W. H. MINER.

BOLSTER FOR CARS OR OTHER VEHICLES.

APPLICATION FILED JAN. 22, 1908.

953,048. Patented Mar. 29, 1910.

Fig. 1.

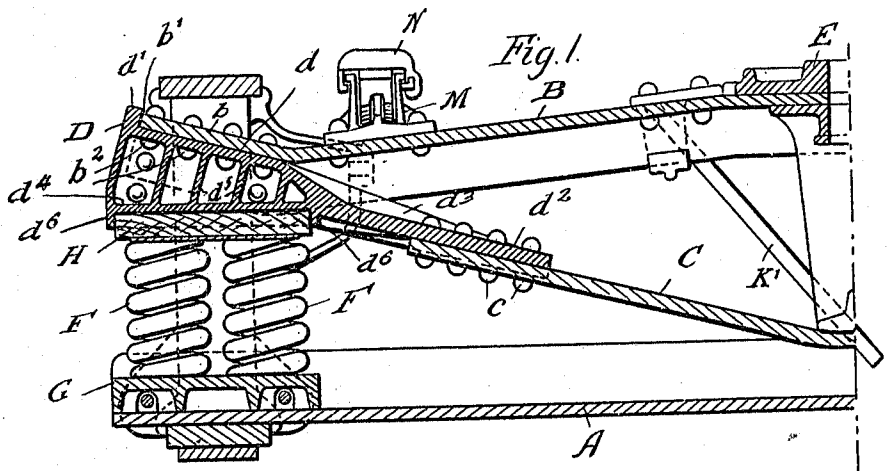


Fig. 2.

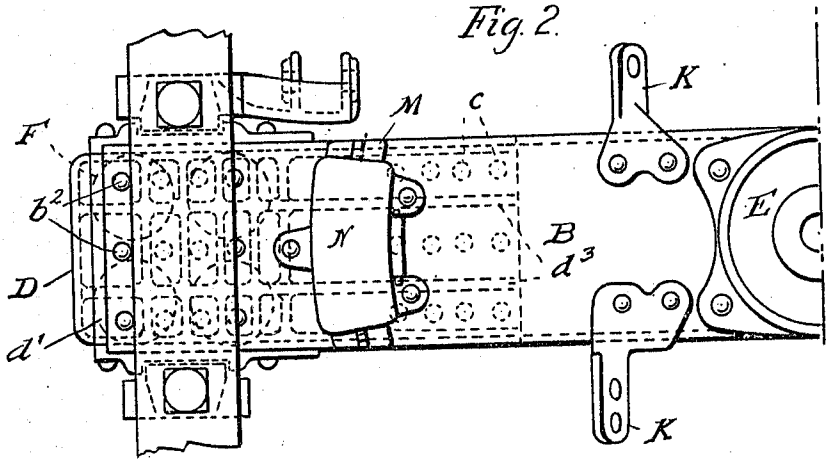
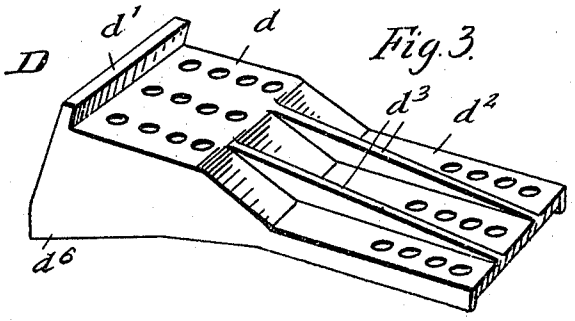


Fig. 3.



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BOLSTER FOR CARS OR OTHER VEHICLES.

953,048. Specification of Letters Patent. **Patented Mar. 29, 1910.**

Application filed January 22, 1908. Serial No. 412,086.

To all whom it may concern:

Be it known that I, WILLIAM H. MINER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Bolsters for Cars or other Vehicles, of which the following is a specification.

My invention relates to bolsters for cars or other vehicles, and more particularly to those of a truss construction, comprising a compression member and a tension member and an intervening strut.

Heretofore the bolsters of the kind or class to which my invention relates have, ordinarily, had the ends of the flat rolled steel tension member folded over the ends of the compression member, and in order to secure the parts together under the proper tension to prevent bending or bowing of the compression member, it has been necessary to employ an expensive and special construction of machine by means of which the ends of the flat steel tension member could be folded over the ends of the compression member, while the tension member is heated to a high temperature, so that the subsequent shrinkage of the metal would give the parts the requisite tight, close tension fit with each other. And, in case of breakage or other serious injury to either the compression member or tension member, or other part, it is necessary to send the bolster back to the factory where it was made or where the special machine for uniting the compression and tension members is located, thus rendering repairs extremely difficult, troublesome and expensive, and frequently causing much car and traffic delay.

The object of my invention is to provide an improved construction of truss rolled steel bolster, by means of which these difficulties may be overcome, and the repairing of the bolster by substitution of a new compression member, or new tension member, a new central strut or other part enabled to be made at any ordinary railway car shop.

