P. J. HOWARD.

JOURNAL BOX SECURING MECHANISM.

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1,125,540.

Patented Jan. 19, 1915.

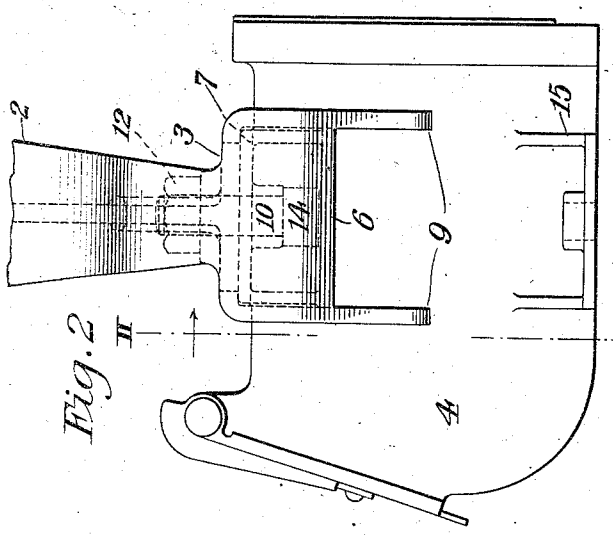

Fig. 2

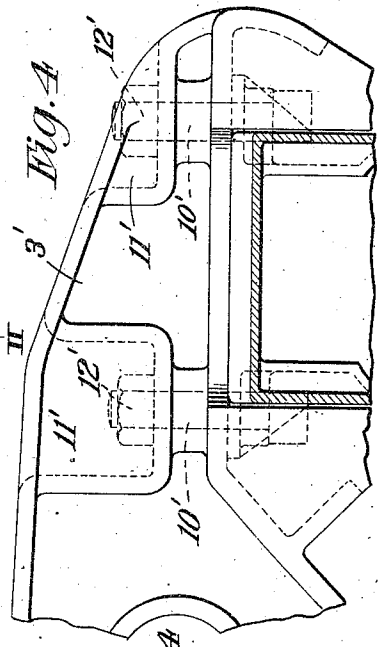

Fig. 4

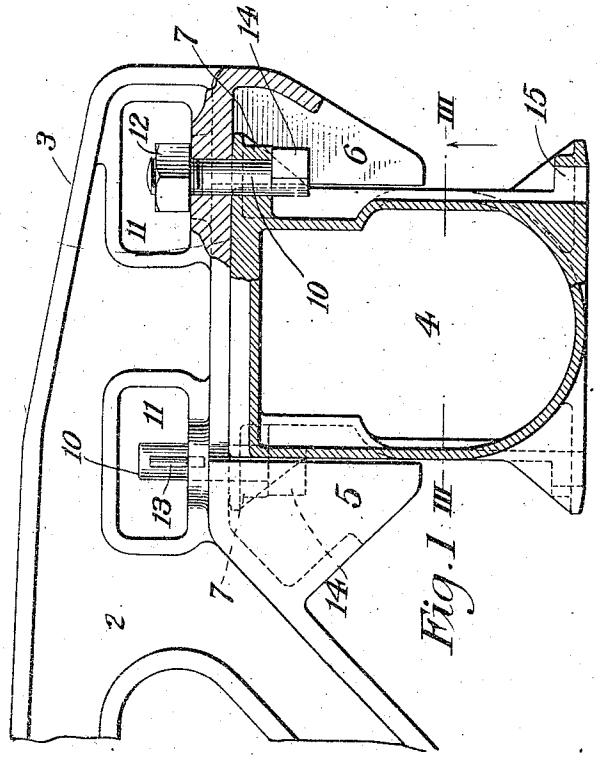

Fig. 1

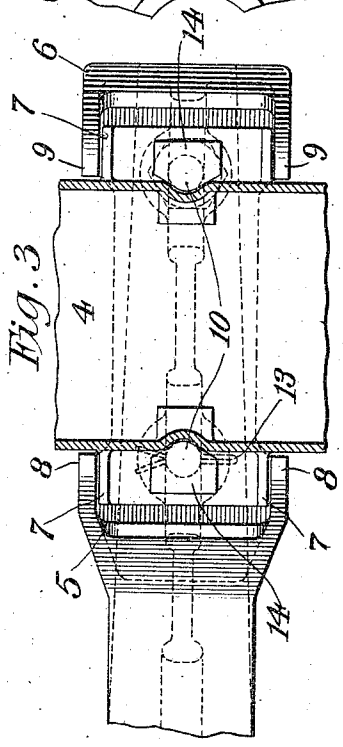

Fig. 3

Witnesses:

Raphael Ketter

H. E. Long

Inventor

Pliny J. Howard

By his Attorney

Clarence D. Kemp.

