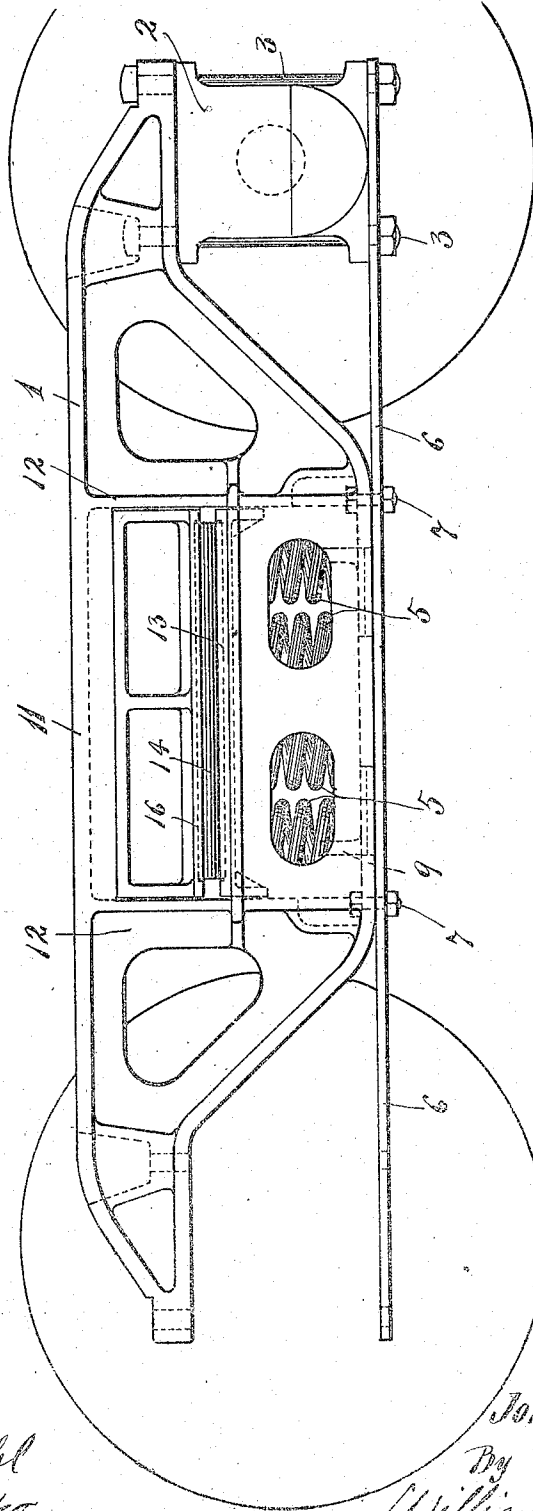


933,223.

Patented Sept. 7, 1909.
 3 SHEETS—SHEET 1.

Fig. 1



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CAR TRUCK.
APPLICATION FILED APR. 16, 1909.

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3 SHEETS—SHEET 2.

