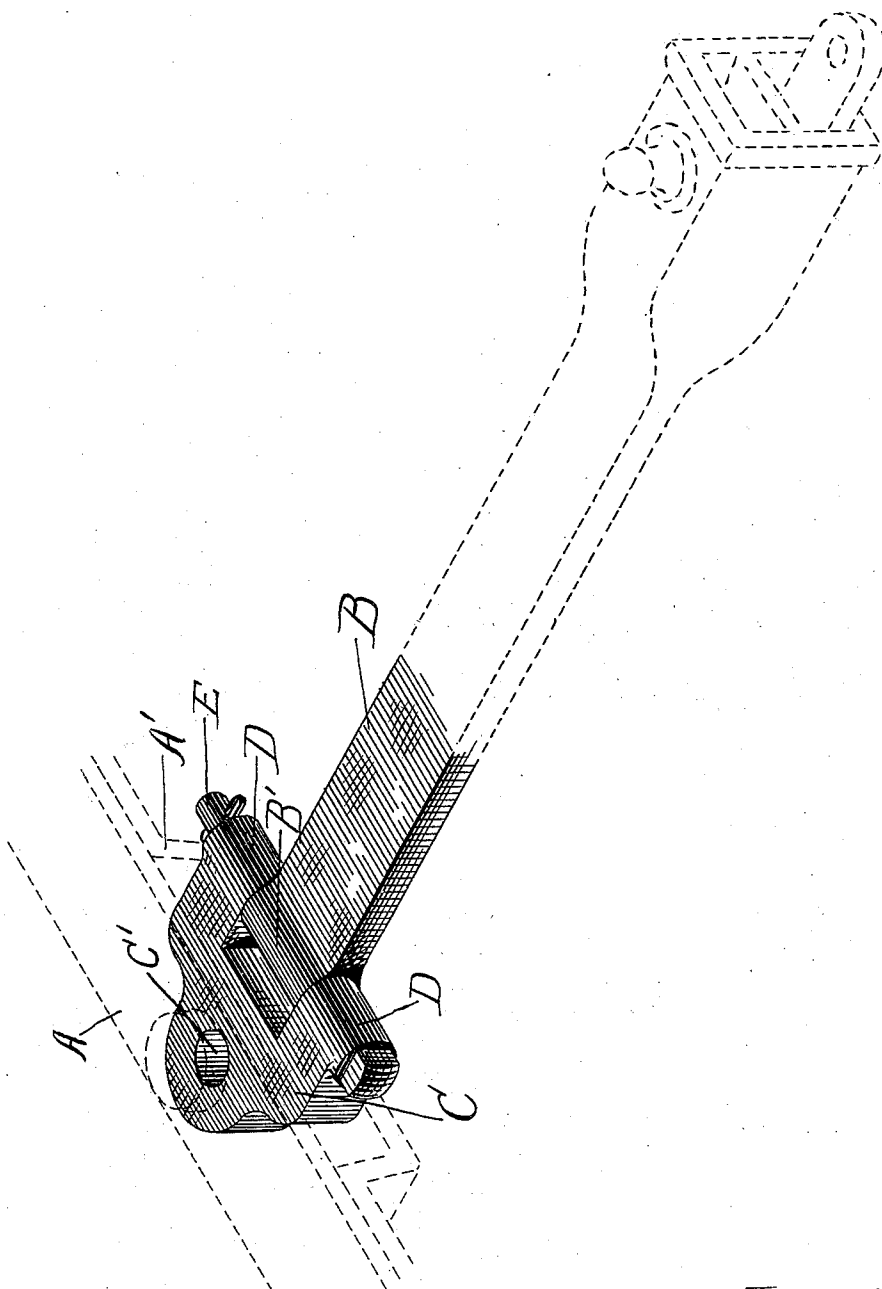


(No Model.)

J. L. BLESSING.
DRAW BAR FOR CARS.

No. 479,048.

Patented July 19, 1892.



