S. P. BUSH.

CAR TRUCK SIDE FRAME AND JOURNAL BOX.

APPLICATION FILED OCT. 15, 1913. RENEWED JULY 9, 1914.

1,107,890. Patented Aug. 18, 1914.

FIG. 1.

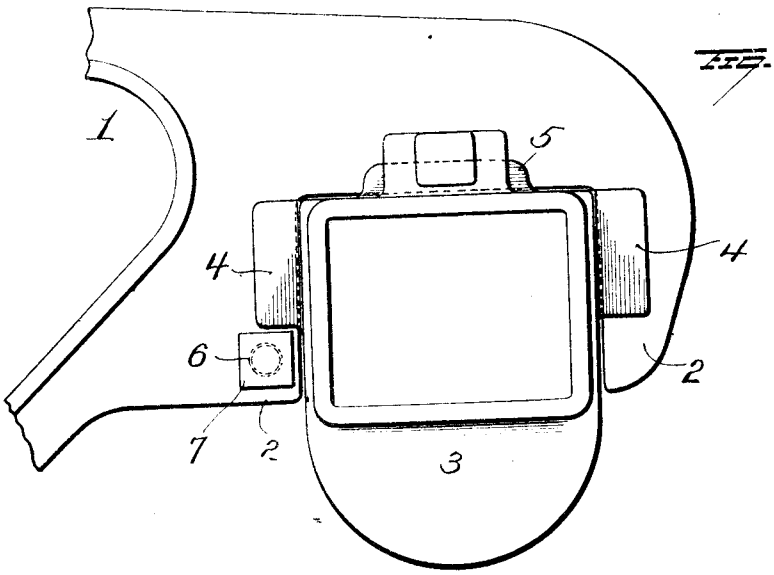


FIG. 2.

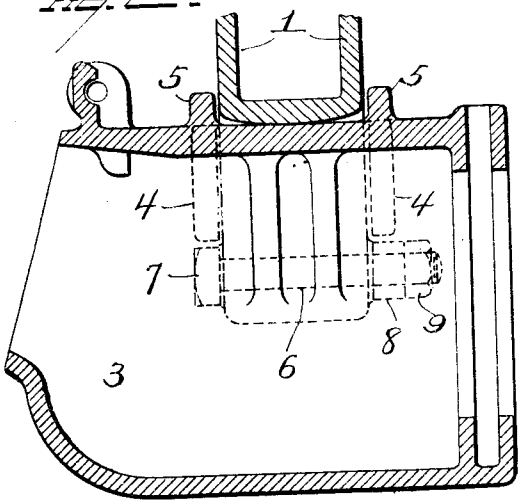
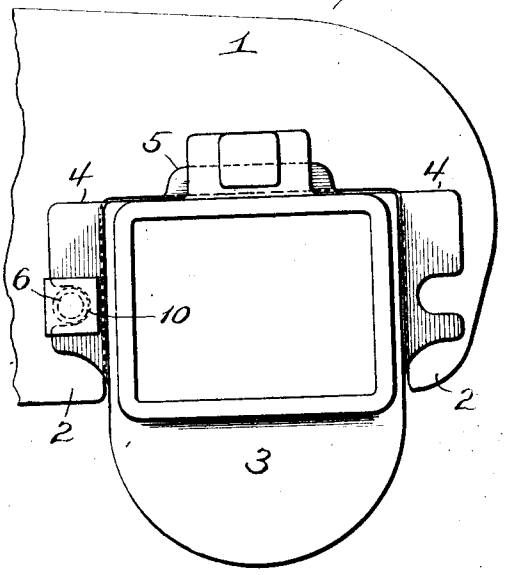


FIG. 3.



WITNESSES

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SAMUEL P. BUSH, OF COLUMBUS, OHIO, ASSIGNOR TO THE BUCKEYE STEEL CASTINGS COMPANY, OF COLUMBUS, OHIO.

CAR-TRUCK SIDE FRAME AND JOURNAL-BOX.

1,107,890. Specification of Letters Patent. Patented Aug. 18, 1914.