UNITED STATES PATENT OFFICE.

PLINY J. HOWARD, OF CLEVELAND, OHIO, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO.

JOURNAL-BOX-SECURING MECHANISM.

1,125,540. Specification of Letters Patent. Patented Jan. 19, 1915.

Application filed September 30, 1913. Serial No. 792,665.

To all whom it may concern:

Be it known that I, PLINY J. HOWARD, a citizen of the United States, residing at Cleveland, Cuyahoga county, Ohio, have invented new and useful Improvements in Journal-Box-Securing Mechanism, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 shows a side elevation partly in section of a portion of a truck side frame embodying my invention and having a journal box of the M. C. B. type, secured therein; Fig. 2 is an end elevation thereof; Fig. 3 is an inverted section on lines III—III of Fig. 1; and Fig. 4 shows a modified form of my invention.

My invention relates to the securing of journal boxes to truck side frames and consists in providing journal box seats adapted for use with journal boxes such as those of the Master Car Builders' type, which are designed to receive endwise and lateral thrust transmitted by the car axle to the box, and also serve to permit twisting of the box; it also consists in providing securing mechanism therefor.

Referring to the drawings, the side frame 2 has the usual horizontal extensions 3 (only one of which is shown) each of which is adapted to rest upon the upper surface of a journal box 4. Extending downwardly at right angles to the extension 3 are journal box receiving portions 5 and 6 spaced apart sufficiently to accommodate between them the body of a journal box of the M. C. B. type. The portions 5 and 6 are U-shaped in horizontal cross section (as is shown in Fig. 3) and such portions are adapted to receive therein the top lugs 7 of the box 4 so that the ribs 8 and 9 of the portions 5 and 6 will bear at their edges against the sides of the journal box, and on their inner faces against the top lugs 7. These journal box receiving portions are adapted to receive through the ribs 8 and 9 the thrust transmitted from the axle to the box, and to prevent skewing or twisting of the box relative to the side frame.

When the journal box has been put in position in the receiving space just described bolts 10 are inserted in apertures in the lugs 7 of the box and are passed upwardly through registering apertures in the extension 3 of the side frame 2. The extension 3 has cored out spaces 11, which permit the securing of the bolts 10 by nuts 12 or split keys 13 as is shown in Figs. 1 and 3. The squared heads 14 of the bolts 10 are cut away on the side next the box to permit the ends of the bolts to enter the apertures in the lugs 7 and also to insure that the heads 14 will lie closely against the sides of the box. It will be seen that the bottom lugs 15 of a box of the M. C. B. type are not necessary for securing a journal box to a side frame of applicant's construction, and may when it is desired to save weight, be omitted from the box.

In Fig. 4 I show a modified form of my securing mechanism in which the nuts 12′ for the bolts 10′ are set in pockets 11′ which extend downwardly from the upper surface of the extensions 3′. The nuts 12′ may be manipulated by a socket wrench.

It is obvious that within the scope of my invention many changes may be made in the construction and application of the improvements which I have described and shown above.

What I claim is:

1. A side frame having a horizontally-extending journal box seat, journal box receiving portions extending downwardly from said seat and adapted to receive between them the top lugs of a journal box of the Master Car Builders' type, said journal box receiving portions being adapted to take about the said top lugs and being open at the bottom to receive the said lugs when the journal box is inserted upwardly from below, apertures in the top lugs and in the side frame for reception of bolts, horizontal bearings on the side frame and on the under side of the top lugs, and bolts coöperating with the said apertures and the said bearings, to secure the side frame and the top lugs together.

2. In journal box securing mechanism, a truck side frame having a journal box seat, a journal box having lugs thereon adapted to coöperate with said seat, headed bolts for securing the lugs of the journal box to the side frame, the heads of said bolts being cut away adjacent to the box to permit said bolts to lie closely against the sides of the box.

3. In journal box securing mechanism a

truck side frame having an extension comprising a journal box seat, a journal box having oppositely extending lugs, downwardly extending projections on the said extension taking about the lugs on the journal box, and bolts for securing the journal box to the side frame, each of said bolts having a cut away head adapted to permit the body of the bolt to lie closely against said box.

PLINY J. HOWARD.

Witnesses:
CHESTER K. BROOKS,
HARRY E. ORR.