(No Model.)

M. R. CAREY.

CAR AXLE BOX.

No. 298,552. Patented May 13, 1884.

Fig: 1.

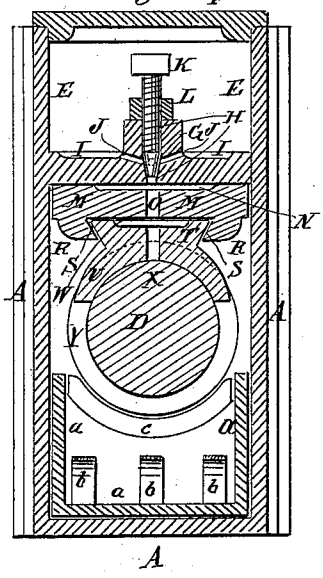


Fig: 2.

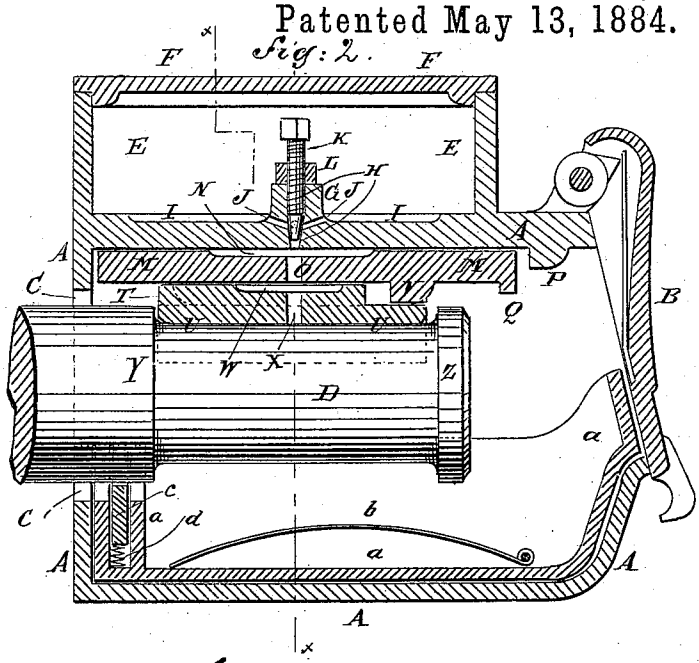


Fig: 3.

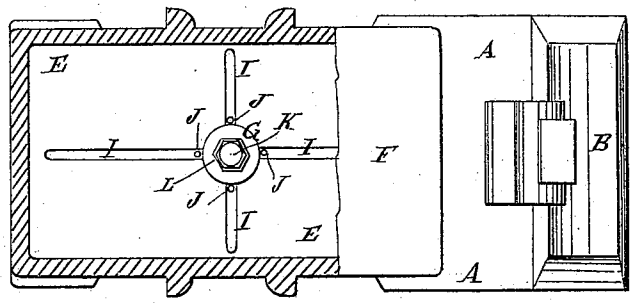


Fig: 4.

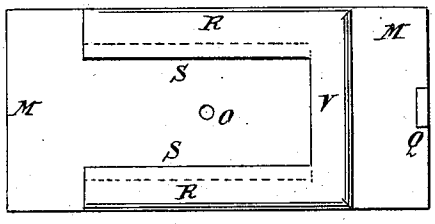


Fig: 6

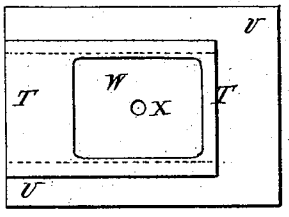


Fig: 5.

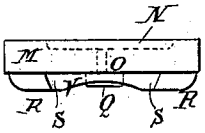
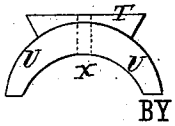


Fig: 7.



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UNITED STATES PATENT OFFICE.

MILTON R. CAREY, OF MAUCH CHUNK, PENNSYLVANIA.

CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 298,552, dated May 13, 1884.

Application filed January 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, MILTON R. CAREY, of Mauch Chunk, in the county of Carbon and State of Pennsylvania, have invented a new and useful Improvement in Car-Journal Boxes, of which the following is a full, clear, and exact description.

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

Figure 1 is a sectional end elevation of my improvement, taken through the line *x x*, Fig. 2. Fig. 2 is a sectional side elevation of the same. Fig. 3 is a plan view of the same, partly in section. Fig. 4 is an under side view of the wedge. Fig. 5 is an end view of the same. Fig. 6 is a plan view of the brass. Fig. 7 is an end view of the same.

The object of this invention is to promote convenience and efficiency in the use of car-journal boxes.

