

No. 720,239.

PATENTED FEB. 10, 1903.

G. H. GOODELL.
TRUCK BOLSTER.

APPLICATION FILED JULY 3, 1902.

NO MODEL.

Fig. 1

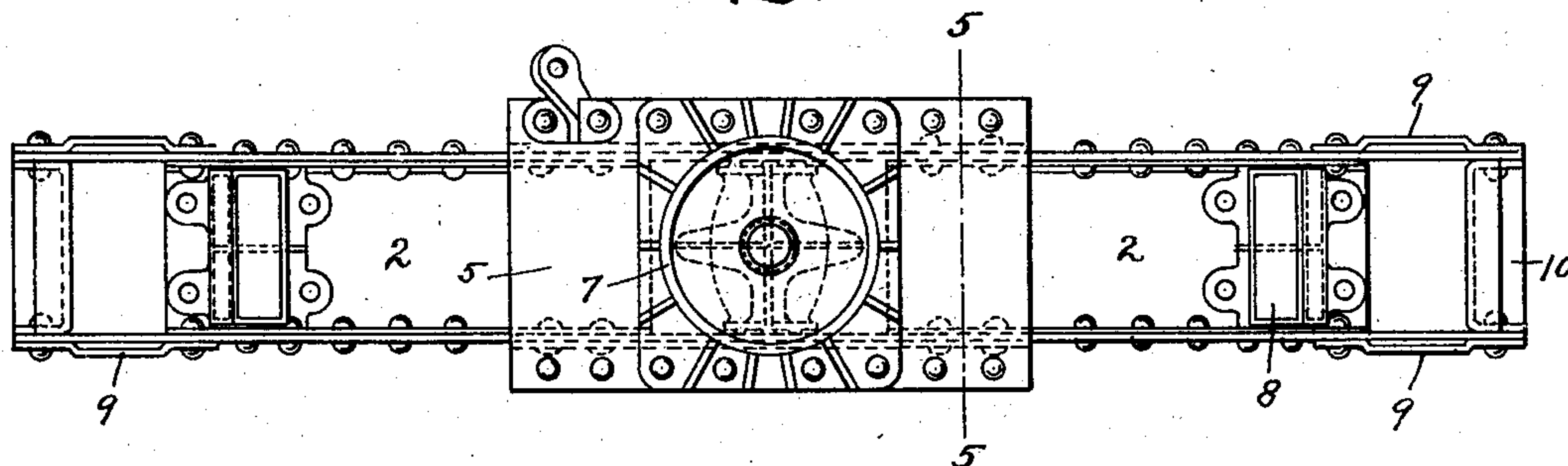


Fig. 2

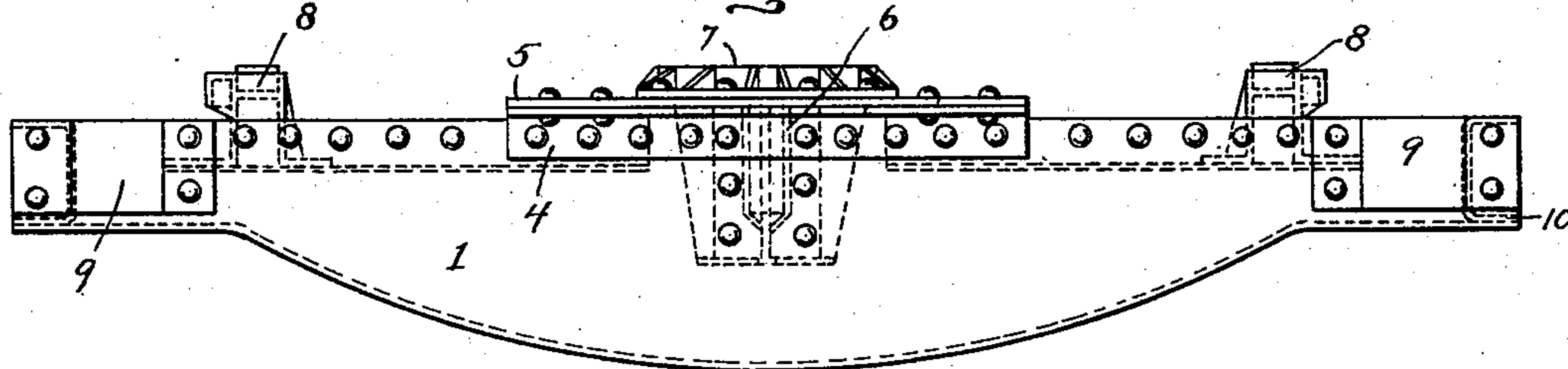


Fig. 5

