

No. 713,510.

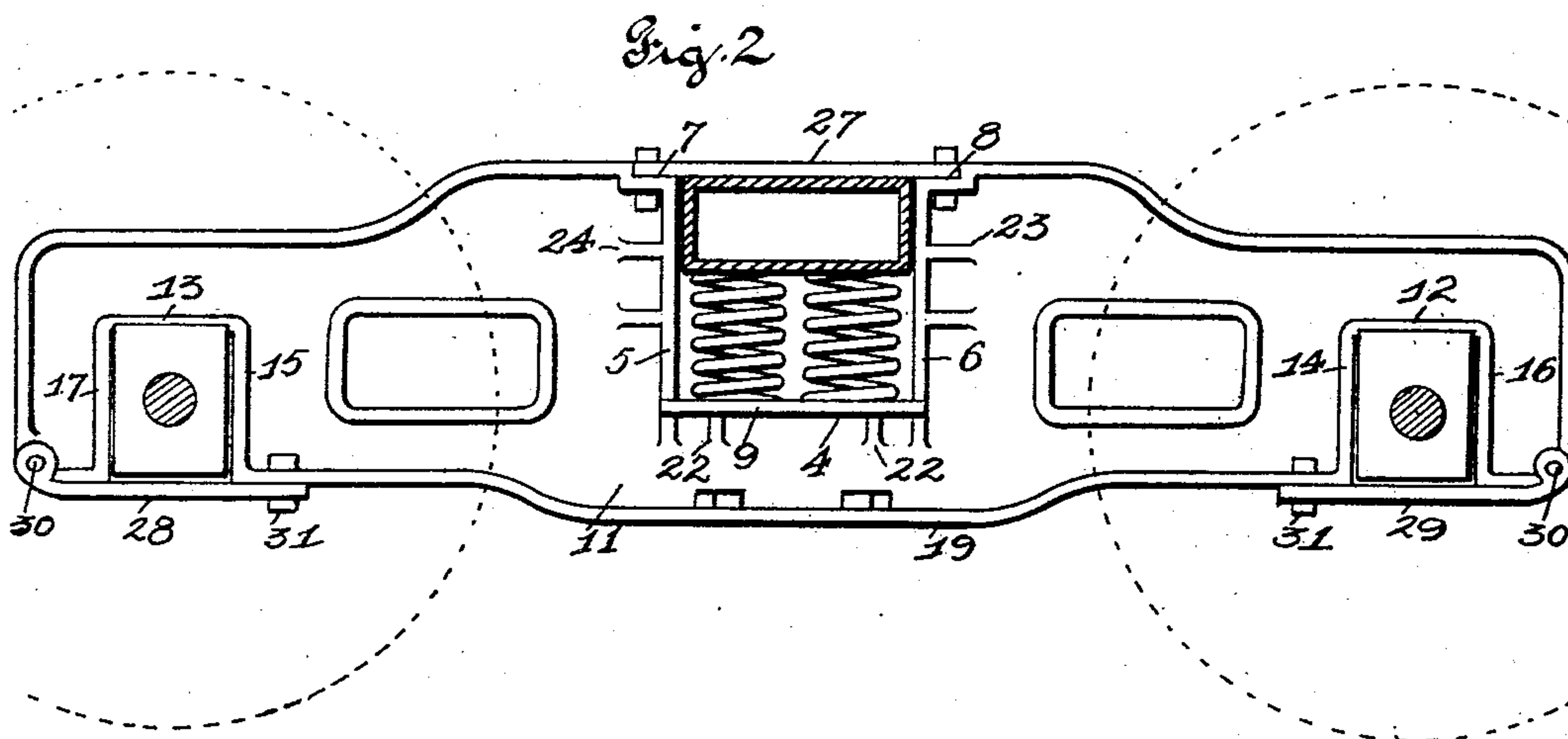
