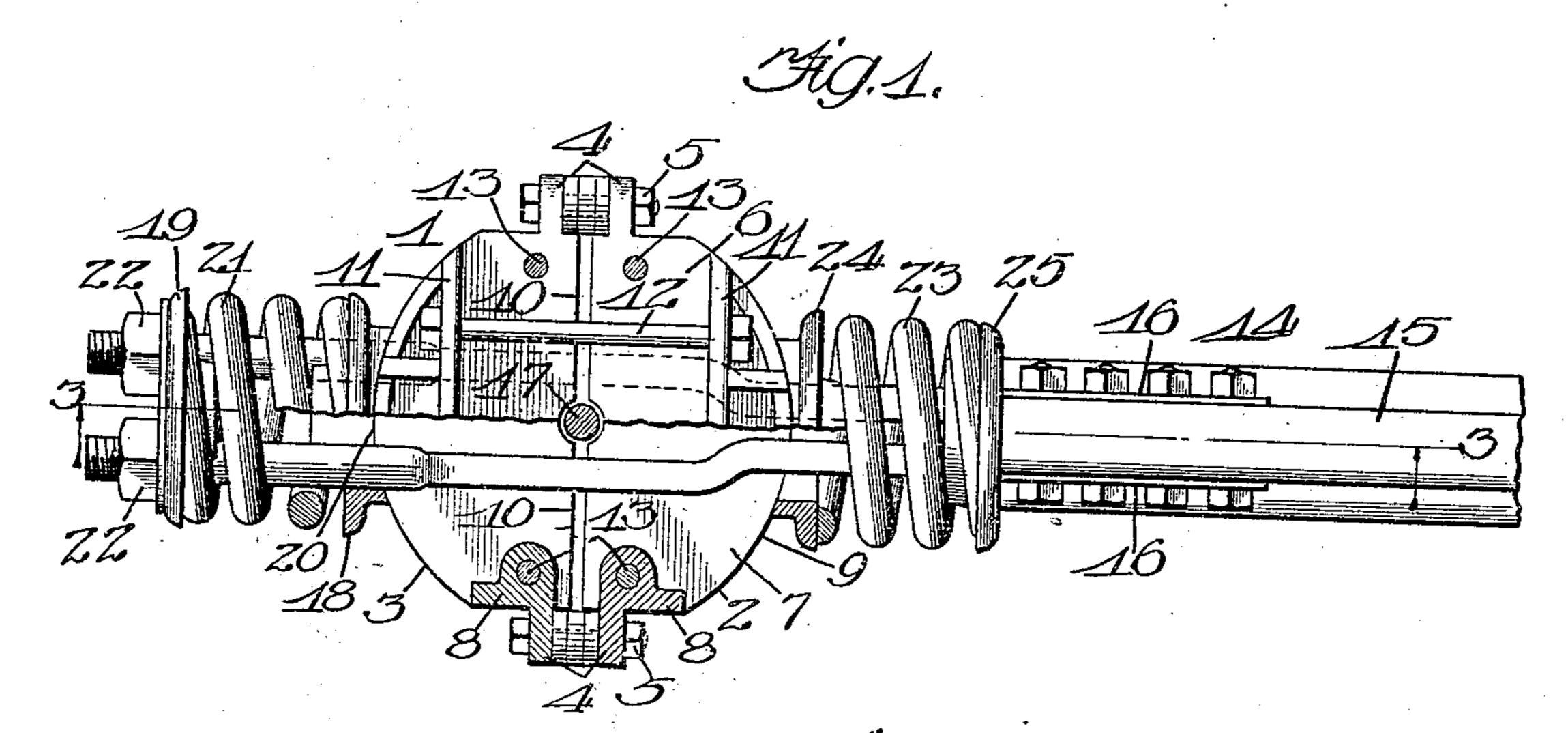
## C. METTERHAUSEN.