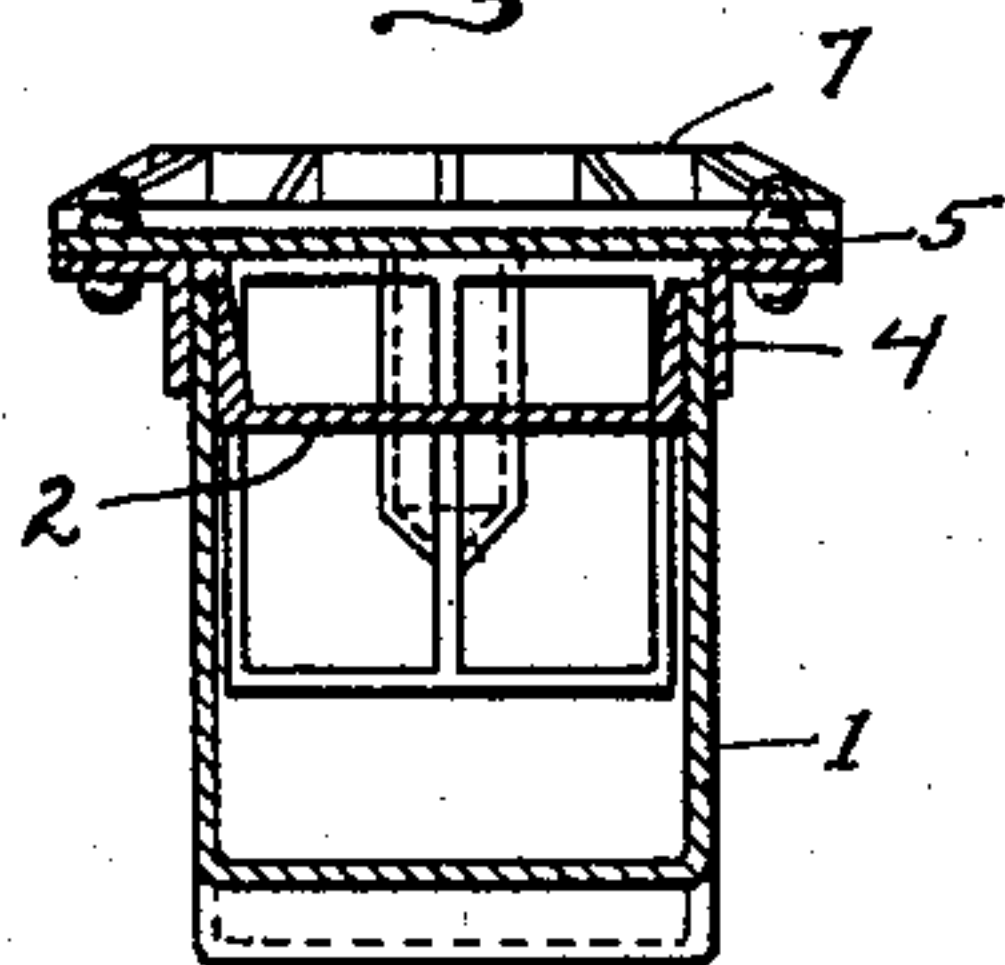


Fig. 4

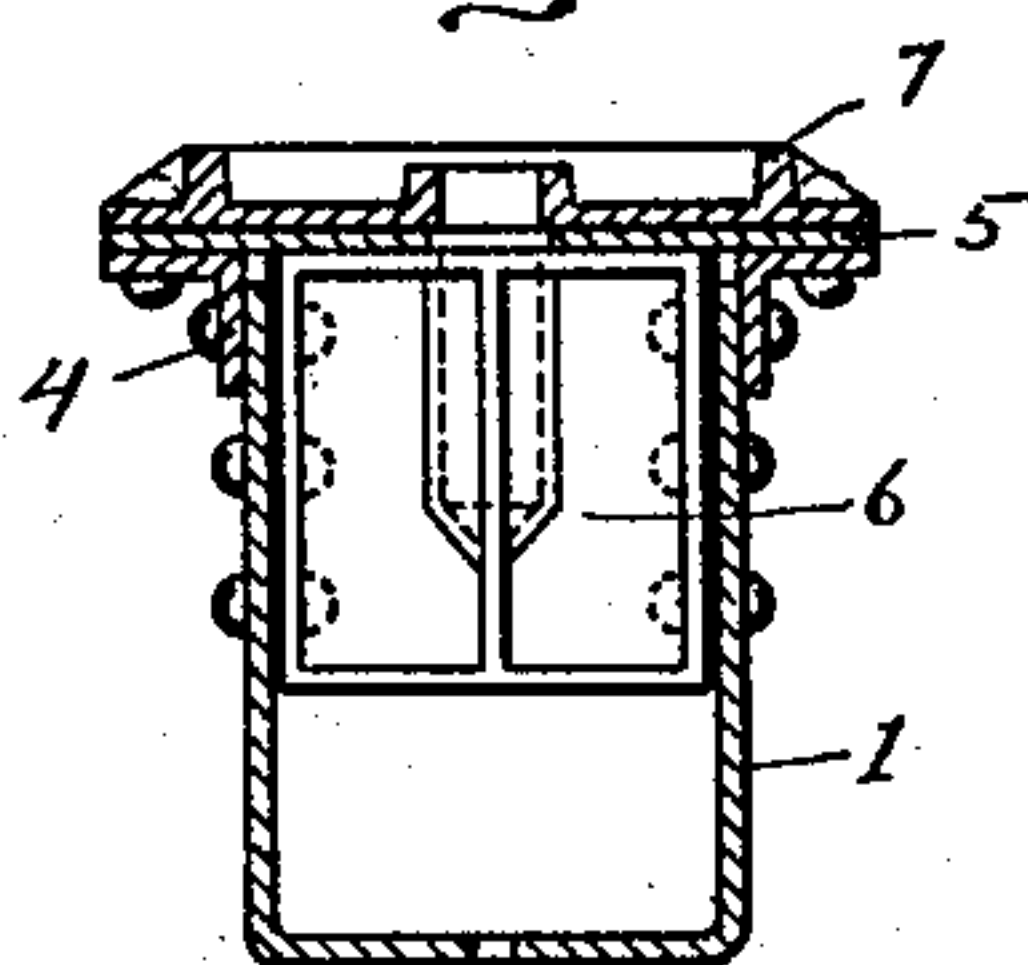
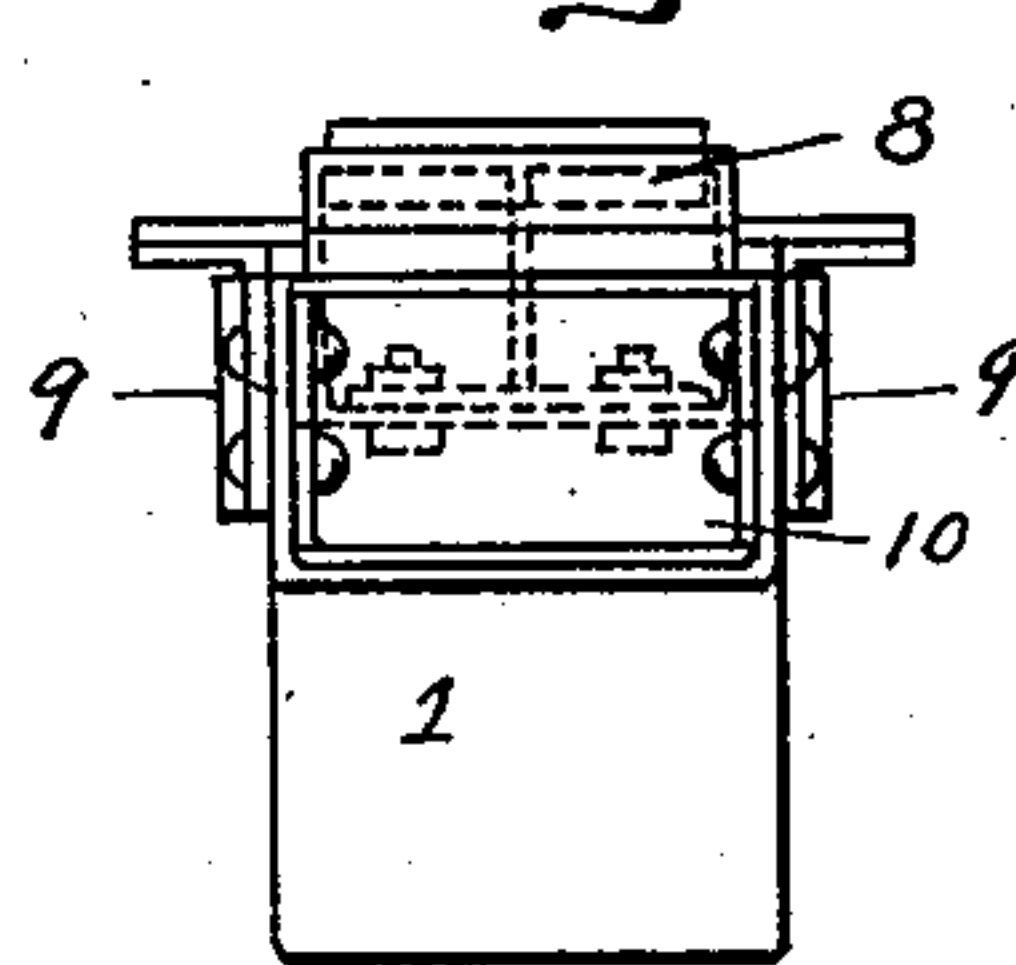