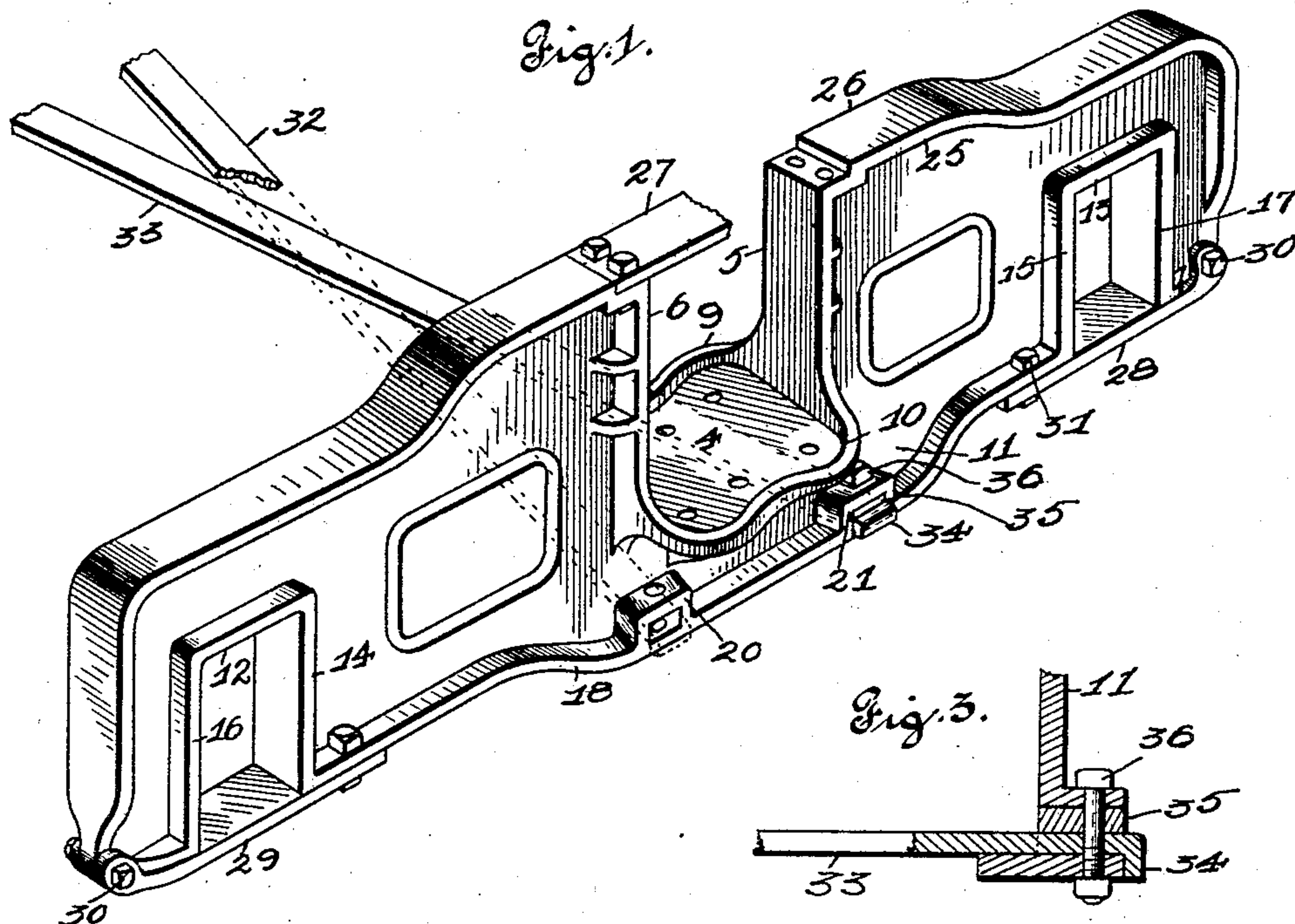
Patented Nov. 11, 1902.