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Fig. 2

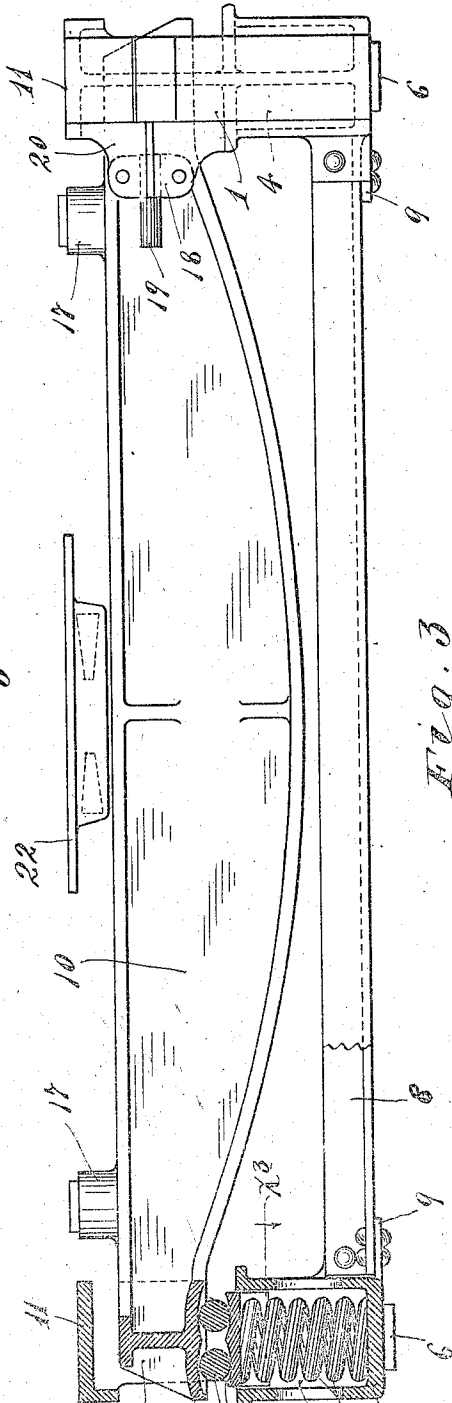
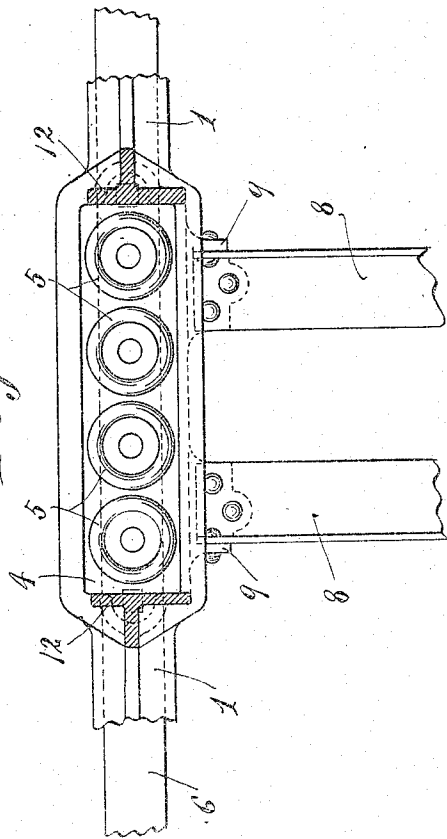


