

No. 703,117.

Patented June 24, 1902.

D. C. COURTNEY.  
CAR TRUCK BOLSTER.  
(Application filed June 4, 1901.)

2 Sheets—Sheet 1.

(No Model.)

Fig. 1.

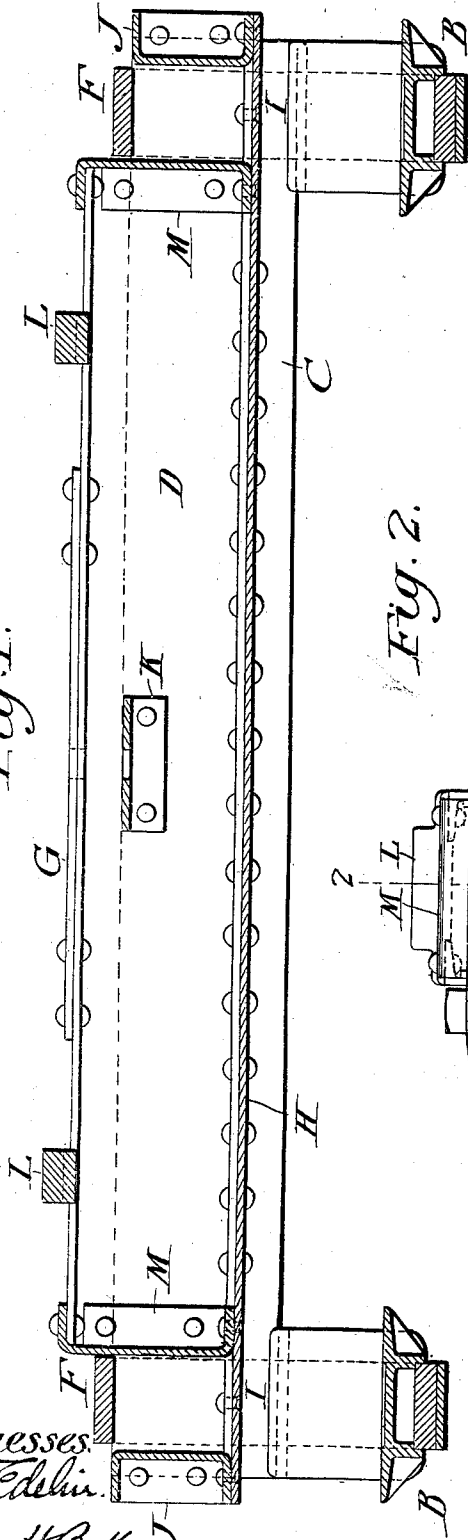
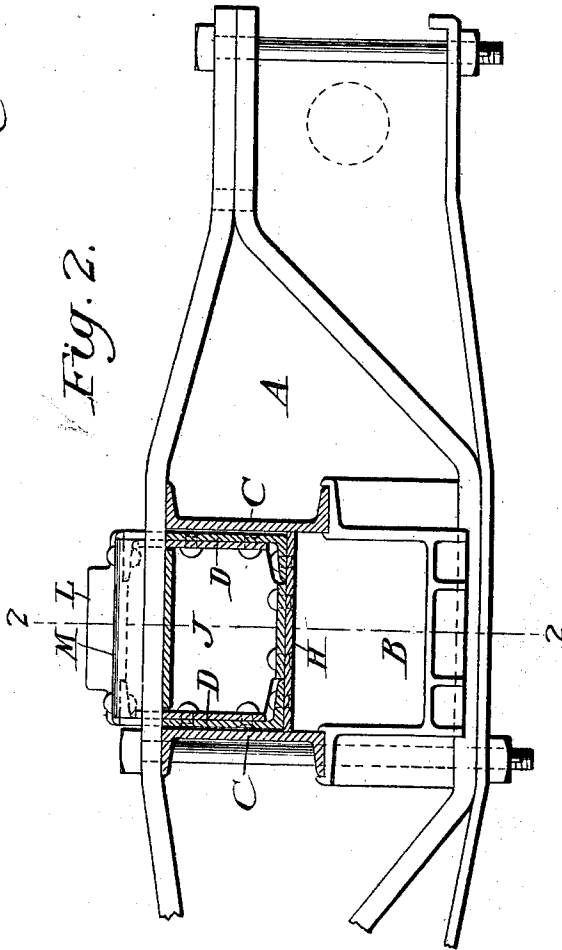


Fig. 2.