C. S. SHALLENBERGER.

TRUCK SIDE FRAME.

(Application filed July 12, 1902.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLES S. SHALLENBERGER, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF  
ONE-HALF TO M. J. HURLEY, OF ST. LOUIS, MISSOURI.

## TRUCK SIDE FRAME.

SPECIFICATION forming part of Letters Patent No. 713,510, dated November 11, 1902.

Application filed July 12, 1902. Serial No. 115,324. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES S. SHALLENBERGER, of the city of Milwaukee, Milwaukee county, State of Wisconsin, have invented  
5 certain new and useful Improvements in Truck Side Frames, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

10 My invention relates to improvements in truck side frames; and my invention consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

15 My object is to produce an improved truck side frame; and my invention consists in its most narrow construction of a plate forming a bolster spring-seat, truck-columns extending upwardly from the ends of the spring-seat,  
20 there being compression-member recesses in the upper ends of the truck-columns, spring-housing flanges extending upwardly from the sides of the spring-seat and connecting the lower ends of the truck-columns, a web extending downwardly from the transverse centers of the spring-seat and outwardly from the transverse centers of the truck-columns,  
25 upper journal-box housing-plates in the outer ends of said web, inside and outside vertical housing-plates extending downwardly from said upper housing-plates, flanges extending horizontally both ways from the lower edge of said web and connecting the lower ends of the inside journal-box housing-plates and  
30 forming a cord or strain connection between the journal-box housings, diagonal brace-boxes extending upwardly from the outer flange, there being openings through the web to admit the braces to said boxes, braces extending downwardly from the spring-seat to the web, flanges extending both ways from the upper edge of said web and from the upper ends of said truck-columns to the outer lower corners of the web and serving as continuations of the compression member, and  
45 braces extending laterally from the truck-columns to the web, all cast integrally, a compression member inserted between the upper ends of the truck-columns and in said recesses, and lower journal-box housing-plates  
50 hinged to the outer lower corners of said web

and bolted to the outer ends of said lower flanges, said lower flanges being lower at the centers than at their ends, and said upper flanges being higher at the ends of the truck- 55 columns than at the outer ends of the flanges, and said upper and lower flanges corresponding to the arch-bars of a diamond frame.

Figure 1 is a view in perspective of a truck side frame embodying the principles of my 60 invention and showing the diagonal braces in position for use. Fig. 2 is an inside elevation with the bolster, bolster-springs, and journal-boxes in position for use. Fig. 3 is a cross-sectional detail through one of the di- 65 agonal braces.

Referring to the the drawings in detail, my improved truck side frame comprises a bolster spring-seat 4; the truck-columns 5 and 6, extending upwardly from the ends of the 70 spring-seat and having the compression-member recesses 7 and 8 at their upper ends; the spring housing-flanges 9 and 10, extending upwardly from the sides of the spring-seat and connecting the lower ends of the truck- 75 columns; the web 11, extending downwardly from the transverse center of the spring-seat and extending outwardly from the transverse centers of the truck-columns; the upper journal-box housing-plates 12 and 13 at the outer 80 ends of the web; the inside vertical housing-plates 14 and 15 and the outside vertical housing-plates 16 and 17, extending downwardly from the ends of the upper housing-plates 12 and 13, respectively; the flanges 85 18 and 19, extending horizontally both ways from the lower edge of the web 11 and connecting the lower ends of the inside journal-box housing-plates 14 and 15 and forming a cord or strain connection between the jour- 90 nal-box housings; the diagonal brace-boxes 20 and 21, extending upwardly from the outer flange 18, there being openings through the web to admit the braces to the boxes; the braces 22, extending downwardly from the 95 spring-seat to the web 11; the braces 23 and 24, extending laterally from the truck-columns to the web; the flanges 25 and 26, extending both ways from the upper ends of the truck-columns to the outer lower corners 100 of the web and serving as continuations of the compression member, all cast integrally;



