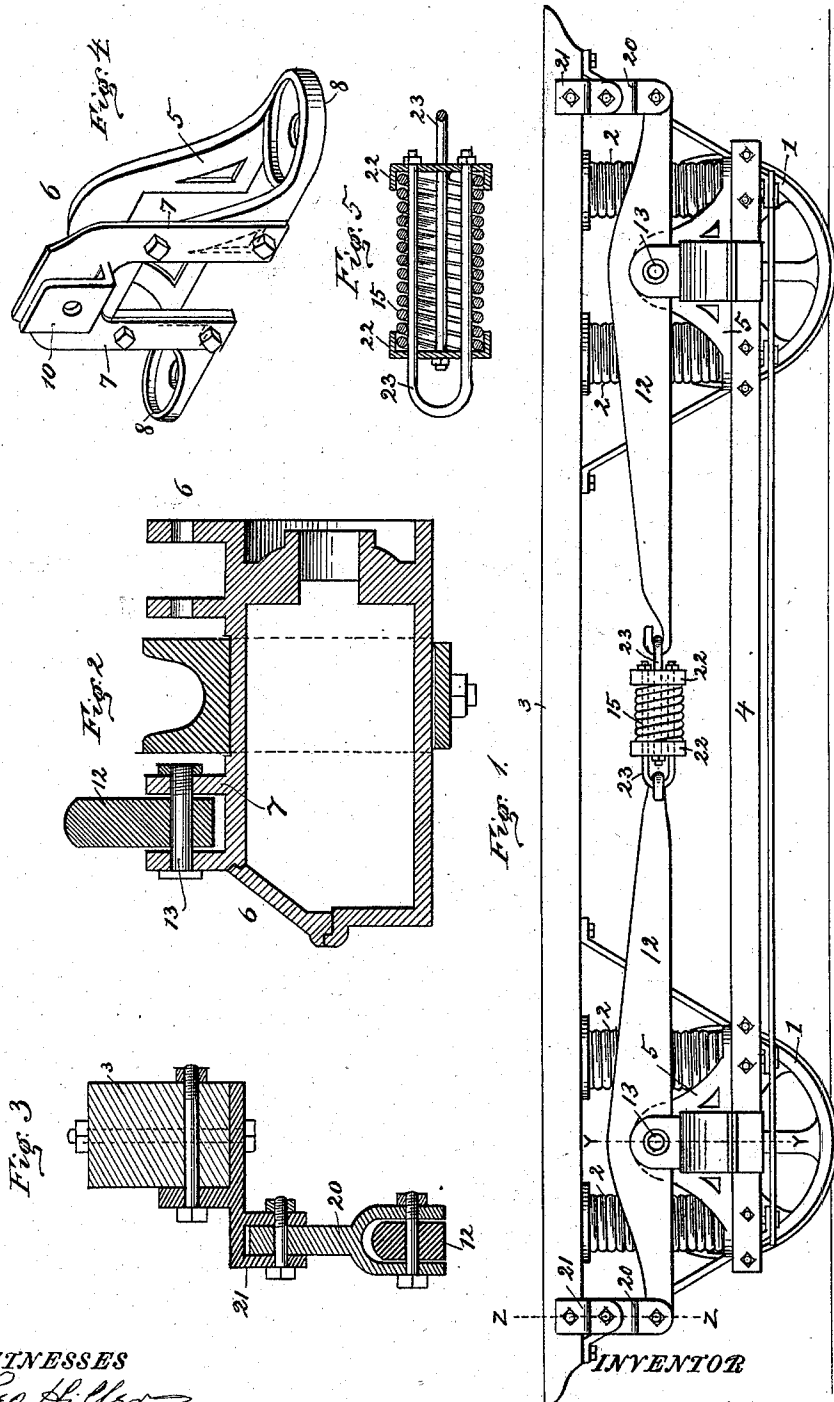


(No Model.)

M. E. MEEK.
EQUALIZER FOR STREET RAILWAY CARS.

No. 562,406.

Patented June 23, 1896.



WITNESSES

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MATHEW E. MEEK, OF CANTON, OHIO.

