

No. 830,807.

PATENTED SEPT. 11, 1906.

J. S. STEVENSON.

CAR BOLSTER.

APPLICATION FILED MAR. 5, 1906.

FIG. 2.

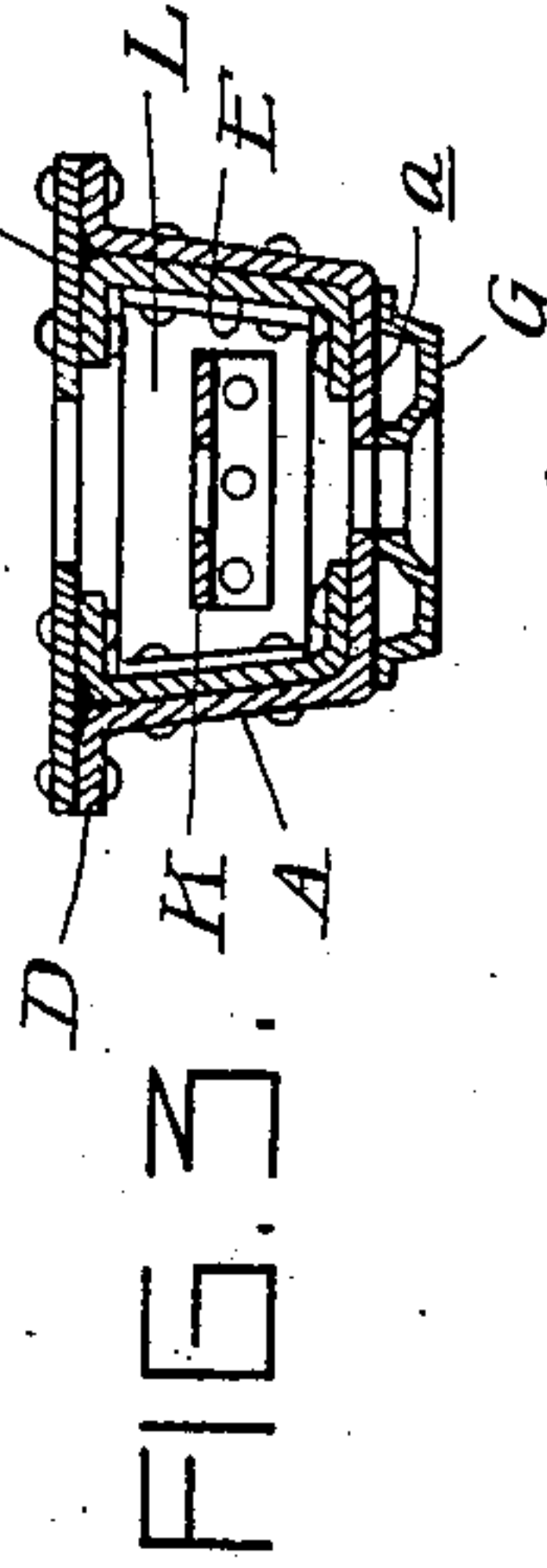
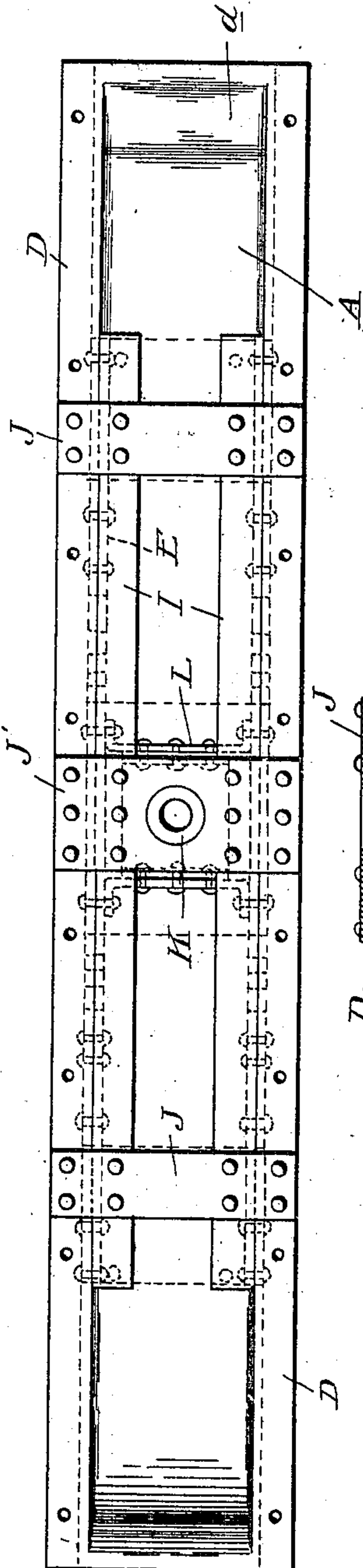


