Jan. 1, 1929. 1,697,514

H. C. PRIEBE

TRUCK FOR RAILWAY VEHICLES

Filed Sept. 30, 1927

Fig. 1.

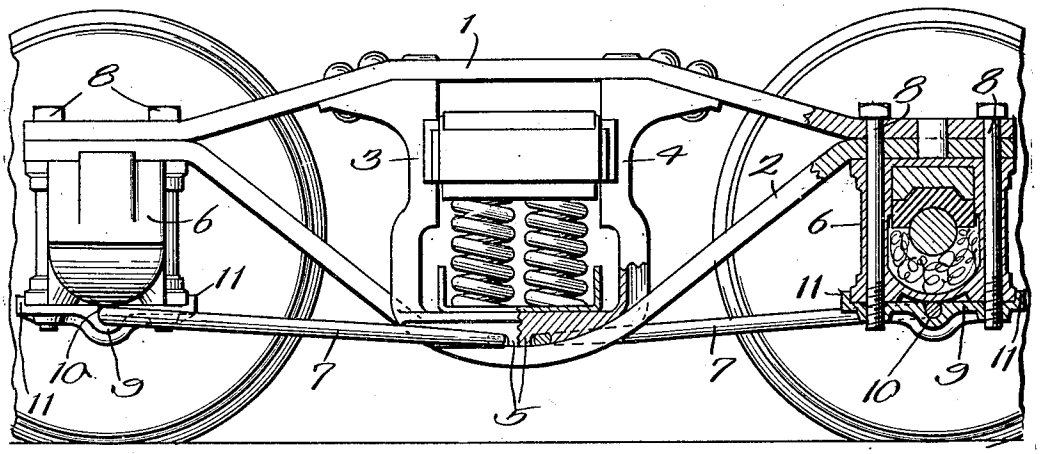


Fig. 2.

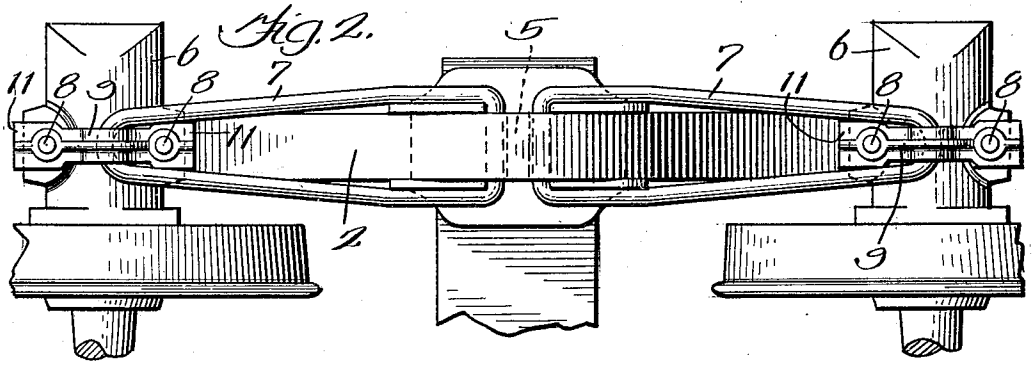
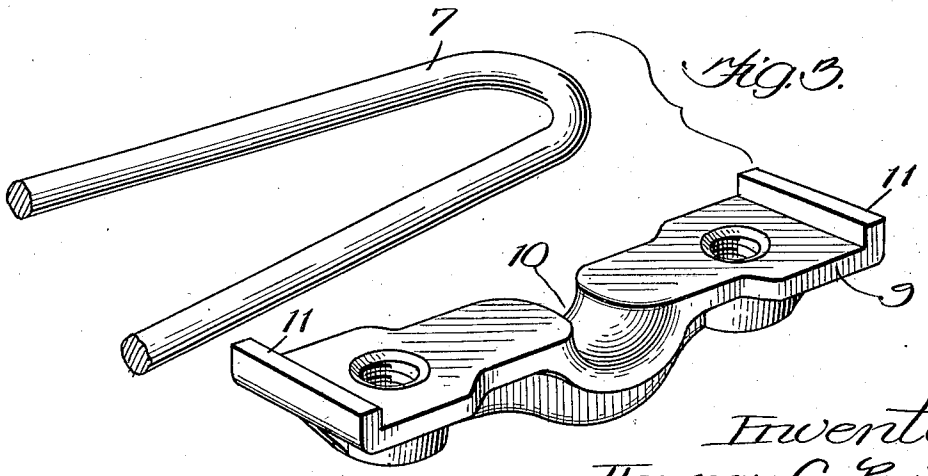


Fig. 3.