Fig. 3



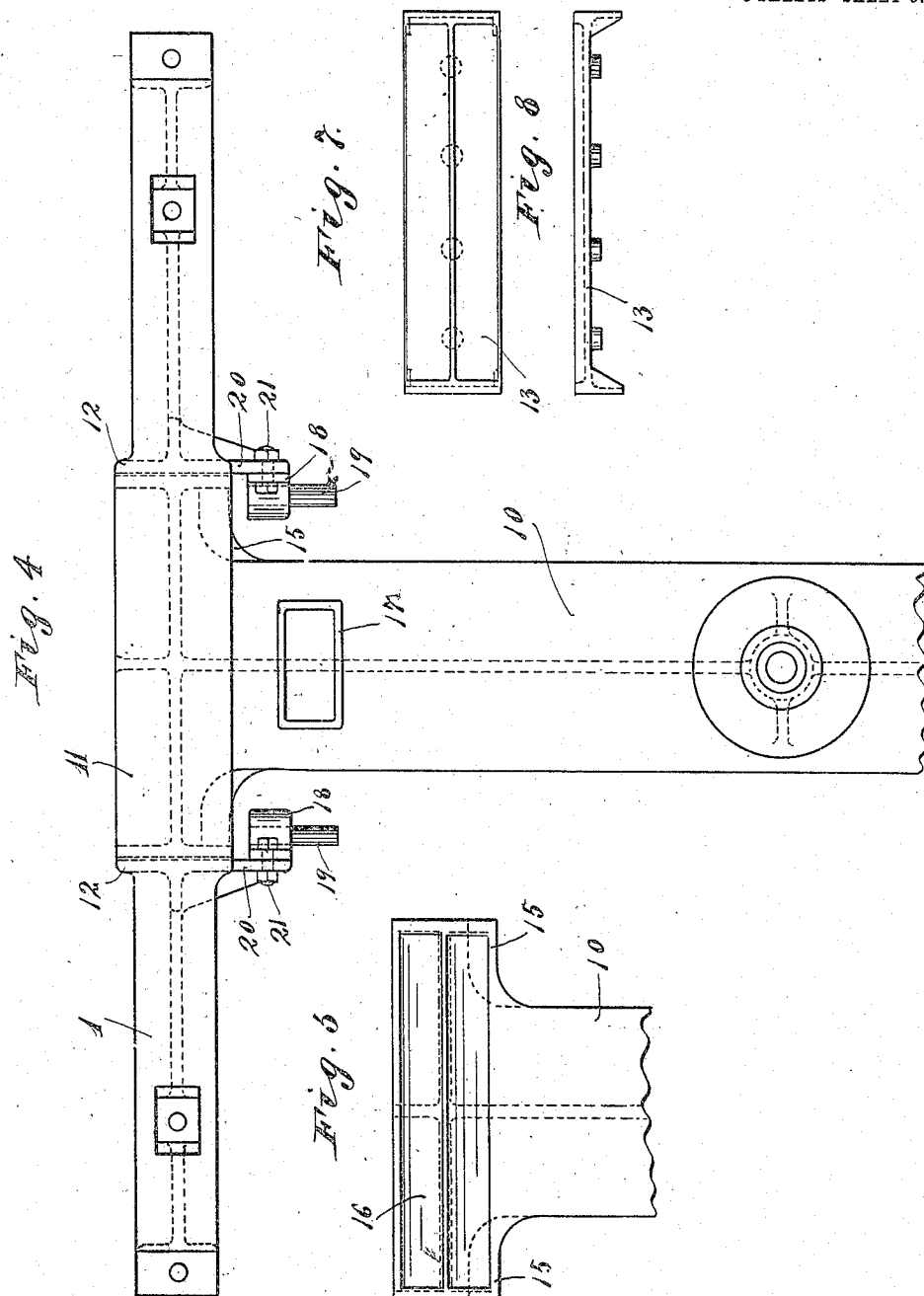
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UNITED STATES PATENT OFFICE.

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CAR-TRUCK.

933,223.

Specification of Letters Patent.

Patented Sept. 7, 1909.

Application filed April 16, 1909. Serial No. 490,298.

To all whom it may concern:

Be it known that I, JOHN C. BARBER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Car-Trucks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to car trucks and has for its object to improve the same in the several particulars hereinafter noted.

The invention consists of the novel devices and combinations of devices herein-after described and defined in the claims.

The drawings of this application disclose certain features of construction which, in a broad sense, are disclosed and claimed in a companion application S. N. 490,297, filed of even date herewith, and entitled "Car truck". The present invention is directed to certain improvements or modifications of the construction disclosed and broadly claimed in said companion application and the chief features of novelty are found in the construction and arrangement of the truck side frames and the bolster supporting springs.

In the accompanying drawings which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings: Figure 1 is a view in side elevation, showing the improved truck, some parts being removed and some parts being shown in diagram only; Fig. 2 is a view partly in transverse vertical section and partly in rear elevation, with some parts removed, showing the improved truck; Fig. 3 is a horizontal section taken on the line $x^3 x^3$ of Fig. 2, some parts being broken away; Fig. 4 is a plan view, showing one of the truck side frames and a portion of the truck bolster; Fig. 5 is a bottom plan view of one end portion of the truck bolster; Fig. 6 is a front elevation of the parts shown in Fig. 5; Fig. 7 is a plan view showing, in detail, one of the combined spring caps and roller bases; and Fig. 8 is a side elevation of the parts shown in Fig. 7.