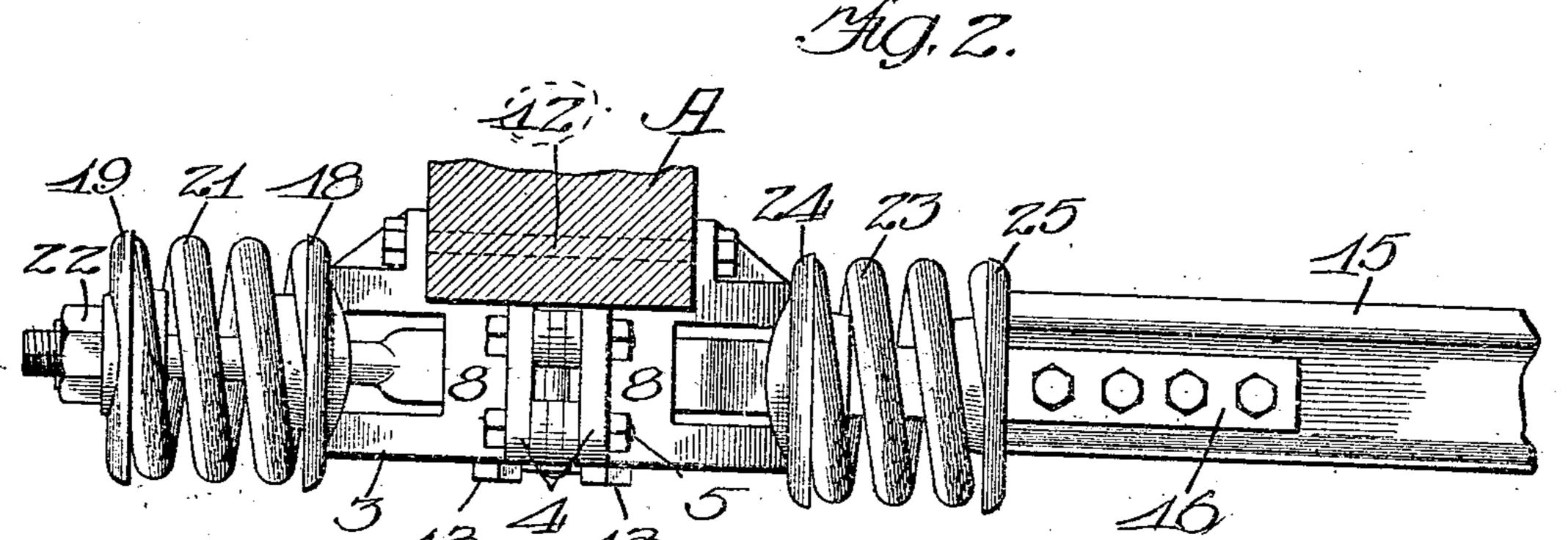
DRAFT RIGGING.

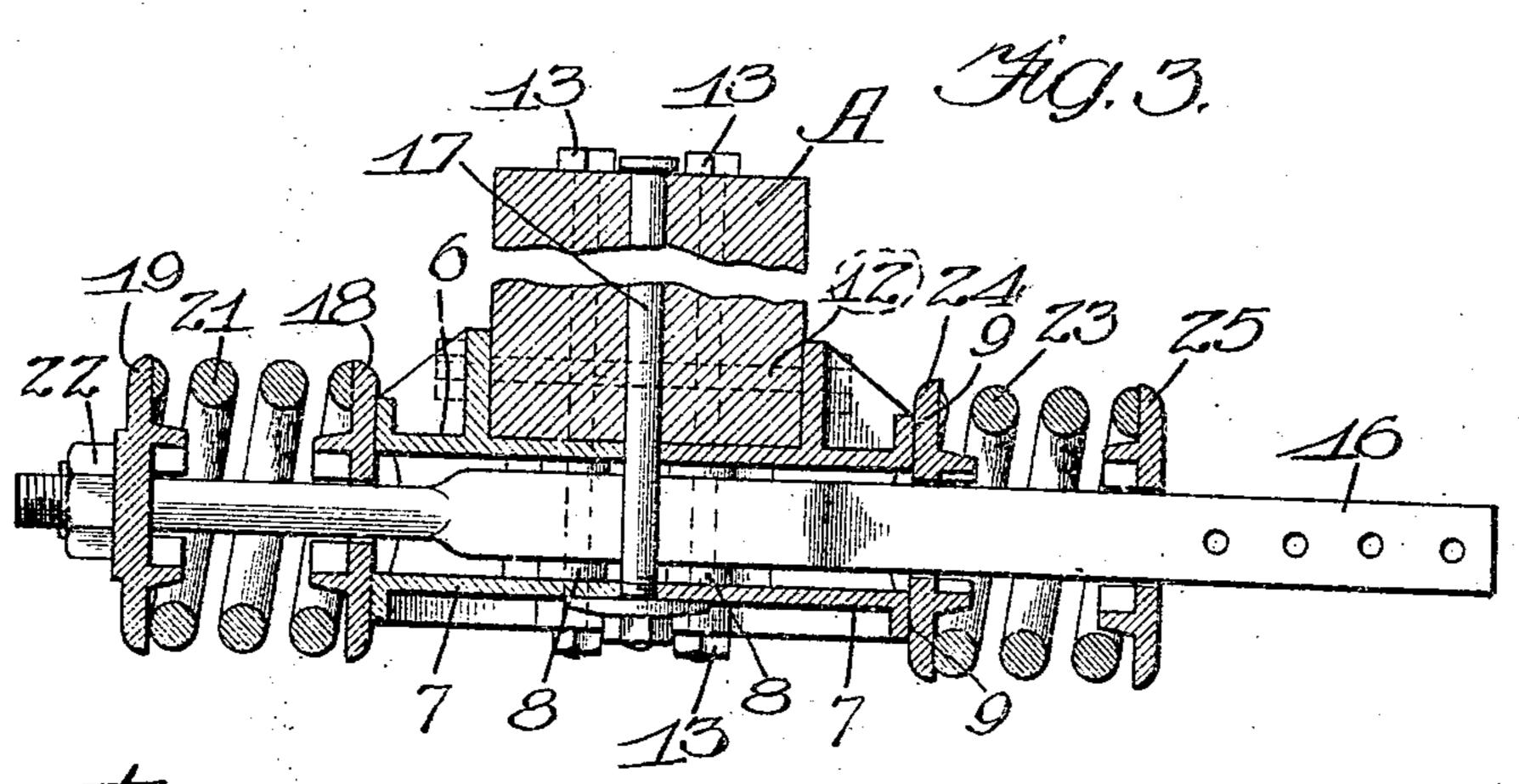
APPLICATION FILED NOV. 22, 1907.