Witnesses:  
W. Edlin.  
Chas. H. Baker.

Inventor:  
D. C. Courtney.  
By J. F. Stebbins,  
Atty.

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2 Sheets—Sheet 2.

Fig. 3.

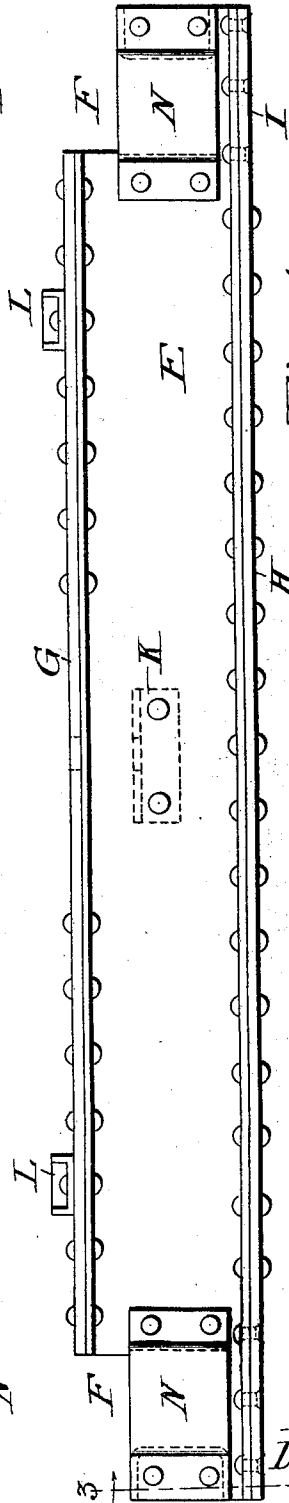
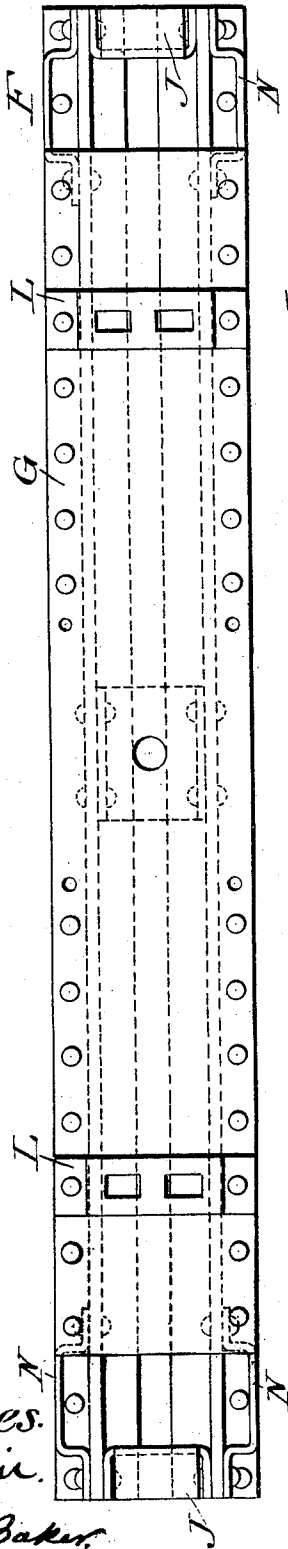
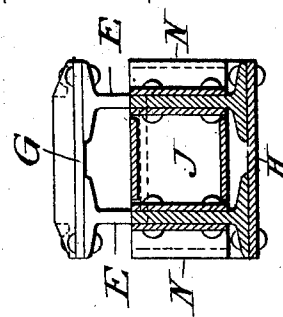


Fig. 4.

Fig. 5.



Witnesses.  
D. W. Edlin.

Chas. H. Baker.

Inventor.  
D. C. Courtney.

By J. B. Stubbins, Att'y.

# UNITED STATES PATENT OFFICE.

DANIEL C. COURTNEY, OF ELKINS, WEST VIRGINIA.