FIG. 3.

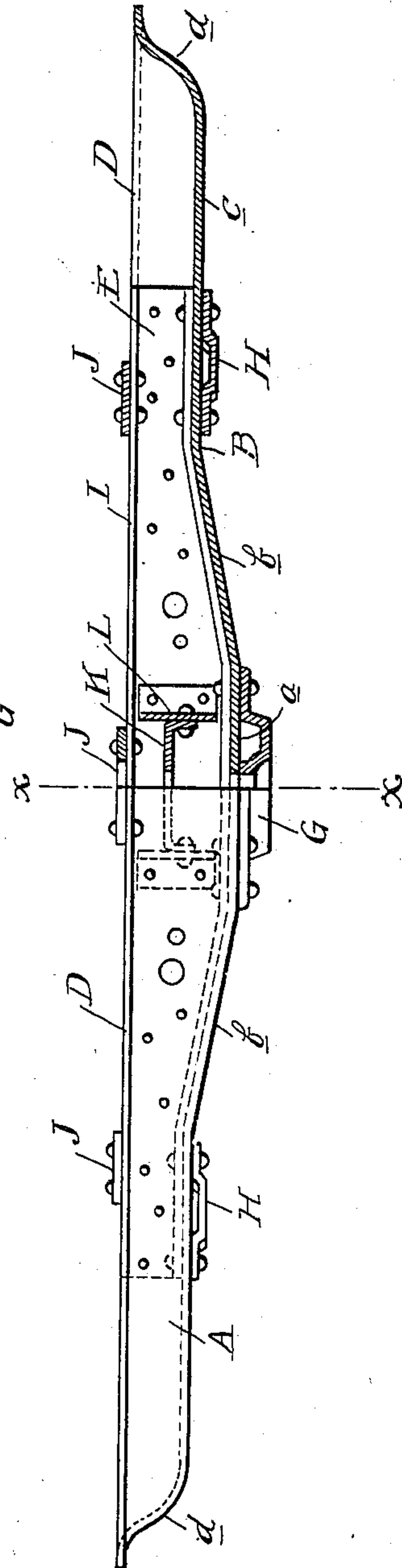


FIG. 1.

WITNESSES

*Geo. A. Groves*  
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ATT'YS.



# UNITED STATES PATENT OFFICE.

JOHN S. STEVENSON, OF DETROIT, MICHIGAN.

## CAR-BOLSTER.

No. 830,807.

Specification of Letters Patent.

Patented Sept. 11, 1906.

Application filed March 5, 1906. Serial No. 304,368.

*To all whom it may concern:*

Be it known that I, JOHN S. STEVENSON, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Car-Bolsters, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention relates to new and useful improvements in car-bolsters; and it consists in the construction of a bolster comprising a tapering trough-shaped body laterally flanged at the top, with interior reinforcing members  
15 riveted to the sides and having complementary flanges and with top ties. The body of the bolster is also of peculiar construction, being made of a single piece with integral bottom and ends.

20 In the drawings, Figure 1 is a side elevation of my improved bolster, half in section. Fig. 2 is a top plan view; and Fig. 3 is a vertical cross-section on line *x x*, Fig. 1.

