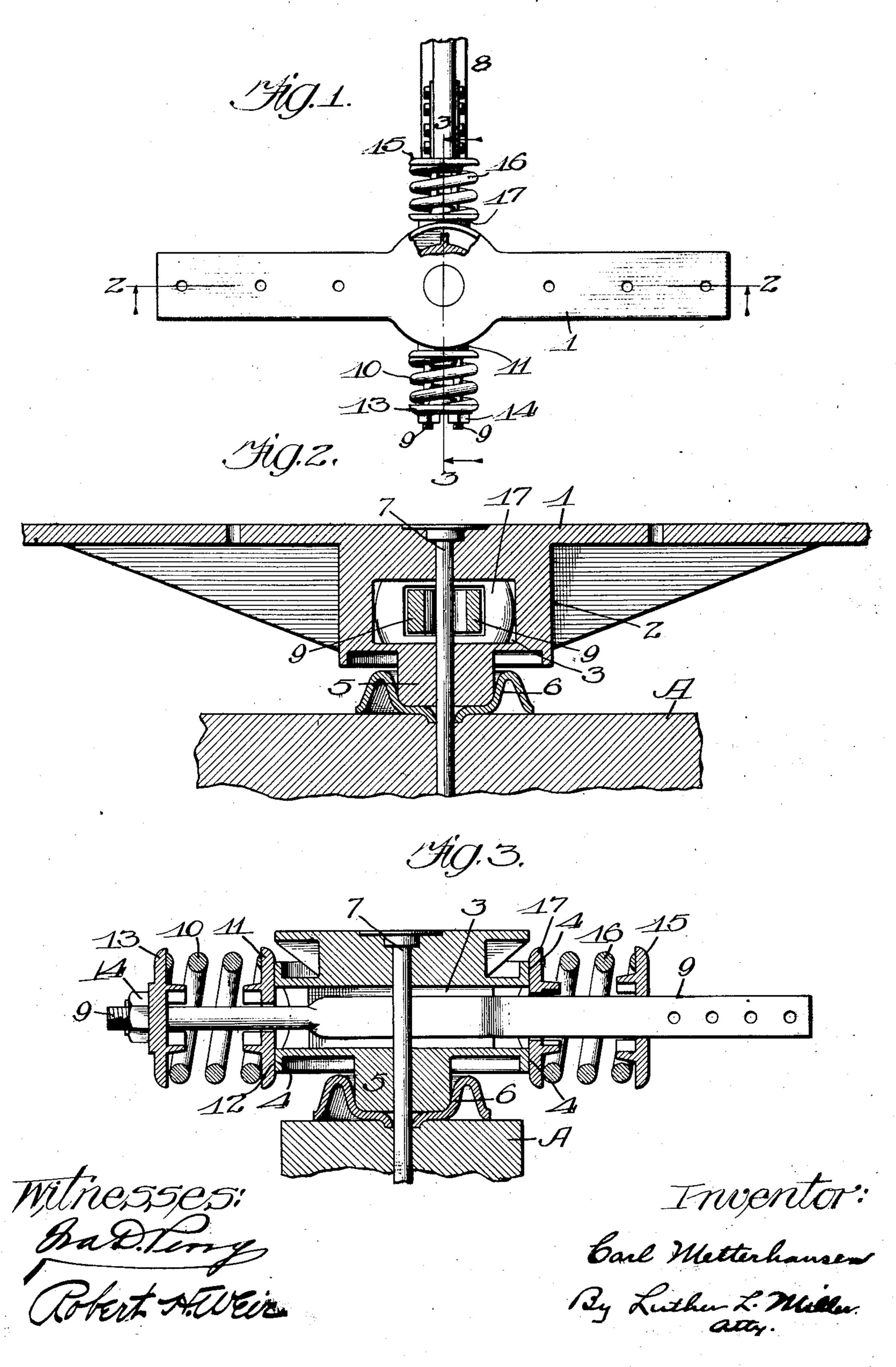
## C. METTERHAUSEN. CAR BOLSTER. APPLICATION FILED NOV. 22, 1907.



## UNITED STATES PATENT OFFICE.

CARL METTERHAUSEN, OF CHICAGO, ILLINOIS.

