(No Model.)

B. F. CHOLLAR.

ANTI-OSCILLATING ATTACHMENT FOR STREET CARS.

No. 522,929. Patented July 10, 1894.

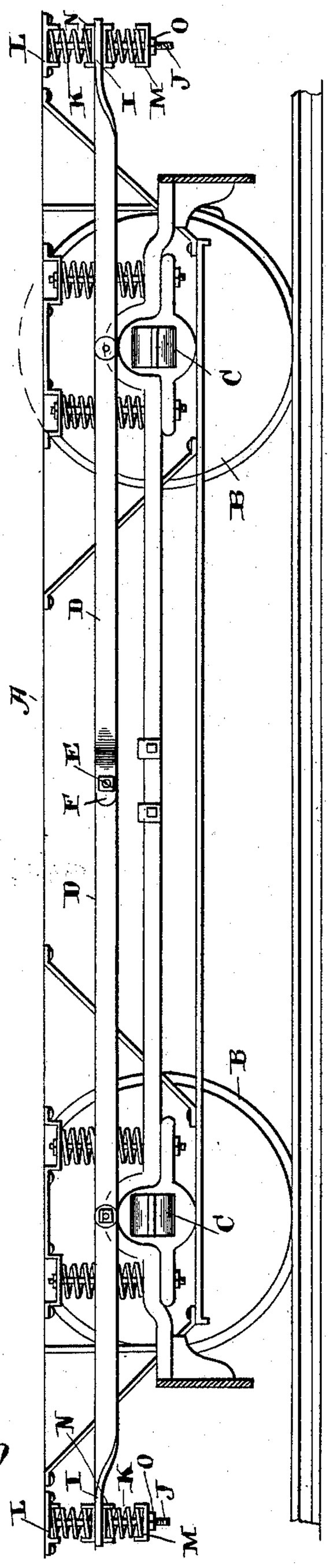

Fig. 1.

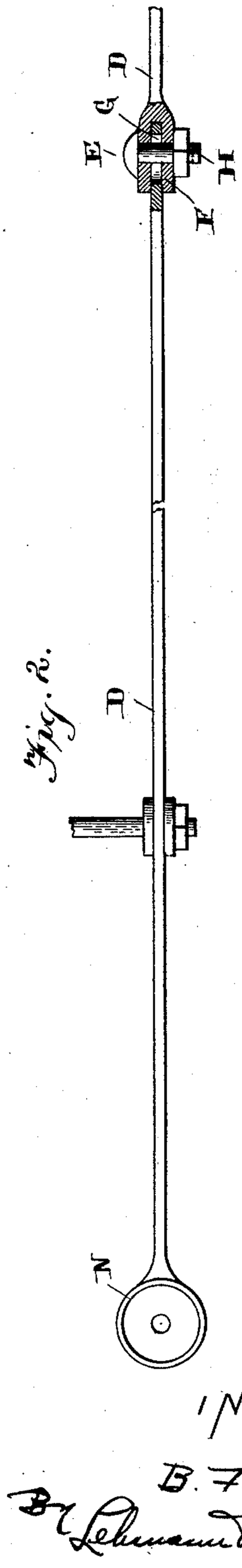

Fig. 2.

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UNITED STATES PATENT OFFICE.

BENJAMIN F. CHOLLAR, OF FORT WORTH, TEXAS, ASSIGNOR OF ONE-HALF TO GEORGE B. HENDRICKS, OF SAME PLACE.

ANTI-OSCILLATING ATTACHMENT FOR STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 522,929, dated July 10, 1894.

Application filed January 4, 1894. Serial No. 495,651. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. CHOLLAR, of Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Anti-Oscillating Attachments for Street-Cars; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved anti-oscillating attachment for street cars; and it consists in the novel arrangement of equalizing bars fully described hereinafter, and especially referred to in the claims.

In building single truck or four wheeled street cars it is necessary to separate the wheels as much as possible, or in other words position them near the respective car ends if oscillation is to be provided against. This form of truck however is objectionable in that considerable more power is required in rounding curves in the track.

My invention is especially directed to the provision of novel equalizing bars for narrow trucks, whereby all the objectionable motion is avoided, and the wear to the car incident thereto avoided.

