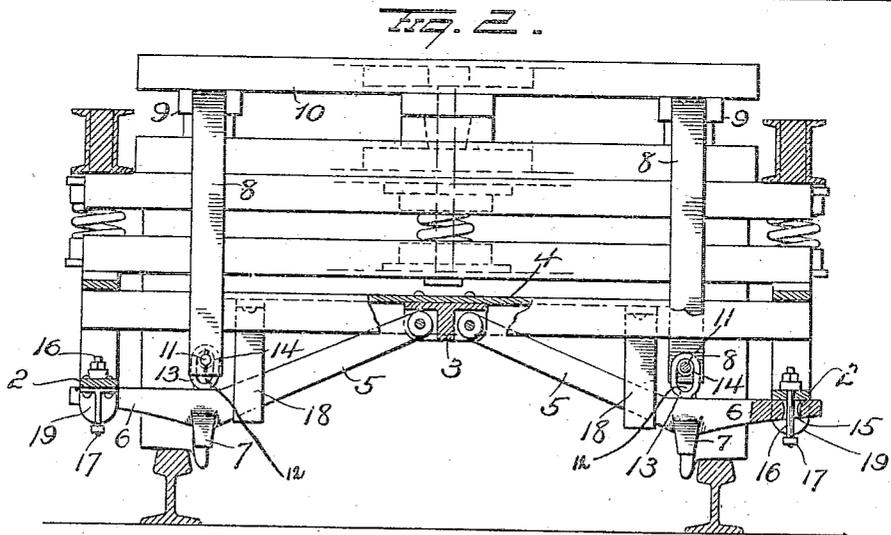
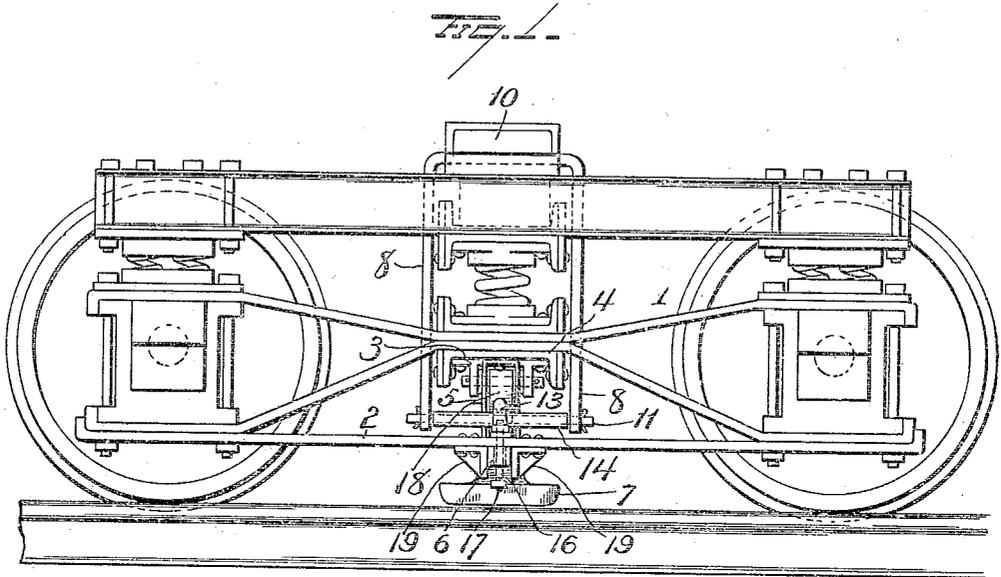


R. J. EDWARDS.
 RAILWAY CAR.
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953,781.

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WITNESSES
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RICHARD JAMES EDWARDS, OF GALENA, ILLINOIS.

RAILWAY-CAR.

953,781.

Specification of Letters Patent.

Patented Apr. 5, 1910.

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To all whom it may concern:

Be it known that I, RICHARD J. EDWARDS, of Galena, in the county of Jo Daviess and State of Illinois, have invented certain new and useful Improvements in Railway-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 appertains to make and use the same.

This invention relates to improvements in railway cars and more particularly to an improved derailment guard therefor associated with means for automatically controlling its operation,—the object of the invention being to so construct a derailment guard and mount it in such manner that the shoe portion of said guard will be normally maintained a distance above the track rail sufficient to prevent the danger of any portion of the guard engaging frogs and the like, and so that the guard will be automatically lowered when the car is rounding a curve and disposed in position to perform its functions of preventing derailment and without permitting the shoe portion of the guard which projects over the rail having actual contact with the tread portion of the latter.

