G. G. FLOYD.
SIDE FRAME AND JOURNAL BOX.
APPLICATION FILED APR. 15, 1907.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Inventor.

Witnesses:

By Affidavit To File.

Attorney.
GEORGE G. FLOYD, OF GRANITE, ILLINOIS, ASSIGNOR TO AMERICAN STEEL FOUNDRIES, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

SIDE FRAME AND JOURNAL-BOX.


Application filed April 16, 1897. Serial No. 388,333.

To all whom it may concern:

Be it known that I, GEORGE G. FLOYD, a citizen of the United States, residing at Granite, in the county of Madison and State of Illinois, have invented certain new and useful Improvements in Side Frames and Journal-Boxes, of which the following is a specification.

The improvement of car truck side frames and journal boxes is the object of my present invention, and to effect this result I cast integral with the cast metal side frame portions or members which heretofore have formed parts of the journal box proper. More specifically I provide the side frame with integral lugs or projections adapted to pass through holes or apertures in the journal box or casing to the interior thereof to form abutments or stops with which cooperate the journal bearing to prevent displacement of the same and to prevent or limit lengthwise or longitudinal shifting of the axle. The improved means for fastening or securing the journal box to the frame in proper position also forms part of this invention.

On the accompanying drawing forming a part of this specification, I have illustrated my preferred and most desirable embodiment of the invention, and on said drawing Figure 1 is a perspective view of an end portion of a railway car truck side frame embodiment; Fig. 2 is a perspective view of a journal box or oil well adapted to be fastened to and cooperate with the side frame shown in Fig. 1; Fig. 3 is a vertical cross-section through the side frame and journal box showing the box secured in place on the side frame; Fig. 4 is a partial side elevation and partial central longitudinal section of the side frame and journal box; and Fig. 5 is a bottom plan view of the two parts.

The cast metal, preferably cast steel, side frame has a vertical plate or web 10 equipped along its top edge with oppositely-extended compression flanges 11 and 12 and along its lower edge with similar tension webs 13 and 14. The latter near the ends of the frame have a horizontal disposition and form the flat plate portion 15, the outer end of which is connected directly with the flanges 11 and 12, the latter curving toward the portion 15, as is clearly illustrated. Projecting downwardly from the under surface of plate 15 are a pair of transverse rectangular lugs or projections 16 and 17, the former being connected to the outer face of flanges 13 and 14 by an integral brace web or bracket 18 which has adjacent to the projection 16 a perforated enlargement or boss 19. Connected with the outer surface of lug 17 is a similar apertured enlargement 20. Above the plate portion 15 and in alignment with the boss 19 web 10 also has an enlargement 21, the same having a centrally disposed aperture or hole in alignment with and forming a continuation of the hole in boss 19. The end portion of the side frame also has an enlargement 22 having a central hole forming a continuation of the aperture or boss 20.

The journal box or oil casing which is adapted to be fastened to and cooperate with the end portion of the side frame shown in Fig. 1 is illustrated in perspective in Fig. 2 and comprises a receptacle 23 having vertical side walls 24 and 25 and a rounded bottom 26, its top wall 27 being flat as indicated and supplied with longitudinal rectangular apertures or holes 28 extended therethrough and located just inside of the walls 24 and 25. These apertures 28 are of substantially the same dimensions as the projections or lugs 16 and 17 which are adapted to pass through the same and project into the interior portion of the box. The side walls 24 and 25 of the casing have at their top central portions 29 rounded on the inner edge or ribs 29 and 30 which are hollowed out as indicated, the latter 30 connecting with the apertures 28 and with the interior of the box, as is clearly shown. The bottom wall of each of these enlargements which is horizontal is centrally apertured at 31, and the inner enlargement 29 has a vertical slot 32 of substantially the same width as the thickness of web 18 and adapted to accommodate the same when the journal box is in position on the side frame.

When the two parts are attached together the top wall 27 of the box or casing lies directly beneath the plate portion 15 of the side frame, projections 16 and 17 extend through the rectangular holes or apertures 28 into the box, the bosses 19 and 20 are neatly housed within the enlargements 29 and 30, and the slot 32 accommodates the web 18 as mentioned above. To hold the box in this position and securely maintain it in place I use a U-shaped bolt 33, the parallel legs of which pass through the vertical holes in the bosses 19, 20...
aid in bracing the projections 16 and 17 and holding them in place.

To those skilled in the art it will be apparent that many minor mechanical changes may be made in the structures shown and described without departure from my invention.

I claim:

1. The combination of a car truck side frame having one or more lugs or projections integral therewith, a journal box having one or more apertures through which said lugs or projections are adapted to extend into the interior of said box, a U-bolt passing around said box to fasten the same to said side frame, and nuts for the ends of said bolt, substantially as described.

2. The combination of a car truck side frame having lugs or projections integral therewith, a journal box having apertures through which said lugs or projections are adapted to extend into the interior of said box, said box also having a groove on its external surface, a U-bolt adapted to lie in said groove and secure said box to said side frame, and nuts for the ends of said bolt, substantially as described.

3. The combination of a car truck side frame having apertured bosses, a journal box or casing adapted to be fastened to said side frame and having recesses or pockets to house the said bosses, and a bolt and nuts to secure said journal box to said side frame, said bolt passing through the apertures of said bosses, substantially as described.

4. The combination of a car truck side frame having apertured bosses and integral lugs, a journal box or casing having holes through which said lugs are adapted to extend into the interior of the box, said box being adapted to be fastened to said side frame and having recesses or pockets to house said bosses, and a bolt and nuts to secure said journal box to said side frame, said bolt passing through the apertures of said bosses, substantially as described.

5. The combination of a car truck side frame having apertured bosses and integral lugs, a journal box or casing adapted to be fastened to said side frame and having holes through which said lugs are adapted to extend into the interior of said box, said box also having recesses or pockets to house said bosses, a journal, a journal bearing having shoulders co-acting with said lugs, and a bolt and nuts to secure said journal box to said side frame, said bolt passing through the apertures of said bosses, substantially as described.

GEORGE G. FLOYD.

Witnesses:

JAS. II. LOUIE.

E. B. SHERZER.