the invention consists in providing the lower removable box, or that portion of the bearing containing the reservoir with handles, or other suitable devices to facilitate its removal, and with springs so arranged beneath and between it and the shell or case that when the box is in place an upward pressure is exerted upon the same to retain it in place; while at the same time the box can be easily depressed to clear it of the flange or ring upon the end of the shaft or axle when it is desired to remove the box to replenish the reservoir.

In the drawing, Figure 1 is a longitudinal section of the shell, the upper portion of the box being shown as formed with the shell. Fig. 2 is a similar section of the lower portion of the box; Fig. 3, a view of the plate and wick-tubes; Fig. 4, the bearing for the axle recessed for the reception of the wick-tube plate; Fig. 5, a similar view, the tube-plate

being in place; Fig. 6, an end view, showing the handle and springs attached to the lower removable box, and in dotted lines the position of the box when depressed for removal; Fig. 7, a transverse section of Fig. 6, showing reservoir and wick-tube; Fig. 8, a vertical longitudinal section of Fig. 6; Fig. 9, a similar section, showing the lower portion of the box depressed for removal.

The box for the axle is made in two parts, A and B. The part A, or upper portion of the box, is shown in the drawing as formed with the shell *a*, but this is not necessary, as it may be formed separately and bolted or otherwise fastened to the shell. The lower portion B is separate and detachable. It is made hollow to form a reservoir, *b*, for the lubricant, the two portions of the box forming the journal for the axle C, which is provided with a flange or collar, *i*, which controls the play of the axle. The bearing-surface of the box B is recessed for the reception of a plate, D, which is provided with one or more wick-tubes, *d d*. This recess is sufficiently deep to form a secondary chamber, *e*, (Figs. 4 and 7,) for the reception of any surplus oil carried up by the wicks. From this secondary chamber the oil returns to the reservoir through the openings *ff* in the plate D and grooves *gg* in the chamber leading to the reservoir. The secondary chamber and the return openings will prevent the waste of the lubricant, which escapes at the end of the shaft in the ordinary car-axle lubricators. The wick-tubes *d* are made sufficiently long to rest upon the bottom of the reservoir, or upon the interposed wick, and in the drawing I have shown the lower ends of the tubes rounded so as to allow free access of the lubricant to the wick. By causing the wick-tube to rest upon the bottom of the reservoir I avoid all liability of displacement, which is apt to occur if only the plate or short wick-tubes are used. The box B is supported upon and pressed up by springs H, so that the end of the wick is at all times in contact with the axle, which takes up and distributes the lubricant. The springs may be of any desired form, but are preferably like those in the drawing, as it is

the form which enables me to depress or cant the box most readily when I desire to withdraw the same. The box is also recessed, as shown in the drawing, to run upon guides *l*, which keep it in a steady position as it is introduced or removed. A handle, *I*, is attached to the box for convenience in withdrawing it. The box is removed by taking hold of the handle and drawing down and outward; the spring yielding, the forward end of the box *B* is canted sufficiently for it to escape from and pass under the flange or collar *i* of the axle or shaft. After the box is removed the plate *D*, together with its tubes *d*, can be lifted out, the reservoir *b* filled, and the box replaced, when it will be forced up into its seat against the axle by the springs *H*.

What I claim as my invention is—

1. The plate *D*, provided with one or more openings and one or more wick-tubes, *d d*, essentially as herein shown, in combination with

the oil-chamber *b* in the box *B*, with or without the secondary chamber, substantially as and for the purpose described.

2. The box *B* having an oil-reservoir *b*, grooves *g g*, and guide-slots *m* in combination with the plate *D* having one or more openings and one or more wick-tubes, *d*; the plate *D* and box *B* being arranged in respect to the axle so as to form a secondary oil-chamber, the several parts constructed and arranged for operation as herein shown and described.

3. The box *B* provided with a reservoir, *b*, and wick-tubes *d d*, as shown, in combination with the springs *H*, handle *I*, and guideways *l l*, so that the box can be canted for withdrawing it out past the collar of the axle, as and for the purpose specified.

JESSE S. EGGLESTON.

Witnesses:

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