With this object in view the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation of a car truck showing an embodiment of my invention, and Fig. 2 is a sectional view through the yielding side bearings and showing the connection of the stirrup with the derailment guard.

1 represents a car truck having horizontal braces 2 at respective sides below the plane of the journal boxes.

A block 3 is secured to and depends from the spring board 4 and to this block, the inner ends of two guard arms 5 are pivotally attached. Each of these guard arms is provided at its outer end with a shoe portion 6 which projects over the adjacent track rail and an appreciable distance laterally beyond the latter,—said shoe portion having a beveled under face. The shoe portion of each guard arm is provided at the inner end of the said inclined under face, with a depending flange 7 which, when the guard is

lowered will become disposed adjacent to the inner side of the head of the track rail in position to engage the latter and prevent derailment of the truck. Each guard arm is normally supported so that its shoe will be disposed appreciably above the track rail, by means of a stirrup 8, the horizontal or connecting member of which is located over a spring side bearing 9 of the bolster 10 so that said stirrup will be carried by and partake of the movements of the upper member of said spring side bearing and the bolster thereon as disclosed by Patent No. 943,666 granted to me on the 21st day of December, 1909. A rod 11 connects the vertical members of the stirrup in proximity to the lower ends thereof and this rod also passes through the elongated opening 12 of an eye bolt 13 secured to and projecting upwardly from the guard arm adjacent to the shoe portion thereof. A sleeve 14 is preferably loosely disposed on the rod 11 where the latter passes through the eye bolt 13. The shoe portion of each guard arm is provided near its free end with an elongated slot 15 for the accommodation of a bolt 16 which is adjustably secured to and depends from the adjacent truck brace and each bolt 16 is provided at its lower end with a head 17 (preferably in the form of a nut) which constitutes a stop to limit the downward movement of the guard arm shoe through which the bolt passes.

Guides or braces 18 and 19 are secured to and depend from the truck so as to embrace the guard arm inwardly of the shoe portion and the outer end of said shoe portion respectively.

From the construction and arrangement of parts above described it will be observed that the guard will be normally maintained by the stirrup, an appreciable distance above the track-rail and that at such time, the free end of the shoe portion of the guard arm will be located some distance above the head or stop 17 at the lower end of the depending bolt 16, the guard being sustained by the engagement of the upper portion of the eye bolt 13 with the rod 11 at the lower end of the stirrup. When the truck is rounding a curve and the bolster 10 becomes depressed at one side, the stirrup connected with the side bearing at this side of the bolster will descend and thus permit the guard to be lowered until the outer portion of its shoe engages the head or stop 17 at the lower

end of the bolt 16,—at which time the under face of the shoe will be disposed in proximity to but not in actual engagement with the tread of the rail, while the flange of the guard will be disposed adjacent to the inner side of the rail head and in position to engage the latter and prevent derailment. Should one side of the bolster become depressed to a greater extent than is necessary to accomplish the disposition of the guard as above described, such movement of the bolster will be permitted without danger of injury to any of the parts by the play of the rod 11 at the lower end of the stirrup in the elongated opening of the eye bolt 13 on the shoe.

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

1. The combination with a car truck and a derailment guard pivotally connected therewith, of means for normally sustaining the derailment guard above the plane of the track-rail and a stop carried by the truck and operating to limit the downward movement of the guard and prevent its engagement with the upper face of the head of the track rail.

2. The combination with a car truck, a bolster thereon and a derailment guard pivotally connected with the truck, of a stirrup connected with the bolster and the derailment guard, and a stop carried by the truck and cooperating with the derailment guard

to limit the downward movement of the latter.

3. The combination with a car truck, a bolster thereon and a derailment guard pivotally connected with the truck, of a stirrup connected with the body bolster, a lost motion connection between the stirrup and the derailment guard, and a stop carried by the truck and cooperating with the derailment guard to limit the downward movement of the latter.

4. The combination with a car truck, spring side bearings for a bolster and derailment guards pivotally connected with the truck, of a stirrup connected with each spring side bearing, an eye bolt having an elongated opening, secured to and projecting upwardly from each derailment guard, a rod supported near the lower end of each stirrup and passing through the eye bolt on the adjacent derailment guard, and bolts depending from a part on the truck and provided at their lower ends with stops, each derailment guard having near its free end an elongated slot through which one of said bolts freely passes.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

RICHARD JAMES EDWARDS

Witnesses:

FRANK JOSEPH MELLER,
MARTIN ELLSWORTH COLTMAN.