Witnesses:
Chas. C. Burnap By *John L. Blessing*
Cyrus Burnap his Attorney
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UNITED STATES PATENT OFFICE.

JOHN L. BLESSING, OF CHICAGO, ILLINOIS.

DRAW-BAR FOR CARS.

SPECIFICATION forming part of Letters Patent No. 479,048, dated July 19, 1892.

Application filed June 22, 1891. Serial No. 397,112. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. BLESSING, a citizen of the United States, residing at Chicago, county of Cook, State of Illinois, have invented a certain new and useful Improvement in Draw-Bars for Cars; and I 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 the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention is designed to produce a draw-bar for use more particularly on street-railway cars, which shall be strong and durable, easily manufactured and mounted, and yet which shall be so connected to the frame of the car that the outer end will have the free vertical and horizontal movement requisite in draw-bars on cable cars.

In the drawing the figure is a perspective view of my improved draw-bar.

Heretofore the draw-bars on cable cars (where this invention is perhaps of the most utility) have consisted of a single bar having on one end the coupling-head, such as shown by the dotted lines in the drawing. The rear or inner end has, however, been engaged by a vertical pin between two bars, which are rigidly engaged to the car-frame. These frame-bars have been a considerable distance apart, so that the end of the draw-bar when the outer end was raised or depressed might slide up and down on the pin. This has caused the orifice in the draw-bar to quickly become enlarged by the wear first on the upper edge and then on the lower one, and when so enlarged has made more or less slack between the cars, causing the disagreeable jerking now experienced. Again, with this old form of draw-bar, as just described, the platform of the car is frequently subjected to a severe strain, since, the outer end of the draw-bar being supported by a brace from the outer edge of the platform, when the outer end of the draw-bar is depressed and the inner end binds on the vertical pin the strain all comes on the platform-brace, thus racking the car and shortening its life. My invention remedies

these difficulties and defects by providing both a vertical and horizontal pivot for the inner end of the draw-bar, and I will now describe the same.

In carrying out my invention A A' represent in dotted lines the bars, which are rigidly engaged to the frame of the car, and to which the draw-bar B is engaged. These bars A A' are the same as those now on the cars.

C is a block or casting of such thickness as to fill the space between the bars A A' and provided with a hole or orifice C', through which a pivoting-pin is passed. Extending horizontally from the main portion of the block C are the projections D, each having a horizontal bore or orifice. The rear end B' of the draw-bar is provided with a horizontal bore and is inserted between the projections D. A pin E is then passed through the projections and the end of the draw-bar, thus pivoting them together, so that the outer end of the draw-bar may be moved vertically. The block C, being pivoted to the frame by a vertical pivot, allows the draw-bar to have a horizontal movement. It will be at once seen that by this construction the parts are made much more durable, since there are no edge bearings—that is to say, all of the parts have broad bearings where there is frictional contact. Again, there is no play or slack whereby the cars may be given the unpleasant jerking above referred to. Again, the difficulty now experienced of the inner end of the draw-bar binding on its vertical pivot, on which it slides, as above set forth, is entirely obviated, and the platform of the car is not subjected to any strain whatever from this source. Again, this binding on the vertical pivot in the old construction, as just described, frequently causes the link connecting two cars together to bind the coupling-pins in the coupling-heads of the respective draw-bars. This in my construction is entirely obviated.

Another advantage of my draw-bar is that it can take the place of the draw-bar now in use without any alteration of the car whatever.

What I claim is—

In a draw-bar for cars, the combination, 100

with two parallel supporting cross-bars, of a
block having an eye in its rear and horizontal
ears, the upper and lower faces of the entire
block being parallel and flat throughout its
5 entire width and length, a pin passing through
the eye and cross-bars, a draw-bar having a
horizontal eye in its end and a coupling de-
vice on its opposite end, and a pintle passing

through the ears of the block and eyes of the
draw-bar, substantially as described. 10

In testimony whereof I sign this specifica-
tion in the presence of two witnesses.

JOHN L. BLESSING.

Witnesses:

EUGENE SMITH,
W. H. CHAMBERLIN.