The body A, I make from a single piece of  
25 pressed or shaped steel trough-shaped in cross-section, widest at the center, tapering or narrowing to the point B, having the parallel or straight end portions C. The bottom, which is continuous, has the middle section or center-bearing section *a*. From this  
30 point it inclines upwardly to both ends in the inclined sections *b*, merging into the straight sections *c*, then into the upwardly-inclined end sections *d*, and terminating flush with  
35 the top, so as to make a closed end.

The sides have the outwardly-extending flanges D, as shown. Within I place the reinforcing-channels E, one on each side, as shown, and rivet them to the sides. Through  
40 the bottom flange F of the reinforcing-channels and through the bottom plate of the body I pass the rivets which secure the center bearing-plate G and the side bearings H. This gives three thicknesses of metal for these  
45 rivets and adds to the security of these parts. The top flanges I of these channels turn inward and are on the plane of the flanges D of the sides, forming a T-shaped top to the bolster. At suitable points I tie the sides together by the tie-plates J, riveted, preferably,  
50 to the flanges D and I. I find it is necessary only to extend these reinforcing-channels through the middle portion of the bolster and prefer to shape them longitudinally to  
55 conform to the body.

The center bearing-pin carrier I preferably

make of a U-shaped piece K, riveted to the two U-shaped brackets L, which are riveted to the sides, as shown in Fig. 1. I have shown a central tie-plate J', and this preferably has a sufficiently-large aperture there-  
60 through to permit of insertion of the pin.

Such a bolster is light and strong and the metal well placed to resist the strains to which it is subjected. The main or body  
65 portion is composed of but three parts, easily shaped, and the riveting can be readily accomplished. By having closed ends dirt, dust, and snow cannot get into the same from the ends, and it saves the riveting in of  
70 separate end pieces, as has been done with trough-shaped bolsters heretofore.

While I have shown channels for the reinforcing members, and prefer such shape, it is obvious that the lower flanges F may be  
75 omitted, thus leaving angle or L-shaped members for such reinforcement.

What I claim as my invention is—

1. A bolster comprising a trough-shaped body deepest in the middle section and with  
80 shallower ends, lateral flanges at the top of the sides thereof, vertical longitudinal reinforcing members riveted to the sides, and flanges at the top of said members complementary to the flanges of the body.  
85

2. A bolster comprising a trough-shaped one-piece body, deepest in the middle section, lateral flanges at the top of the sides thereof, reinforcing-plates, corresponding in shape to the shape of the sides of the body,  
90 riveted to such sides, and flanges on the reinforcing-plates complementary to those on the body.

3. A bolster comprising a trough-shaped body deepest in the middle section, having  
95 reduced ends and outwardly-extending flanges at the top, interior reinforcing members riveted to the sides and complementary inwardly-extending flanges at the top.

4. In a bolster, a body portion comprising  
100 a trough-shaped one-piece body deepest in the middle section and tapering toward the ends, the bottom plate being integral throughout and extending to a point flush with the top at the ends, laterally-extending  
105 flanges at the top of the body portion and reinforcing members extending the depth of the sides of the body portion and riveted thereto.

5. A bolster comprising a trough-shaped  
110 one-piece body portion deepest at the middle section and tapering toward the ends, the



bottom plate extending to a point flush with the top at the end portions and thus closing the ends, lateral flanges at the top of the sides, complementary reinforcing-plates riveted to the sides of the body portion, and flanges on the reinforcing-plates complementary to those on the body.

6. In a bolster, the combination with a trough-shaped body of a center-pin carrier comprising a perforated inverted-U-shaped plate, U-shaped plates riveted to the sides and to which the said center-pin carrier is attached, substantially as described.

7. A bolster comprising a trough-shaped one-piece body deepest in the middle section, lateral flanges at the top of the sides, rein-

forcing channel-plates corresponding in shape to the shape of the sides of the body, and riveted to the sides thereof, the upper flange of the channel extending in the plane of the flange on the sides of the body and the lower flange lying upon the bottom of the body, a center plate secured to the middle portion of the bolster by rivets passing therethrough, through the bottom and through the lower flanges of the reinforcing channel-plates.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN S. STEVENSON.

Witnesses:

JAMES WHITTEMORE

AMELIA WILLIAMS