

No. 630,866.

Patented Aug. 15, 1899.

J. C. DEVLIN.  
STREET CAR TRUCK.

(Application filed May 24, 1897.)

(No Model.)

2 Sheets—Sheet 1.

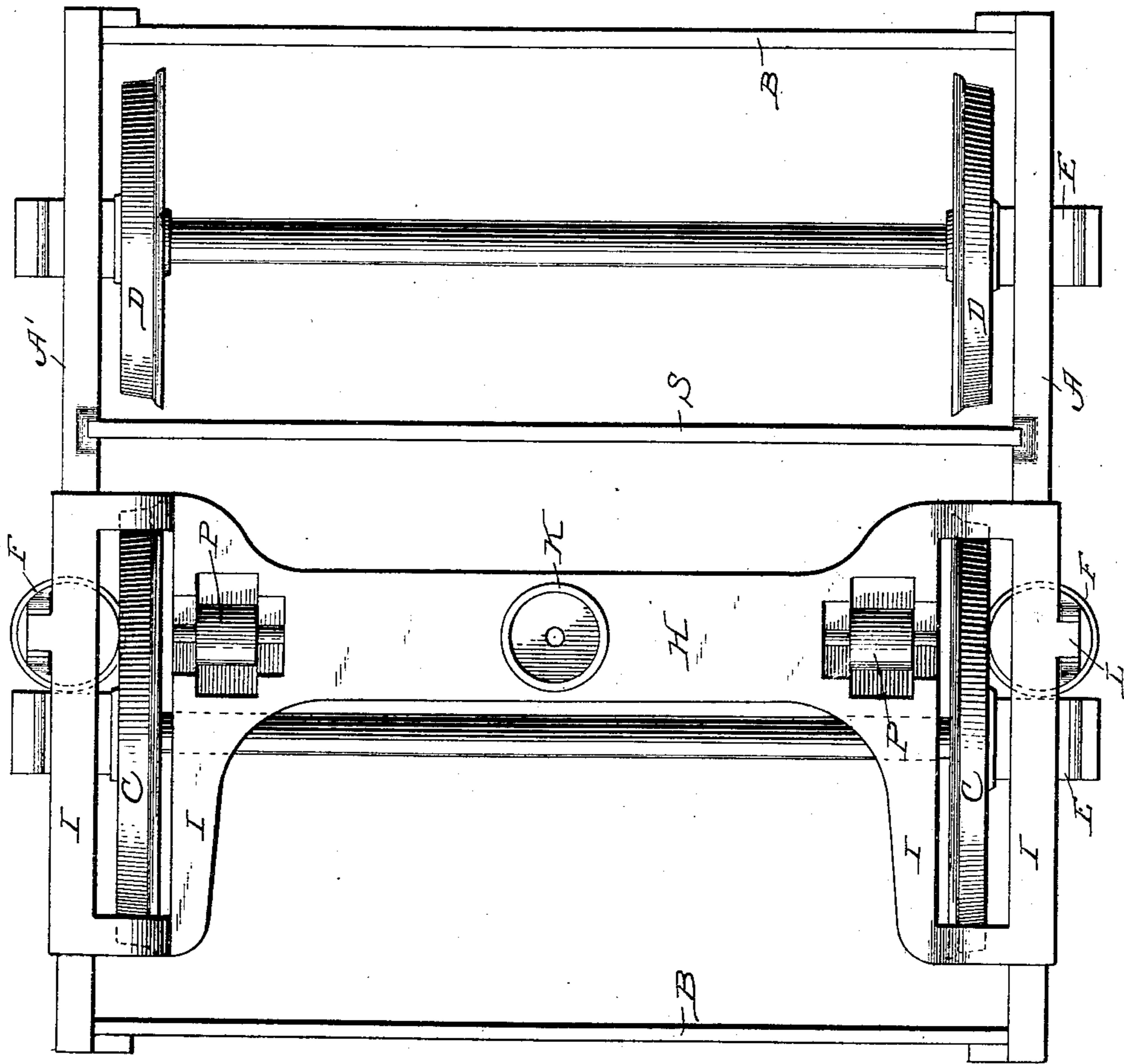


Fig. 1.

Witnesses:  
Harry S. Rohrer.  
Shuyler Sumner

Inventor:  
James C. Devlin  
by Wallace W. W. W.  
Atty.

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Fig. 2.