EQUALIZER FOR STREET-RAILWAY CARS.

SPECIFICATION forming part of Letters Patent No. 562,406, dated June 23, 1896.

Application filed November 18, 1895. Serial No. 569,265. (No model.)

To all whom it may concern:

Be it known that I, MATHEW E. MEEK, a citizen of the United States, and a resident of Canton, county of Stark, State of Ohio, have
5 invented a new and useful Improvement in Equalizers for Street-Railway Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.
10

My invention relates to improvements in supporting and equalizing the weight of street-car bodies and their load on the truck; and it consists in providing equalizing-bars
15 and horizontally-disposed springs at the ends of the bars, intermediate the axles, whereby a part or the whole of the burden may be supported.

With these ends in view my invention consists of certain features of construction and combination of parts, as will be hereinafter described and claimed.

Figure 1 of the accompanying drawings is a side elevation of a car-truck, illustrating
25 my invention. Fig. 2 is a cross-section on a line $y y$ of Fig. 1. Fig. 3 is a cross-section on a line $z z$ of Fig. 1. Fig. 4 is a bracket forming a support for the equalizing-bar and vertical spring. Fig. 5 is a longitudinal section
30 of the supporting and equalizing spring.

In the drawings, numeral 1 indicates the wheel of the car, and 2 vertical supporting-springs, and 3 the platform-timber.

The numeral 4 designates the side bar, connected with the truck in any ordinary or suitable manner. Secured to these side bars 4
35 is a bracket 5, consisting of the curved plates 6, the standards 7, and the apertured spring-sockets 8, through which pass bolts 9. Formed in the said bracket is an upwardly-extending
40 lug 10, forming a way to receive the equalizing-bar 12. The said standard and lug are formed with apertures through which passes a bolt 13, which serves as a pivot for the sections
45 of the equalizing-bar. The lugs 10 may be cast with and form a part of the axle journal-box, as shown in Fig. 2. There are two of these brackets at each end of the truck, one on each side, to which are pivotally secured
50 the equalizing-bars 12, the outer ends of which are connected to the platform 3 by a link, as 20, pivotally secured to bracket 21, the weight of car and its load being supported wholly or in part on the bars 12, as the case may be.

The inner ends of the bars 12, secured in
55 operative position by a coiled spring 15, placed between the ends thereof, and to which they are secured. For the purposes of this application, I have shown a coiled spring inclosed
60 between end plates 22 by links 23.

In operation, as either end of the car is depressed, the outer end of the equalizing-bar will be pressed down, which in turn will raise the inner end of the same bar and the spring,
65 which will raise the inner end of the other bar and depress the outer end. In other words, the burden of one end of the car or platform will be equalized by a transmission of a portion through the bars and spring 15
70 to the other end. It will be noticed that any upward or downward movement of the inner ends of the equalizing-bars will compress the spring. Consequently a portion of the load
75 is always borne by the horizontally-compressed springs 15, thus allowing the springs 2 to be made very light or soft; or, if preferred, the springs 2 may be omitted, allowing the whole weight to be carried by the side
80 or equalizing springs 15, thus equalizing the load on the two ends of the truck, and preventing the longitudinal rocking of the body of the car.

Having thus fully described the nature and object of my invention, what I claim is—

1. The combination in a car-truck of platform and side bars, of the equalizing-bars,
85 the intermediate link by which the equalizing-bars are connected to the platform, the inner ends of said bars, connected by a horizontally-disposed spring, the brackets secured
90 to the side bars, and provided with lugs to which the equalizing-bars are pivotally secured, and the vertical springs, substantially as described and for the purpose set forth.

2. The combination, in a car-truck, of the
95 side bars and platform, the brackets and equalizing-bars pivoted thereto, vertical springs, 2, and the horizontally-disposed spring, 15, connected to the inner ends of the equalizing-bars by the plates, 22, and links,
100 23, substantially as set forth.

In testimony whereof I have hereunto set my hand this 17th day of October, A. D. 1895.

MATHEW E. MEEK.

Witnesses:

W. K. MILLER,
BURT A. MILLER.