My invention consists in the means I employ to practically accomplish this object or result; that is to say it consists in a bolster comprising a compression member, preferably of rolled steel, a central strut, preferably of malleable iron, a tension member, preferably of rolled steel, and two angle blocks, preferably of malleable iron, one at each end of the bolster, each furnished with an inclined seat and an abutment shoulder for engagement with the end of the compression member and to which said compression member is firmly riveted, and having an inwardly extending shank to which the end of the shortened tension member is securely riveted, and also provided with a horizontal seat to receive the cap for the bolster springs of the car truck.

It further consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described.

In the accompanying drawing, forming a part of this specification Figure 1 is a central vertical section of a car truck bolster embodying my invention; Fig. 2 is a plan view; and Fig. 3 is a detail perspective view of one of the angle blocks which connect the compression and tension members and at the same time afford a horizontal seat for the spring cap.

In the drawing A represents a portion of a car truck frame, B the compression member of the bolster, C the tension member thereof, D one of the angle blocks, E the central strut through which the king bolt extends, F the bolster springs, G the lower spring seat, and H the spring cap or follower between the springs and the bolster.

The compression member B may be of any suitable form, it is however preferably a channel bar of rolled steel, as illustrated in the drawing. The tension member C is preferably a flat bar of rolled steel, it is made materially shorter than rolled steel tension members heretofore in use, and the ends of which have been folded over the ends of which have been folded over the ends of the compression member. Each of the angle blocks D is provided with a flat inclined seat or portion d adapted to receive and fit flat against the upwardly inclined end b of the compression member B, and also with a shoulder d^1 against which the extreme end b^1 of the compression member directly and snugly abuts. The end b of the compression member is secured firmly and rigidly to the seat portion d of the angle block D by rivets b^2. The angle block D is also provided with an inwardly extending shank portion d^2 furnished with upright strengthening ribs d^3 on the upper side. This shank d^2 is firmly and rigidly secured to the tension member C by rivets c. The angle block D is also provided on its lower side with a hori-

zontal cap seat d^4 to receive the horizontal spring cap or bearing plate H. The horizontal cap seat d^4 is preferably in part formed by transverse ribs d^5 of varying widths on the under side of the angular connecting block D. The horizontal cap seat d^4 is preferably surrounded by a marginal flange d^6 to embrace the edges of the spring cap H. By this improved construction either the compression member, tension member, the central strut, or either or both of the angular combined spring cap-seat-and-connecting-blocks may be readily and conveniently replaced or repaired without the necessity of any special machine.

K are brackets secured to the compression member to receive the brace rods K^1.

M is the lower member of the side bearing and N is the upper member thereof.

I claim:

1. In a bolster, the combination with a compression member and central strut, of a tension member, and an angular connecting block having a shank secured to the tension member and provided with a flat seat secured to the compression member and furnished at its under side with a horizontal seat for a spring cap, substantially as specified.

2. In a bolster, the combination with a compression member and central strut, of a tension member, and an angular connecting block having a shank secured to the tension member and provided with a flat seat secured to the compression member and furnished at its under side with a horizontal seat for a spring cap, said block having a shoulder for the extreme end of the compression member to abut against, substantially as specified.

3. In a bolster, the combination with a compression member and central strut, of a tension member, and an angular connecting block having a shank secured to the tension member and provided with a flat seat secured to the compression member and furnished at its under side with a horizontal seat for a spring cap, said spring cap seat comprising in part ribs of varying widths on the under side of said block, substantially as specified.

4. In a bolster, a combined connecting and cap-seat block D, having an inclined flat seat d to receive the inclined end of a compression member, a shank d^2 for connection with the end of the tension member, and a horizontal seat d^4 to receive the cap or bearing plate of the springs, substantially as specified.

5. In a bolster, a combined connecting and cap-seat block D, having an inclined flat seat d to receive the inclined end of a compression member, a shank d^2 for connection with the end of the tension member, a horizontal seat d^4 to receive the cap or bearing plate of the springs, and also provided with a shoulder d^1 for the extreme end of the compression member to abut against, substantially as specified.

6. In a bolster, a combined connecting and cap-seat block D, having an inclined flat seat d to receive the inclined end of a compression member, a shank d^2 for connection with the end of a compression member, a horizontal seat d^4 to receive the cap or bearing plate of the springs, said shank having reinforcing ribs on its upper side, substantially as specified.

7. In a bolster, a combined connecting and cap-seat block D, having an inclined flat seat d to receive the inclined end of a compression member, a shank d^2 for conection with the end of the tension member, and a horizontal seat d^4 to receive the cap or bearing plate of the springs, and also provided with ribs of varying widths on its under side forming part of said horizontal seat for the cap of the spring, substantially as specified.

8. In a bolster, a combined connecting and cap seat block D, having an inclined flat seat d to receive the inclined end of a compression member, a shank d^2 for connection with the end of the tension member, and a horizontal seat d^4 to receive the cap bearing plate of the springs, and also provided with a flange to embrace the cap of the springs, substantially as specified.

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Witnesses:
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