Inventor:
Herman C. Priebe.
By G. L. Craig
Atty.

Patented Jan. 1, 1929. 1,697,514

UNITED STATES PATENT OFFICE.

HERMAN C. PRIEBE, OF BLUE ISLAND, ILLINOIS.

TRUCK FOR RAILWAY VEHICLES.

Application filed September 30, 1927. Serial No. 223,049.

My invention relates to trucks for railway vehicles and has for its object the provision of an improved assembly between the arch bars of the truck side frames and the journal boxes whereby the bolts which are employed for assembling the journal boxes with the side frames are relieved of shearing strain.

The invention has for its further object the provision of improved means for assembling the bottoms of the journal boxes with the tie members that are employed for preventing the journal boxes from separating.

In carrying out my invention in the preferred way, anchoring plates are assembled with the bottoms of the journal boxes by means of bolts, these anchoring plates being formed with fins which engage the journal boxes directly and prevent the anchoring plates from having shearing effect upon the bolts. In the preferred embodiment of the invention, these fins are at the ends of the anchoring plates and are positioned to engage the inner and outer transverse bottom portions of the journal boxes, the anchoring plates, in effect, thus constituting sockets that receive the bottoms of the journal boxes and serve very effectively to relieve the aforesaid bolts of shearing strain. The bolts are preferably single or straight bolts, each box being assembled by two sets of bolts whose lower ends are threaded into the underlying anchoring plate. These anchoring plates are formed with recesses at their mid portions which receive the tie members that are provided to prevent the bottoms of the journal boxes from spreading apart.

The invention will be more fully explained by reference to the accompanying drawing in which Fig. 1 is a side view, partially in section, illustrating the preferred embodiment thereof; Fig. 2 is a bottom view of the structure shown in Fig. 1; and Fig. 3 is a perspective view illustrating an anchoring plate and a tie member associated therewith in separated relation.

The truck illustrated includes an upper arch bar or compression member 1, a lower arch bar or tension member 2, bolster columns 3 and 4, a yoke 5 joining the lower ends of the bolster columns, journal boxes 6 at the ends of the side frame, and tie links 7 which assemble the lower ends of the journal boxes with the yoke 5. The arch bars 1 and 2 are desirably of rolled steel converging toward the ends of the side frame and whose ends are brought together above the journal boxes. These journal boxes are assembled with the arch bars by means of the bolts 8 which are passed downwardly through the outer ends of the arch bars and through the sides of the journal boxes 6. The lower ends of these bolts are threaded and are screwed into the ends of the anchoring plates 9 which are arranged longitudinally of the side frame. Each anchoring plate is formed with a mid recess 10 which receives the outer end of an adjacent link 7, the inner end of such link being received in a recess in the bottom side of the yoke 5. The bottom of each journal box closely approaches the outer end of the underlying link 7 so as to hold this link end in its receiving recess 10. The bolts are relieved of shearing strains due to fins 11 upon the anchoring plates 9. These fins are preferably disposed at the outer and inner ends of the anchoring plates and snugly receive the outer and inner bottom portions of the journal boxes to prevent the plates from having shearing effect upon the bolts.

Changes may be made without departing from the invention.

Having thus described my invention, I claim:

1. A truck for railway vehicles including journal boxes; upper and lower arch bars assembled with the journal boxes and which converge toward the tops of said boxes; tie members coupled with the journal boxes to prevent the same from spreading at their bottoms; anchoring plates at the bottoms of the journal boxes and engaging said tie members; and bolts passing through the arch bars and said anchoring plates, said anchoring plates being provided with fins which engage the journal boxes to prevent the plates from having shearing effect upon the bolts.