951,326.

Patented Mar. 8, 1910.







Witness, 5,e,5:
Bad Perg

Envertor: Carl Metterhausen By Lucher & Millians att,

ANTIREW IS GRASSAM CO. BROTO CHARGED PROGRESS OF COMMISSION IN

## UNITED STATES PATENT OFFICE.

CARL METTERHAUSEN, OF CHICAGO, ILLINOIS.

## DRAFT-RIGGING.

951,326.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed November 22, 1907. Serial No. 403,255.

To all whom it may concern:

Be it known that I, CARL METTERHAUSEN, a citizen of the United States, residing at Chicago, in the county of Cook and State 5 of Illinois, have invented certain new and useful Improvements in Draft-Rigging, of which the following is a specification.

This invention relates to draft-rigging for railway cars, and especially to improved 10 means for operatively connecting a draw-

bar of the radial type to a car.

In the accompanying drawings, Figure 1 is a fragmental top plan view of a draft rigging, embodying my invention. Fig. 2 is 15 a side elevation of said draft rigging. Fig.

3 is a longitudinal vertical section.

In the embodiment which I have elected to illustrate herein, the draw-bar is especially intended to be connected with a mem-20 ber of the underframe of the car body other than the member through which the king pin passes, as, for example, to a cross-sill A. The means for attaching the draw-bar to the cross-sill comprises a casing 1 consist-25 ing of a front section 2 and a rear section 3, said sections being adapted to be secured together by means of perforated lugs 4 and bolts 5. Each casing-section is preferably a casting comprising two plates 6 and 7 se-30 cured together by the end walls or webs 8, said plates having at one side substantially semicircular convex edges 9 and at their opposite sides plane edges 10 adapted to lie in contact with the similar edges 10 of the 35 other casing-section. Upon the upper side of the casing 1 are two ribs 11 adapted to lie at opposite sides of the cross-sill and be secured thereto by means of bolts 12. The casing 1 is further secured to said cross-sill 40 in this instance by means of four bolts 13.

The draw-bar 14 may be of any suitable construction. As herein shown, it comprises a bar 15 and two rods 16 rigidly secured to said bar. The rods 16 extend through the 45 casing 1 at opposite sides of a pivot pin 17. Upon the rear ends of said bar are loosely mounted two collars 18 and 19, the former

having a concave face 20 which is slidable upon the convex edges 9 of the casing section 3. A coiled spring 21 lies between the 50 collars 18 and 19, nuts 22 being turned upon the ends of the rods 16 behind the collar 19. The spring 21 takes up the shock of pulling stresses. A coiled spring 23 interposed between the other side of the casing 1 and a 55 fixed point in the draw-bar 15 provides means for taking up pushing stresses. The last mentioned spring lies between collars 24 and 25 substantially similar to the collars 18 and 19, respectively. The tension of the 60 springs 21 and 23 may be regulated by

means of the nuts 22.

It will be seen that the two similar castings 2 and 3 form a complete casing for pivotally supporting the draw-bar 14 and 65 for connecting the latter to the car. In fitting the casing 1 to a cross-sill of the car frame, the sections 2 and 3 may, if desired, be spaced apart by means of filler pieces or washers 4<sup>a</sup> placed between the lugs 4. It 70 will be noted that the lugs 4 are set back a little distance from the inner edges of the casing-sections 2 and 3. The draw-bar 14 is mounted to swivel in vertical and horizontal planes, the springs 21 23 serving in 75 all positions of the draw-bar to cushion the shock of pulling and pushing stresses.

The foregoing detailed description has been given for clearness of understanding only and is not to be regarded as in the 80

nature of an undue limitation.

I claim as my invention: In draft rigging, in combination, a twopart casing comprising a front section and a rear section; lugs at the sides of said sec- 85 tions, said lugs being set back from the inner edges of said casing-sections; filler pieces lying between opposite lugs and spacing said sections apart; and a draw bar connected with said casing. CARL METTERHAUSEN.

Witnesses:

L. L. MILLER, C. P. PARKER.