Fig. 3



Witnesses.

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UNITED STATES PATENT OFFICE.

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TRUCK-BOLSTER.

SPECIFICATION forming part of Letters Patent No. 720,239, dated February 10, 1903.

Application filed July 3, 1902. Serial No. 114,229. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. GOODELL, a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Truck-Bolsters; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to bolsters for car-trucks; and its object is to provide a bolster which can readily be inserted in truck-frames having columns placed closely together and which nevertheless affords a broad flat support for a wide center-plate.

Truck-frames which have the columns secured in place by bolts or similar devices offer very little obstruction to the ready placing therein of bolsters which have laterally-projecting flanges, which in inserting the bolster would interfere with the columns. In such trucks it is an easy matter to remove the column-bolts and partially or wholly displace the columns until the bolster has been properly placed, after which the columns can be put back in place. With truck-frames having the columns riveted in place often very great difficulty is encountered in inserting therein a bolster provided with laterally-projecting flanges.

My invention has for its object to provide a truck-bolster which can be readily inserted in a truck-frame having columns riveted in place.

In the accompanying drawings, Figure 1 is a plan view of my improved bolster. Fig. 2 is a side view of the same. Fig. 3 is an end view of the same. Fig. 4 is a central transverse section of the same, and Fig. 5 is a transverse section on the line 5 5, Fig. 4.

The main body of the bolster consists of a trough-shaped member 1, preferably deeper at the center than at its ends and preferably formed from a single plate of steel pressed to shape, although this is not essential, as it may be built up of two side members provided with inwardly-projecting flanges on their lower edges and a bottom plate riveted to said flanges. In either event, however, a trough-shaped member is formed. This trough-shaped member has its upper edges

connected near its ends by flange members 2, preferably rolled channel-bars placed with their flanges projecting upwardly and riveted to the side walls of the trough. The top edges of the flanges preferably come about flush with the top edges of the sides of the trough; but, if desired, the channels may be placed with their flanges projecting downwardly, although for ease in riveting the arrangement shown in the drawings is desired. These channel members do not extend entirely to the center of the bolster. The upper edges of the sides of the trough member 1 near the middle portion of said member are provided with outturned flanges, which may be formed integral with the side walls by merely providing additional metal at this point, but which preferably are composed of separate angle-bars 4, riveted to the central portion of the sides of the trough on their outer faces. These angle-bars project somewhat beyond the inner ends of the channel members 2, and the overlapping portions of the channel members and angle-bars are secured by common rivets. This prevents any weakness that might occur by the sudden change in cross-section in the bolster. The top cover-plate 5 is riveted to the outturned flanges of the angle-bars 4, and a center brace 6 is riveted in the trough underneath the cover-plate. The center bearing-plate 7 is secured to the cover-plate in the usual way. Side bearings 8 are riveted between the channel members 2, and column-guides 9 are riveted to the sides of the trough member near its ends. The trough member may also be provided with the end braces 10.