## CAR-BOLSTER.

No. 887,210.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed November 22, 1907. Serial No. 403,256.

To all whom it may concern:

Chicago, in the county of Cook and State of 5 Illinois, have invented certain new and useful Improvements in Car-Bolsters, of which the following is a specification.

One of the objects of this invention is the provision of a car bolster that shall embody 10 in itself means for the attachment thereto of

the draft rigging.

Another object is to adapt a car bolster for the attachment thereto of draw-bars of various types.

The invention will be more fully understood by reference to the accompanying

drawings, in which

Figure 1 is a top plan view of a car bolster and draft rigging embodying the features of 20 my invention. Fig. 2 is a vertical section on dotted line 2 2 of Fig. 1. Fig. 3 is a section

on dotted line 3 3 of Fig. 1.

In the illustrative embodiment herein 25 sists of an integral casting, but it will be understood that it may be built up from pressed steel parts or structural iron shapes, or constructed of a combination of castings and pressed or rolled members. The central por-30 tion of the bolster is formed to provide a casing 2, said casing having an opening 3 extending horizontally therethrough for the reception of the draw-bar, and convex, substantially-semicircular surfaces 4 at opposite ends 35 of said opening. Centrally of its lower side the bolster is provided with a pivot boss 5 adapted to be seated in a socket 6 upon the truck bolster A. The king pin 7 extends through the body bolster and the truck bol-40 ster, passing centrally through the casing 2.

The draw-bar 8 may be of any common or approved construction. As herein shown it comprises two substantially parallel rods 9 extending through the longitudinal opening 45 3 of the casing 2 on opposite sides of the king pin, and carrying means for taking up the shock of pulling and pushing stresses. Said means comprises a coiled spring 10 interposed between one side of the casing 2 and a 50 relatively fixed point upon the rear ends of said rods. A collar 11 having a concave surface 12 is slidably mounted upon the con-

vex surfaces 4 of the casing 2, and supports Be it known that I, Carl Metterhausen, one end of said spring. The opposite end of a citizen of the United States, residing at the spring bears upon a collar 13 loosely 55 mounted upon the rods 9 and adjustably secured thereon by means of the nuts 14. Between the other side of the casing 2 and a collar 15 immovable upon the rods 9 is a coiled spring 16, said spring bearing at one 60 end upon a collar 17 similar to the collar 11. The tension of the springs 10 and 16 may be regulated by means of the nuts 14.

The opening 3 in the casing 2 is of sufficient width and height to permit of pivotal 65 movement of the draw-bar 8 in horizontal and vertical planes. During such movements the collars 11 and 17 slide upon the convex surfaces 4 of the casing 2. A larger or smaller amplitude of vertical oscillation of 70 the draw-bar may be provided for by properly proportioning the size of the opening 3

and the size of the rods 9.

The opening 3 is herein shown as having straight parallel side walls, but said walls 75 shown of my invention, the car bolster con- | may be made to approach each other at their middle points or take any other suitable form as considerations of strength may dictate.

While I have herein shown a draw-bar 80 pivotally and yieldingly connected with the bolster 1, it will be understood that a drawbar may be directly pivoted upon the king pin 7 for radial movement, or may be mounted for non-pivotal, yielding movement in the 85 opening 3, or may be rigidly attached to the bolster.

It will be seen that the self-contained bolster and draw-bar-attaching means is very compact and renders it possible to carry the 90 car body lower on its trucks than could be done by the use of the ordinary body bolster and separate means for connecting the draft rigging thereto.

I claim as my invention:

1. A car bolster having an opening therethrough and a convex surface at each end of said opening; a draw-bar extending through said opening; members on said draw-bar in sliding contact with said convex surfaces; 100 and springs bearing against said members and relatively fixed points in said draw-bar.

2. A car bolster having an opening therethrough for the reception of a draw-bar; a convex bearing surface at each end of said ing therethrough for the reception of a drawopening; and a pivot stud upon the lower bar and a convex bearing surface at each end side of said bolster.

3. A car bolster comprising a casing hav-5 ing a longitudinal opening therethrough and convex surfaces at each end of said opening. 4. An integral car bolster having an open-

of said opening.

LUTHER L. MILLER, C. P. PARKER.

Witnesses: