H. E. DOERR.

SIDE FRAME ARRANGEMENT.

APPLICATION FILED MAR. 31, 1920.

1,343,618. **Patented June 15, 1920.**

Fig. 1.

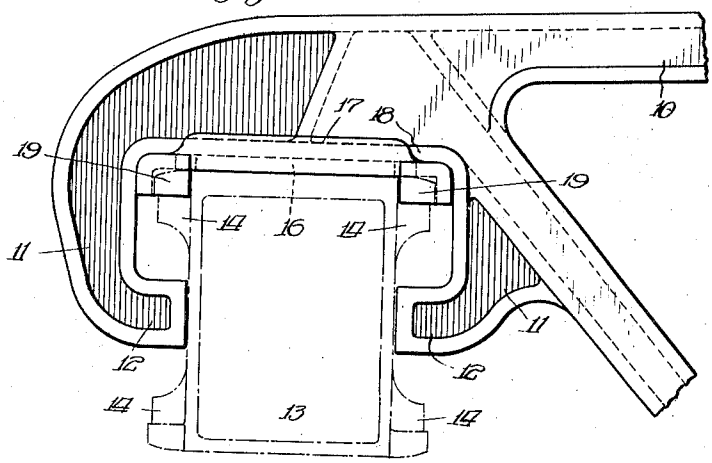


Fig. 2.

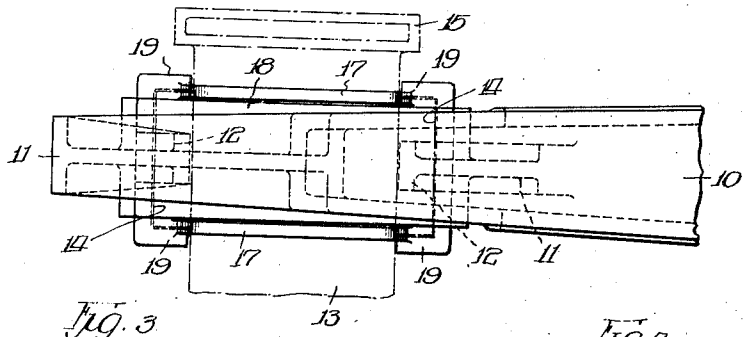


Fig. 3.

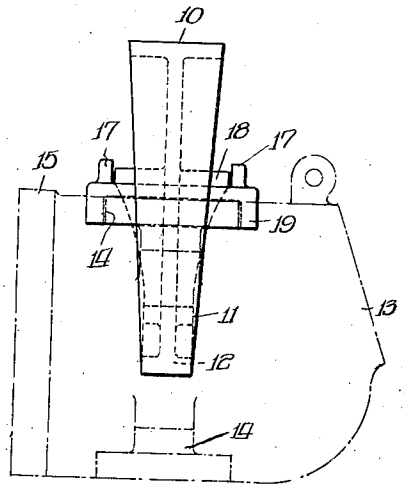


Fig. 4.

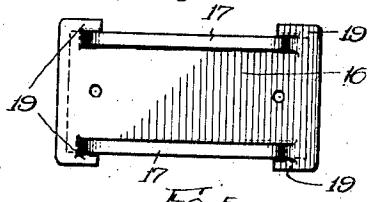


Fig. 5.

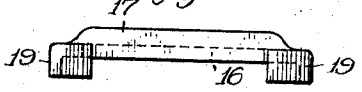
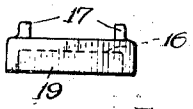


Fig. 6.



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UNITED STATES PATENT OFFICE.

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SIDE-FRAME ARRANGEMENT.

1,343,618. Specification of Letters Patent. **Patented June 15, 1920.**

Application filed March 31, 1920. Serial No. 370,087.

To all whom it may concern:

Be it known that I, HARRY E. DOERR, a citizen of the United States, residing at St. Louis, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Side-Frame Arrangements, of which the following is a specification.

This invention relates to a side frame arrangement and particularly to means for holding the journal boxes in place in a pedestal type of side frame.

In my co-pending application, Serial No. 347,976, filed December 29, 1919, I disclosed a pedestal truck side frame which receives and holds Master Car Builders' journal boxes in place without the use of the usual bolts. Said application also disclosed a truck side frame which may be detachably connected to the journal boxes in a manner to obviate the use of bolts and whereby an emergency fastening is formed in the event the truck be derailed or lifted from the track by any part other than the axles.

This present application is generally related to the same type of construction. However, in this application I disclose means interposed between the upper part of the journal box and the side frame which compensates for a wheel of decreased diameter which has become so by wear or necessitated by turning the wheels down for truing them.

Accordingly one object of this invention is to provide simple and efficient means associated with the truck side frame and journal boxes for compensating for wear of the wheels.

Another object is to provide a shim arrangement to coöperate with the journal box and side frame and interlock therewith to prevent accidental relative movement therebetween.

These and other objects are accomplished by means of the arrangement disclosed on the accompanying sheet of drawings, in which—

Figure 1 is a fragmentary side elevation of a truck side frame and associated parts embodying my invention;

Fig. 2 is a top plan view of the same;

Fig. 3 is an end elevation of the same; and

Figs. 4, 5 and 6 are reduced top plan view, side elevation and end elevation, respectively, of the shim which is interposed between the side frame and journal box.

The various novel features will be apparent from the following description and drawings and will be particularly pointed out in the appended claims.

Referring to the figures of the drawings, it will be noted that I have shown a truck side frame 10 having pedestal jaws 11, the lower ends of which terminate in laterally extending portions 12 which extend toward each other lengthwise of the side frame. These extending jaw portions 12 engage the sides of the Master Car Builders' journal box 13 intermediate its ends and more particularly intermediate the vertical planes of the journal box bolt lugs 14. As is apparent from the particular arrangement disclosed in the figures of the drawings, it would be impossible to apply the side frame to the journal box by a vertical relative movement while the jaw extensions 12 are intermediate the journal box bolt lugs 14. Accordingly, to apply the side frame to the journal box when the latter is fixed on the journal, the side frame 10 is moved inwardly with respect to the journal box to a point where the relatively narrow jaw extensions 12 will pass vertically downwardly between the inward journal box bolt lugs 14 and the dust guard 15. With the side frame in this position the same may be lowered, permitting the jaw extensions 12 to pass vertically downwardly beyond the upper journal box bolt lugs 14 whereupon the side frame may be moved relatively outwardly with respect to the journal box to take its normal operating position.

Let it be assumed that the truck wheels have become worn, or, for other reasons have been reduced in diameter. To compensate for such wear or decrease in diameter of the truck wheels I have provided a shim 16 which is interposed between the upper part of the journal box 13 and the truck side frame. This shim has upwardly extending ribs 17 which coöperate with the roof portion 18 of the pedestal jaws to prevent relative lateral movement between the side frame and the shim when the shim is placed in operative position. The shim 16 is of such length to completely fill the jaws in a lengthwise direction so that movement in a lengthwise direction is prevented. The shim is provided with four housing lugs 19 which

fit over the outside and embrace the four upper journal box bolt lugs 14. Accordingly, when the journal box 13 and the side frame with its shim or shims have moved relatively laterally to a point where the housing lugs 19 of the shim may assume the proper position with respect to the box lugs 14, the side frame is lowered into the position shown in Fig. 1 of the drawings to prevent relative movement between the side frame and the shim and between the shim and the journal box under normal operating conditions, thereby forming an interlock between the shim and the side frame and between the shim and the journal box to prevent relative lateral movement between the parts in question. It will be noted that the jaw extensions 12 are spaced from the housing lugs 19 vertically an amount to accommodate the box lugs 14 in applying the frame to and withdrawing the same from the journal box. The pedestal jaw extensions 12 act as an emergency fastening for maintaining the connection between the side frame and the journal boxes and therefore for the wheels and axles, in the event that the truck is derailed or is lifted from the track by any part other than the axles. It will be noted that no bolts or other fastenings are required to hold the side frame, shim and journal box in proper position other than the parts hereinabove specifically set forth, the housing lugs 19 embracing the side of the journal box lugs, the shim ribs 17 interlocking with the roof 18 of the pedestal jaws, and the pedestal jaw extensions 12 bearing against the sides of the box for holding the same in proper relation to the side frame. It will be understood that when it is desired to replace a broken journal box the same may be done by raising the side frame an amount to properly accommodate the upper journal box lugs 14 between the jaw extensions 12 and the shim housing lugs 19, whereupon the new journal box may be moved laterally inwardly to the point where the lugs 19 may move down over the journal box lugs 14.

It will be appreciated also that the side frame construction may be varied considerably and still have my shims coöperate to produce the same results and function in a like manner.

It is my intention to cover all modifications of the invention falling within the spirit and scope of the following claims.

I claim:

1. In combination, a truck side frame having a journal box receiving portion, a Master Car Builders' journal box, and a shim interposed between the said side frame and journal box which embraces bolt lugs on said journal box normally to prevent relative lateral movement between said side frame and journal box.

2. In combination, a truck side frame having a journal box receiving portion, a Master Car Builders' journal box, and a shim interposed between said side frame and journal box which embraces bolt lugs on said journal box normally to prevent relative lateral movement between said side frame and journal box, said shim also having rims which coöperate with the side frame to prevent relative lateral movement between said shim and side frame.

3. In combination, a pedestal truck side frame including pedestal jaws having portions which embrace the sides of a Master Car Builders' journal box between the lugs thereof for assisting in maintaining the operative position of said side frame and said journal box, and a shim interposed between the side frame and the journal box having portions which embrace the bolt lugs of the Master Car Builders' journal box normally to prevent relative lateral movement between said journal box and shim.

4. In combination, a pedestal truck side frame including pedestal jaws having portions which embrace the sides of a Master Car Builders' journal box between the lugs thereof for assisting in maintaining the operative position of said side frame and said journal box, and a shim interposed between the side frame and the journal box having portions which embrace the bolt lugs of the Master Car Builders' journal box normally to prevent relative lateral movement between said journal box and shim, said side frame and shim having interlocking portions to prevent relative movement therebetween.

5. In combination, a truck side frame, and a shim associated therewith having lugs for embracing adjacent bolt lugs on Master Car Builders' journal boxes to prevent relative movement between said journal box and shim.

6. In combination, a truck side frame, and a shim associated therewith having lugs for embracing adjacent bolt lugs on Master Car Builders' journal boxes to prevent relative movement between said journal box and shim, said shim and said frame having interlocking portions to prevent relative movement therebetween.

Signed at St. Louis, Missouri, this 27th day of March, 1920.

HARRY E. DOERR.