In this improved truck, cast steel side frames 1 are provided. These castings 1 are provided with ribbed or flanged end portions that are secured to the axle boxes 2 preferably by long bolted nuts 3. The intermediate portion of each frame casting 1 is dropped

downward to truss the structure and is provided with laterally spaced side plates and cooperating bottom plate, which form a longitudinally extended spring receiving pocket 4 that is open at its top and in which coiled bolster supporting springs 5 are mounted, in tandem arrangement. The castings 1 constitute integral side frames, but are preferably provided with detachable bottom bars 6 secured thereto by short nutted bolts 7 and secured to the bottom of the axle boxes 2 by the bolts 3 above described. At their lower central portion, the side frame castings 1 are rigidly tied together, as shown, by a pair of angle iron transoms or tie bars 8 riveted at their ends to projecting flanges 9 of the said frame castings.

In the frame castings 1, above the pockets 4, are transverse seats or openings in which the ends of the truck bolster 10, presently to be more fully described, are mounted to work with freedom for transverse and vertical movement. Above these seats, the said frame castings 1 are formed with integral bridge bars 11 that are preferably angular in cross section, as best shown in Fig. 2. Extending from the ends of the pocket 4 upward to and joining with the so-called bridge bars 11, the frame castings 1 are formed with bolster guiding columns or portions 12, which, as shown, are approximately T-shaped in cross section, as best shown in Fig. 3.

Seated on the upper ends of each set of springs 5 is a combined spring cap and roller base 13 that is guided for vertical movements by the cooperating pocket 4 and is preferably provided at its ends with flanges that depend into the said pocket. In its upper face, each combined spring cap and roller base 13 is formed with concave roller seats that receive rollers 14.

The ends of the bolster 10 are widened or transversely expanded, as shown at 15, and in their under sides are formed with concave roller seats 16 that rest upon the rollers 14. The tandem arrangement of the springs, the long bearing rollers, the long combined spring caps and roller bases, and the transversely elongated or widened ends on the truck bolster, cooperate to give a wide base of support to the truck bolster and to thereby adapt the bolster to resist strains tending to oscillate or rotate the same on its longitudinal axis. The truck bolster, as shown, is of cast steel construction, but might be other-

wise constructed. As shown, it is provided with side bearing lugs 17. Brake hanger lugs 18, having pins 19, are shown as detachably secured to inwardly projecting flanges 20 of the frame castings 1, by short nutted bolts 21, and are positioned for cooperation with the widened ends 15 of the truck bolster, to limit the endwise movements of said bolster transversely of the truck.

The numeral 22 indicates a center bearing applied to the central portion of the truck bolster 10 for connecting the same to the car or body bolster, not shown.

What I claim is:

1. A car truck having cast side frames formed in their lower central portions with longitudinally extended spring receiving pockets and above said pockets with transverse bolster passages and with integrally formed bridge bars extending above said bolster passages, in combination with springs arranged in tandem, in said pockets, combined spring caps and roller bases supported by said springs and working in the upper portions of said pockets, rollers on said com-

bined spring caps and roller bases, and a truck bolster mounted on said rollers with its ends working in the bolster passages of said side frames.

2. In a car truck frame, the combination with truck side frames having spring pockets and transverse bolster passages above said pockets, of springs in said pockets, a truck bolster having expanded or widened ends working in said bolster passages, combined spring caps and roller bases resting on said springs, rollers interposed between said combined spring caps and roller bases and the ends of said truck bolster, and brake hanger lugs bolted to inwardly projecting flanges of said side frames, and engageable with the expanded ends of said bolster to limit the endwise movement of said bolster transversely of the truck.

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

JOHN C. BARBER.

Witnesses:

LEE W. BARBER,
E. W. WEBB.