The invention consists in a journal-box constructed with a wedge having a recess in its upper side to receive oil, a perforation through it to conduct oil to the brass, and provided with dovetailed flanges and a stop-flange on its lower side, and a brass having a dovetailed projection to engage with the dovetailed flanges of the wedge, and provided with a recess to receive oil, and a perforation to conduct the oil to the journal, whereby the said wedge and brass can have the necessary play, and will conduct oil to the journal. Upon the top of the housing is formed an oil-chamber, having perforations leading through it and through the top of the housing to discharge the oil, and provided with a screw fitting into the main perforation to regulate the outflow of the oil, so that oil in any desired quantity can be introduced continuously into the journal-box. In the lower part of the journal-box is placed a cellar-box provided with springs to hold the cotton waste up against the journal, and thus keep the said journal oiled, and allow the said cotton waste and the refuse oil to be readily removed. The inner end of the cellar-box is made with a double wall, and in the space between the parts of the said wall is placed a guard-plate, which is held up against the journal by springs placed beneath it, whereby the cotton waste and oil will be kept from working out at the inner end of the journal-box, as will be hereinafter fully described.

A represents the case or housing of a journal-box, which is provided at its outer end with a door, B, and at its inner end with an aperture, C, to receive the journal D.

Upon the top of the housing A is formed an oil-chamber, E, which is made with a separable cover, F, as shown in Figs. 1 and 2.

Upon the center of the bottom of the oil-chamber E is formed a boss or projection, G, which is perforated vertically, the said perforation H passing through the top of the housing A, and having a screw-thread in its upper part, and its lower part tapered, as shown in Figs. 1 and 2.

In the bottom of the oil-chamber E are formed oil-conducting grooves I, leading to the base of the boss G, where they connect with perforations J, connecting at their lower ends with the tapered lower part of the perforation H, as shown in Figs. 1 and 2.

K is a screw fitting into the screw-thread of the perforation H, and having its forward end tapered to fit into the tapered lower part of the said perforation H, so that the outflow of oil from the oil-chamber E can be regulated by adjusting the screw K. The screw K is secured in place, when adjusted, by a jam-nut, L, placed upon the said screw and screwed down upon the boss G.

M is the wedge, the upper side of which has a recess, N, formed in it to receive oil from the perforation H, and has a perforation, O, in its middle part to allow the oil to pass through it. The forward movement of the wedge M is limited by a shoulder, P, formed upon the lower side of the outer part of the top of the housing A. The wedge M is made a little shorter than the space between the shoulder P and the inner end of the housing A, to give the said wedge a slight longitudinal play.

Upon the lower side of the outer end of the wedge M is formed a flange or lip, Q, for convenience in inserting and removing the said wedge.

Upon the lower side of the middle part of the wedge M are formed flanges R, which are undercut upon the inner side to form a dovetailed groove, S, to receive the dovetailed projection

T, formed upon the upper side of the brass U. The inner end of the groove S is open, and its outer end is closed by a flange, V, connecting the outer ends of the flanges R, and which serves as a stop to limit the outward movement of the brass U.

In the upper side of the projection T is formed a recess, W, to receive oil from the perforation O of the wedge M, and through the said projection T and the brass U is formed a perforation, X, to conduct the oil to the journal D. The brass U is made a little shorter than the space between the shoulders Y Z of the journal D, and the outer end of the projection T, when the various parts are in their ordinary positions, is at a little distance from the stop-flange V. By this construction the journal D will have a slight play upon the brass U, and the brass will have a slight play upon the wedge M, and the wedge will have a slight play upon the top of the housing A, as indicated in Fig. 2.

In the lower part of the journal-box is placed a cellar-box, *a*, to receive and hold oil and cotton waste or other suitable material to bring the said oil into contact with the journal D. The cotton waste placed in the cellar-box *a* is held up against the journal D by curved springs *b*, placed in the bottom of the said cellar-box *a*, and attached at one end to the said cellar-box. The cellar-box has a closed bottom and fits snugly in the journal-box, so as to catch and hold in all the refuse oil, thus permitting the latter and the cotton waste to be removed at the same time. The inner end of the cellar-box *a* is made with a double wall, and the upper edge of the said end is recessed to receive the journal D.

In the space between the parts of the double-walled end of the cellar-box *a* is placed a guard-plate, *c*, the upper edge of which is concaved to fit against the journal D, to prevent the cotton waste and the oil from working out beneath the said journal. The guard-plate *c* is held up against the journal D by spiral or other springs *d*, placed beneath the lower edge of the said plate, as shown in Fig. 2.

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

1. In a journal-box, the combination, with the housing A and the journal D, of the wedge M, having recess N and perforation O, and provided with dovetailed flanges R, and a stop-flange, V, and the brass U, having dovetailed projection T, and provided with a recess, W, and perforation X, substantially as herein shown and described, whereby the said wedge and brass can have the necessary play, and will conduct oil to the journal D, as set forth.

2. In a journal-box, the combination, with the top of the housing A and the recessed and perforated wedge and brass, of the oil-chamber E, having projection G, perforations H J, and the adjustable screw K, substantially as herein shown and described, whereby oil in any desired quantity can be introduced continuously to the wedge, brass, and journal, as set forth.

3. In a journal-box, the combination, with the housing A, provided with the door B, of the cellar-box *a*, fitting within the said housing and having a closed bottom, and the springs *b*, secured at one end to said cellar-box and having their free ends resting on the bottom of the same, substantially as herein shown and described.

4. In a journal-box, the combination, with the housing A, of the cellar-box *a*, fitting within the housing and having a double wall at its inner end, the plate *c*, the springs *d* under the plate *c*, and the springs *b*, substantially as herein shown and described.

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Witnesses:
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LAIRD H. BARBER.