Application filed October 15, 1913, Serial No. 795,300. Renewed July 9, 1914. Serial No. 850,052.

To all whom it may concern:

Be it known that I, SAMUEL P. BUSH, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Car-Truck Side Frames and Journal-Boxes; 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.

My invention relates to an improvement in car truck side frames and journal boxes the object being to provide a construction which will permit of the ready removal of a damaged journal box and the attachment of a new one.

A further object is to provide improved means which operate only in an emergency, as for instance in the derailment of a car, to prevent separation of the journal box from the frame.

A further object is to provide a construction wherein the journal boxes may have movement sufficient in the side frames to permit them to adjust themselves to the axles.

With these objects in view my invention consists in the details of construction as will be more fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation of one end of a side frame showing the journal box in place. Fig. 2 is a view in section, and Fig. 3 is a view, similar to Fig. 1 of a modification.

1 represents the truck frame having pedestal jaws 2 for the reception of an axle box 3. The box is provided with a pair of integral vertical flanges 4 at each side, and each pair of flanges is adapted to receive a jaw between them, the space between each pair, being slightly greater than the width of the jaw, so as to provide for a limited lateral motion of the box with relation to the side frame, or a limited lateral movement of the side frame with relation to the boxes. The box is also provided on its top with the upwardly projecting parallel flange 5, arranged transversely of the box, and adapted to secure the end of the frame on either side against motion.

In order to lock the boxes to the frame so as to prevent a separation of the box from the frame, as might result from a derailment, I pass a bolt 6 through one jaw of the frame below the lower edge of the flanges of one pair as shown in Figs. 1 and 2. The bolt has a tight fit in the jaw, and is provided at one end with an angular head 7, and at its other end with an angular filler block 8 which is held in place on the threaded end of the bolt 6, by the nut 9. The head 7 of the bolt and the filler block 8 rest sufficiently below the lower edge of the side flanges 4 so as to provide for the rocking or rotary movement above described but in a position to prevent a separation of the parts. Instead however of securing the bolt to the frame in a position to limit the movement of the box, I may secure the bolt to the flanges of the box and pass it through a hole 10 in the frame as shown in Fig. 3, the hole in the frame being larger than the bolt so as to permit of the necessary rocking movement of the box. I prefer to use but one bolt for each box, but if desired two may be used, and in order that one pattern of box may answer for a truck and avoid rights and lefts, I construct the flanges at both sides of the box to receive the bolt. By having the bolt pass or project through both flanges on the same side of the box, the bolt will be put in double shear, should the frame from any cause, such as derailment be lifted up from the box and thus put the flanges in double shear which is a more desirable plan and simpler than any of the emergency means for preventing separation of the parts, now in use.

I would have it understood that I do not confine myself to the exact constructions shown, but consider myself at liberty to make such changes as may fall within the spirit and scope of this invention.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:—

1. The combination of a truck frame having pedestal jaws, a journal box having a pair of flanges at each side, each pair adapted to receive a jaw of the frame between them, and a bolt passing through one jaw of the frame in the plane of the flanges embracing said jaw, the said bolt being carried by one of said parts and adapted, in an emergency, to engage the other part, so as to permit of a rocking movement between the boxes and the frame but prevent a separation of said parts.

2. The combination of a truck frame having pedestal jaws, a journal box having a pair of flanges at each side, each pair adapted to receive a jaw of the frame between them, and also provided with a pair of top flanges to engage the frame intermediate the jaw, and a bolt passing through one jaw of the frame in the plane of the flange embracing said jaw, the said bolt being carried by one of said parts and adapted, in an emergency, to engage the other part, so as to permit of a rocking movement between the box and the frame, but prevent a separation of said parts.

3. The combination of a truck frame having pedestal jaws, a journal box having side flanges to overreach said jaws, and a bolt secured to one jaw below the flanges and in a position to engage said flanges in case of derailment and prevent a separation of the truck frame and journal box.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

SAMUEL P. BUSH.

Witnesses:
F. G. BENNETT,
N. A. GRIFFIN.