## CAR-TRUCK BOLSTER.

SPECIFICATION forming part of Letters Patent No. 703,117, dated June 24, 1902.

Application filed June 4, 1901. Serial No. 63,128. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL C. COURTNEY, a citizen of the United States, residing at Elkins, in the county of Randolph and State of West Virginia, have invented certain new and useful Improvements in Car-Truck Bolsters, of which the following is a specification.

The object of my invention is the production of a car-truck bolster which shall be simple in construction and comparatively cheap in first cost, which can be made in the common car-shop by the use of ordinary and well-known tools and appliances, which can be easily repaired when necessary, which shall possess great stiffness and rigidity, so as to prevent bending at the center, which shall be so formed that it will retain its proper position relative to the truck-frame, and which withal shall possess such characteristics as will adapt it for use in supporting a very great weight without distortion.

With the above main ends in view my invention consists in certain novelties of construction and combinations of parts herein after set forth and claimed.

The accompanying drawings illustrate two examples of the physical embodiment of my invention constructed according to the best modes I have so far devised for the application of the principle.

Figure 1 shows part of a diamond truck-frame and part of a bolster, the same being in section and taken on line 2 2 of Fig. 2. Fig. 2 is an end elevation view of the bolster and a side view of a section of the frame. Fig. 3 is a top plan view of another example of bolster made of I-beams. Fig. 4 is a side view of Fig. 3. Fig. 5 is a section on line 3 3 of Fig. 3.

Referring to the several figures, the letter A designates an arch-bar truck-frame, B designates the spring-seats, and C the transoms of channel iron or steel and secured in position as usual.

In Figs. 1 and 2 D designates channel-beams with their flanges facing each other. In Figs. 3, 4, and 5 E designates I-beams of iron or steel. In both examples F designates the recess or notch formed by cutting away the flanges and part of the webs at the ends of the beams whereby the said ends may fit under the top arch-bars of the truck-frame.

G designates top plates riveted to the top flanges of the beams and extending each side of the center. H designates bottom plates riveted to the bottom flanges of the beams and extending to the ends thereof. I designates seats for the ends of the bolsters which rest upon springs. J designates filling or spacing pieces secured by rivets between the beams at the ends, said filling-pieces being either cast or fashioned from plate metal by cutting and bending. K designates tie-pieces riveted to the webs of the beams at the center and each having a hole for a king bolt or pin. L designates side bearings of any approved construction. M in the first example designates inner spacing or filling pieces quite similar in shape and construction to the spacing-pieces J at the ends, but differing mainly therefrom in having their flanges reversed and the top flange of each piece extended over the top flanges of the channels and riveted thereto, as shown, and N in the second example designates frictional bearing-pieces, either cast or of wrought metal bent to shape, riveted to the webs of the beams.

From the foregoing description it is obvious that I have produced a bolster which fulfils all the conditions set forth as the purpose or object of my invention.

While I have illustrated and specifically described only two examples of the physical embodiment of my invention, I do not thereby intend to exclude from the scope thereof other examples which involve immaterial and colorable modifications in construction, inasmuch as changes and even additions may be introduced by the manufacturer without constituting a substantial departure.

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

1. A car-truck bolster comprising two flanged beams arranged parallel with their webs in vertical planes and each having top and bottom flanges; a plate riveted to the lower flanges of the beams and extending the entire length thereof; the under surface of the ends forming top bearings for springs, a top plate riveted to the top flanges at the center, and spacing-pieces uniting the beams at the ends; the top flanges and portions of the webs of the beams being cut away at the ends to allow the same to pass beneath the top

arch-bars, and the vertical portions of the webs being located adjacent the arch-bars and serving as stops to prevent the excessive endwise movements of the bolster in either  
5 direction.

2. The combination with a truck-frame having transoms C C and top arch-bars of a bolster comprising two flanged beams, a bottom plate, a top plate, and spacing-pieces at the  
10 extreme ends; the said bolster being cut away at the ends and the top surface thereof being

in a plane above the plane of the top arch-bars, whereby the bolster is held against endwise movements and the transoms C C serve as bearings for the bolster in its sidewise  
15 movements.

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

DANIEL C. COURTNEY.

Witnesses:

M. L. ROUZER,  
GORDON G. GALL.