A truck-bolster constructed in the manner shown and described has the advantage of a comparatively wide and absolutely flat, if desired, surface to receive the center-plate and an unobstructed space for the accommodation of the center brace, which is situated within the trough and serves to support that portion of the cover-plate immediately beneath the center-plate. Notwithstanding this very wide support for the center-plate the bolster has no outwardly-projecting flanges for a considerable distance at each end thereof, and hence can be inserted in the side

frames of car-trucks having columns placed close to each other without the necessity of disturbing said columns.

I am aware that truck-bolsters have been made with a bottom trough member similar to the one here employed and with a pressed channel top member applied continuously throughout the length of the bolster; but these bolsters have the disadvantage of providing a restricted space for the accommodation of the center-plate. I am also aware that truck-bolsters have been made with a trough-shaped bottom member and a top cover-plate attached to laterally-projecting flanges at the upper edges of said trough member; but such bolsters have the disadvantage that the laterally-projecting flanges interfere with the columns of the truck-frames when inserting the bolster in the truck. Consequently with truck-frames having columns riveted to the arched bars it was found necessary to terminate the cover-plate and flanges some distance from the ends of the bolster. This, however, produced a weakness, to overcome which extra metal in the form of reinforcing-plates had to be provided, and much extra labor and expense in the way of riveting and fitting have been required.

With my truck-bolster the foregoing difficulties are avoided, as the side angles, the cover-plates, and top channels are securely united, the first and the last having certain fastenings in common. There is no especially weak section, and the side angles terminate such a distance from the ends of the bolster as to permit the ready insertion of the bolster in any truck-frame, while at the same time a broad flat surface is provided for accommodating a wide center-plate.

Although I have shown the trough member formed of a single integral piece, I do not wish to be limited thereto, and in the claims it will be understood that the trough member specified may be composed of more than a single integral piece. Neither do I wish to be limited to the flanges at the center of the bolster formed separate from the sides of the trough, as said flanges may be formed integral therewith by merely providing additional metal in the plate from which the trough is made. Neither do I wish to be limited to channel members 2 for uniting the sides of

the trough, as any double-flange member, such as an I-beam or a pressed plate, may be used, and this flange member may be secured in place with its flanges projecting upwardly or downwardly, although for ease of riveting the former is preferred.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A metallic truck-bolster consisting of a bottom trough-shaped member provided with outwardly-projecting flanges at the top of its sides near its center, two double-flanged members, one near each end of the bolster lying between the sides of the trough near the upper edges thereof and riveted thereto, and a top cover-plate, said cover-plate being secured to the laterally-projecting flanges of the trough-shaped member.

2. A metallic truck-bolster consisting of a bottom trough-shaped member of less depth at the ends than at its center and provided with outwardly-projecting flanges at the top of its sides near its center, two channel members, one at each end of the bolster lying between the sides of the trough with their flanges projecting upwardly and riveted to the sides of said trough, and a top cover-plate secured to the laterally-projecting flanges of the trough-shaped member.

3. A metallic truck-bolster consisting of a bottom trough-shaped member, a member having outwardly-projecting flanges riveted to the top of each side of the trough-shaped member near its center, two double-flanged members, one near each end of the bolster lying between the sides of the trough near the upper edges thereof and riveted thereto, the double-flanged members and the adjacent flanged members near the center of the bolster overlapping and having rivets in common for their attachment to the sides of the trough-shaped member, and a cover-plate united to the outwardly-projecting flanges of the members secured at the center of the trough-shaped member.

In testimony whereof I, the said GEORGE H. GOODELL, have hereunto set my hand.

GEORGE H. GOODELL.

Witnesses:

F. W. WINTER,
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