Referring to the accompanying drawings,—Figure 1 is a side elevation of a car truck provided with my improvement. Fig. 2 is a plan view, partly in section of the connected ends of the two bars.

A designates the frame or structure of a car truck of any preferred form suitably supported by wheels B, and provided with the usual axle boxes C.

D are the equalizing bars pivotally secured between their ends at E to the truck frame A. While I here show and prefer to make this connection directly over the axle boxes so that the strain may be immediately on the axles, the same may be made at any other preferred point on the truck. The inner end of one bar is forked at F to receive the corresponding end of the other bar which is slotted at G, and extending through the fork F and slot G is bolt H which serves to connect the said ends and at the same time allow them a longitudinal play. The bars are preferably arranged vertically or on edge, while their outer extremities are turned to form the horizontal surfaces I which are perforated vertically for the passage of bolts J which depend from the base of the car.

Cushion springs K are coiled about the said bolts both above and below the said bar ends. Pockets L secured to the car serve to hold the upper springs in proper position while similarly formed devices M are arranged at the lower spring ends for a like purpose. These pockets each consist of a plate having a depending flange of the form shown which prevents lateral movement of the spring. Similarly formed devices N are also arranged both above and below the bar ends for receiving the adjacent spring ends, so that the latter are held from direct contact with the bars, thus affording the bars a perfect freedom of movement.

Nuts O on the lower ends of bolts J permit a ready adjustment of the springs by increasing or diminishing their tension, as will be readily understood.

By means of the arrangement of bars herein shown and described it will be seen that any up or down play of the car upon its truck will be promptly met and avoided by the cushion springs above and below the bar extremities. The advantages of a wide and narrow truck are thus combined in a most effctual and simple manner.

My invention is of such a character that it can be very readily applied to trucks now in use as well as those manufactured with it in view, as it can be very easily and quickly positioned.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a car truck, bars pivotally secured thereto between their ends and connected at their adjacent ends, and cushions arranged above and below the bar extremities, substantially as shown and described.

2. The combination of a car truck, bars pivotally secured thereto between their ends and connected at their adjacent ends, bolts depending from the car which extend through

the bar extremities, and springs held by the said bolts, substantially as shown and described.

3. The combination of a car truck, bars pivotally secured thereto between their ends and connected at their adjacent ends, bolts depending from the car which extend through the bar extremities, and springs held by said bolts both above and below the bars, substantially as shown and described.

4. The combination of a car truck, bars pivotally secured thereto between their ends and connected at their adjacent ends, springs held by the bolts between the bars and the car, adjustable supports on the lower portions of the bolts, and springs held between the same and the bars, substantially as shown and described.

5. The combination of a car truck, bars pivotally secured thereto between their ends and connected at their adjacent ends, bolts depending from the car which pass through the bars, springs held by the bolts above and below the bars, and pockets between the respective spring ends and the bars, substantially as shown and described.

6. The combination of a car truck, bars pivotally secured between their ends thereto and connected at their adjacent ends, bolts depending from the car which pass through the bars, springs held by the bolts between the car and the bars, adjustable supports on the lower portions of the bolts, and springs held between the same and the bars, substantially as shown and described.

7. The combination of a car truck, bars pivotally secured between their ends thereto and connected at their adjacent ends, bolts depending from the car which pass through the bars, springs held by said bolts both above and below the bars, and pockets for confining the ends of the springs, each pocket consisting of a plate perforated to pass said bolt and provided with a flange extending in the direction of the spring being held, substantially as shown and described.

8. The combination of a car truck, bars pivotally supported on edge thereby and connected at their adjacent ends, horizontal bearing surfaces at the bar ends formed by turning the same to a horizontal position, and cushions for said horizontal ends, substantially as shown and described.

9. The combination of a truck and a car supported thereon, equalizing bars fulcrumed between their ends to the truck and arranged substantially in line and directly connected at their adjacent ends, and yielding connections between the free ends of the bars, and the car, substantially as shown and described.

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

BENJAMIN F. CHOLLAR.

Witnesses:

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R. L. SOMMERVILLE.