2. A truck for railway vehicles including journal boxes; upper and lower arch bars assembled with the journal boxes and which converge toward the tops of said boxes; tie members coupled with the journal boxes to prevent the same from spreading at their bottoms; anchoring plates at the bottoms of the journal boxes and engaging said tie members; and bolts passing through the arch bars and said anchoring plates, said

anchoring plates being provided with fins, at the inner and outer ends thereof, which engage the journal boxes to prevent the plates from having shearing effect upon the bolts.

3. A truck for railway vehicles including journal boxes; upper and lower arch bars assembled with the journal boxes and which converge toward the tops of said boxes; tie members coupled with the journal boxes to prevent the same from spreading at their bottoms; anchoring plates at the bottoms of the journal boxes and engaging said tie members; and bolts passing through the arch bars and said anchoring plates, said bolts being screwed into said plates, said anchoring plates being provided with fins which engage the journal boxes to prevent the plates from having shearing effect upon the bolts.

4. A truck for railway vehicles including journal boxes; upper and lower arch bars assembled with the journal boxes and which converge toward the tops of said boxes; tie members coupled with the journal boxes to prevent the same from spreading at their bottoms; anchoring plates at the bottoms of the journal boxes and engaging said tie members; and bolts passing through the arch bars and said anchoring plates, said bolts being screwed into said plates, said anchoring plates being provided with fins at the inner and outer ends thereof which engage the journal boxes to prevent the plates from having shearing effect upon the bolts.

5. A truck for railway vehicles including journal boxes; a side frame; tie members coupled with the journal boxes to prevent the same from spreading at their bottoms; anchoring plates at the bottoms of the journal boxes and engaging said tie members; and bolts passing through the side frame and said anchoring plates, said anchoring plates being provided with fins which engage the journal boxes to prevent the plates from having shearing effect upon the bolts.

6. A truck for railway vehicles including journal boxes; a side frame; tie members coupled with the journal boxes to prevent the same from spreading at their bottoms; anchoring plates at the bottoms of the journal boxes and engaging said tie members; and bolts passing through the side frame and said anchoring plates, said anchoring plates being provided with fins at the inner and outer ends thereof which engage the journal boxes to prevent the plates from having shearing effect upon the bolts.

7. A truck for railway vehicles including journal boxes; a side frame; tie members coupled with the journal boxes to prevent the same from spreading at their bottoms; anchoring plates at the bottoms of the journal boxes and engaging said tie members; and bolts passing through the side frame and said anchoring plates, said bolts being screwed into said plates, said anchoring plates being provided with fins which engage the journal boxes to prevent the plates from having shearing effect upon the bolts.

8. A truck for railway vehicles including journal boxes; a side frame; tie members coupled with the journal boxes to prevent the same from spreading at their bottoms; anchoring plates at the bottoms of the journal boxes and engaging said tie members; and bolts passing through the side frame and said anchoring plates, said bolts being screwed into said plates, said anchoring plates being provided with fins at the inner and outer ends thereof which engage the journal boxes to prevent the plates from having shearing effect upon the bolts.

9. A truck for railway vehicles including journal boxes; a side frame; tie members coupled with the journal boxes to prevent the same from spreading at their bottoms; anchoring plates at the bottoms of the journal boxes and engaging said tie members; and bolts passing through the side frame and said anchoring plates, said anchoring plates having recesses receiving said tie members and the bottoms of said journal boxes closely approaching said recesses and serving to confine the adjacent portions of the tie members in such recesses.

10. A truck for railway vehicles including a journal box; upper and lower arch bars assembled with the journal box and which converge toward the top of the box; a tie member coupled with the lower portion of the journal box; an anchoring plate at the bottom of the journal box for anchoring the tie member; and bolts passing through the arch bars and said anchoring plate, said anchoring plate being provided with a fin which engages the journal box to prevent the plate from having shearing effect upon the bolts.

In witness whereof, I hereunto subscribe my name.

HERMAN C. PRIEBE.