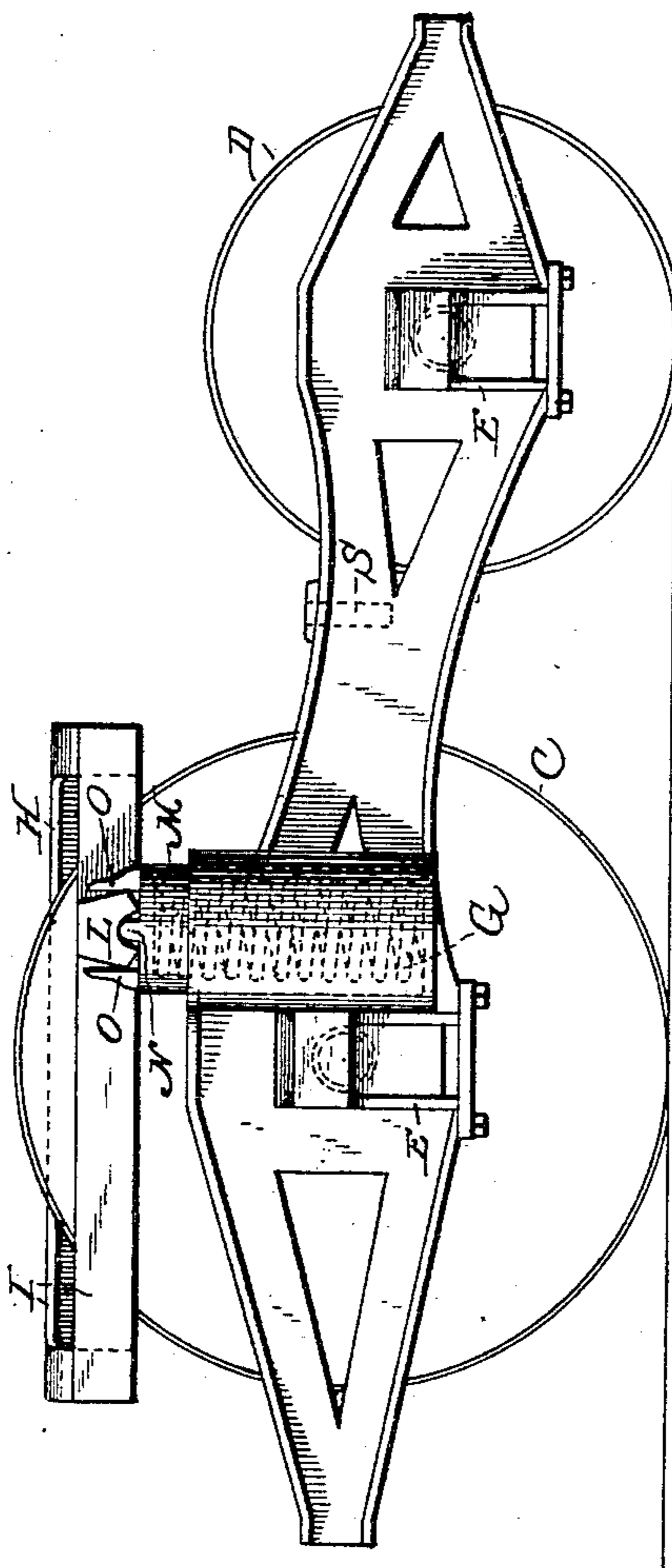
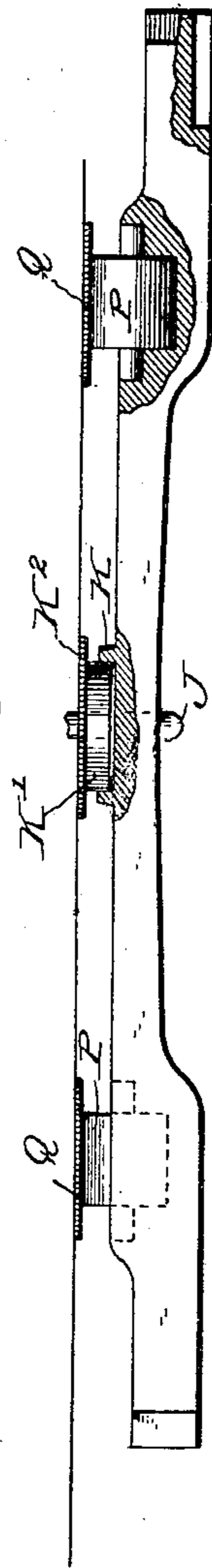


Fig. 3.



Witnesses:

Harry S. Robur.  
Thayer Thayer

Inventor:

James C. Devlin  
by Wallace K. Kline,  
att'y.

# UNITED STATES PATENT OFFICE.

JAMES C. DEVLIN, OF HERNANDO, MISSISSIPPI.

## STREET-CAR TRUCK.

SPECIFICATION forming part of Letters Patent No. 630,866, dated August 15, 1899.