the compression member 27, inserted between the upper ends of the truck-columns 5 and 6 and embedded in the recesses 7 and 8, and the lower journal-box housing-plates 28 and 29, hinged to the outer lower corners of the web by the pins 30 and secured to the outer ends of the flanges 18 and 19 by the bolts 31. The flanges 25 and 26 are higher at the ends of the truck-columns than at the outer ends of the flanges, and the flanges 18 and 19 are lower beneath the spring-seat than at the outer ends of the flanges, said flanges corresponding to the arch-bars of a diamond frame. The diagonal braces 32 and 33 have their ends turned downwardly to form the lips 34, and said braces are inserted through the boxes 20 and 21, respectively, with the lips 34 extending downwardly against the flange 18. A washer 35 is inserted on top of the end of each brace within the box to hold the lip 34 down in its place, and a bolt 36 is inserted through the box-washer and brace, as shown in Fig. 3, to hold the parts securely together.

The more important elements of my truck side frame comprise, as I now view it, a casting having a bolster-recess at its center, primarily open at the top, to receive the springs and the end of the bolster and having journal-box recesses in its ends, primarily open at the bottom, to receive the journal-boxes, a compression member removably inserted in the bolster-recess above the bolster, and journal-box housing members removably attached in position to extend below the journal-boxes in said journal-box recesses.

I claim—

1. A truck side frame comprising a casting having a recess at its center, primarily open at the top, adapted to receive the springs and the end of the bolster; and a compression member removably inserted in said recess above the bolster, substantially as specified.

2. A truck side frame comprising a casting having a bolster-recess at its center, primarily open at the top, adapted to receive the springs and the end of the bolster, and having recesses in its ends, primarily open at the bottom, adapted to receive the journal-boxes; and a compression member removably inserted in said bolster-recess above the bolster, substantially as specified.

3. A truck side frame comprising a casting having a bolster-recess at its center, primarily open at the top, adapted to receive the springs and the end of the bolster, and having recesses in its ends, primarily open at the bottom, adapted to receive the journal-boxes; a compression member removably inserted in said bolster-recess above the bolster; and journal-box housing members removably attached to the ends of the casting and extending below the journal-boxes in said journal-box recesses, substantially as specified.

4. In a truck side frame, a casting comprising a spring-seat; truck-columns extending upwardly from the ends of the spring-seat; flanges extending upwardly from the sides of the spring-seat and connecting the lower ends of the truck-columns; a web extending downwardly from the spring-seat and outwardly from the truck-columns; flanges extending both ways from the lower edge of said web; flanges extending both ways from the upper edge of said web; a compression member connecting the upper ends of the truck-columns; and journal-box housings in the outer ends of the web, substantially as specified.

5. A truck side frame comprising a plate forming a bolster spring-seat; truck-columns extending upwardly from the ends of the spring-seat; there being compression-member recesses in the upper ends of the truck-columns; spring housing-flanges extending upwardly from the sides of the spring-seat and connecting the lower ends of the truck-columns; a web extending downwardly from the transverse centers of the spring-seat and outwardly from the transverse centers of the truck-columns; upper journal-box housing-plates in the outer ends of said web; inside and outside vertical housing-plates extending downwardly from said upper housing-plates; flanges extending horizontally both ways from the lower edge of said web and connecting the lower ends of the inside journal-box housing-plates, and forming a cord or strain connection between the journal-box housings; diagonal brace-boxes extending upwardly from the outer flange, there being openings through the web to admit the braces to said boxes; braces extending downwardly from the spring-seat to the web; flanges extending both ways from the upper edge of said web and from the upper ends of said truck-columns to the outer lower corners of the web, and serving as continuations of the compression member; and braces extending laterally from the truck-columns to the web; all cast integrally; a compression member inserted between the upper ends of the truck-columns and in said recesses; and lower journal-box housing-plates hinged to the outer lower corners of said web and bolted to the outer ends of said lower flanges; said lower flanges being lower at the centers than at their ends, and said upper flanges being higher at the ends of the truck-columns than at the outer ends of the flanges, and said upper and lower flanges corresponding to the arch-bars of diamond frame, substantially as specified.

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

CHARLES S. SHALLENBERGER.

Witnesses:

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G. H. WHITCOMB.