Application filed May 24, 1897. Serial No. 637,853. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES C. DEVLIN, a citizen of the United States, residing at Hernando, in the county of De Soto and State of Mississippi, have invented certain new and useful Improvements in Street-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.

The object of the invention is to produce a truck peculiarly well adapted for long heavy cars used upon lines having short curves and one readily lending itself to the support of such motor and brake mechanism as may be desirable.

In the drawings, Figure 1 is a plan view of the novel truck and bolster. Fig. 2 is a side elevation of the same truck. Fig. 3 is a side elevation of the bolster.

The trucks at each end of the car being symmetrical with respect to each other, only one is shown and described.

The frame of the truck consists of four pieces, two cast end pieces A A', consisting of marginally-flanged vertical webs, and two simple cross-beams B B, rigidly connecting corresponding ends of the pieces first mentioned and forming with them a rectangular frame. This frame is supported by two pairs of wheels C D, the latter pair being much smaller than the others, so that they may swing freely beneath the body of the car. The end pieces are comparatively narrow, rising but a short distance above the axles, and are so inclined that their axes lie in the inclined plane passing through the axles. The axle-boxes E are downwardly open and integral with the end pieces, and near the place of the larger axle each end piece has an integral upwardly-open cup or socket F, lying partly within, partly without the web, and containing a spring G to support a bolster H, which thus transmits most of the weight of the car to the larger wheels. The body of the bolster lies in a horizontal plane slightly below the upper sides of the wheels, and near the latter it is greatly widened and cut away to form loops I, allowing plenty of space for the wheels around which the loops pass. At the middle of the bolster is an aperture to receive a king-bolt J, and surrounding this aper-

ture is an integral annular flange K to receive a corresponding flange K', Fig. 3, upon a plate K<sup>2</sup> to be fixed to the bottom of the car. These flanges fit one within the other, but touch only laterally, and hence prevent lateral displacement, but without transmitting any part of the weight of the car. Each loop bends downward, so that its outer side lies but little above the plane of the upper ends of the springs, and without the loop the bolster is again narrowed to form an end L, which is narrowed above and rounded below. These ends rest upon heavy cups M, inverted over the springs, fitting in the cups F and supported above the bottoms of the latter by the upwardly-projecting springs. Each inverted cup has upon the plate forming its upturned base a rib N, fitting a corresponding groove in the rounded face of the bolster end which rests upon it, and each is provided with lugs O, projecting upward alongside the said end and aiding in keeping it in place. Near the openings for the wheels and between the latter the bolster has recesses or ways to receive traveling rollers P, which project above the body of the bolster, and upon these rollers respectively rest plates Q, fixed to the car-body. The entire load thus rests upon the rollers in all cases and is therefore supported very near the larger wheels and nearly over their axle.

While the truck-frame proper consists of but four pieces, the end pieces have upon their inner faces vertically-grooved bosses R, and when motor or brake mechanism to be added makes it desirable an extra removable cross-beam S may be placed in these grooves.

The narrow inclined end pieces being vertical flanged webs are very strong, and yet they offer a minimum of obstruction to reaching parts beneath the car.

What I claim is—

1. A bolster consisting of a single beam having near each end a closed loop adapting it to lie between the wheels while supported without their planes.

2. The combination with a truck-frame having end pieces with vertical grooves upon their inner faces, of the cross-beam removably resting in said grooves.

3. The one-piece bolster having near its ends the loops to pass around the wheels, at

middle the annular flange and the central aperture, and near the loops the recesses to receive traveling rollers.

4. The combination with the large and the  
5 small wheels, of the narrow end pieces extending obliquely from axle to axle and provided with upwardly-open cups near the vertical plane of the higher axle, inverted cups  
10 spring-coils extending from the bottom of each of the first cups to the bottom of the corresponding inverted cup and offering yielding resistance to the descent of the latter, and a rocking bolster having its free ends resting  
15 upon the inverted cups.

5. The combination with a truck-frame adapted for mounting upon a pair of large wheels and a pair of smaller wheels and having bolster-supports without the larger wheels

and adjacent to their axle, of a bolster resting upon said supports, having loops to pass around the wheels and central devices to resist lateral displacement, and traveling rollers mounted on the bolster between and near the wheels to receive the entire weight of the  
25 car-body.

6. The combination with a truck-frame having bolster-supports without one pair of wheels and near their axle, of a bolster looped about the wheels and having in the line between said supports a central aperture and  
30 near the loops roller-receiving recesses.

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

JAMES C. DEVLIN.

Witnesses:

WALLACE GREENE,  
HARRY BARTON.