R. J. EDWARDS.

CAR TRUCK.

APPLICATION FILED AUG. 28, 1909.

943,666. Patented Dec. 21, 1909.

Fig. 1.

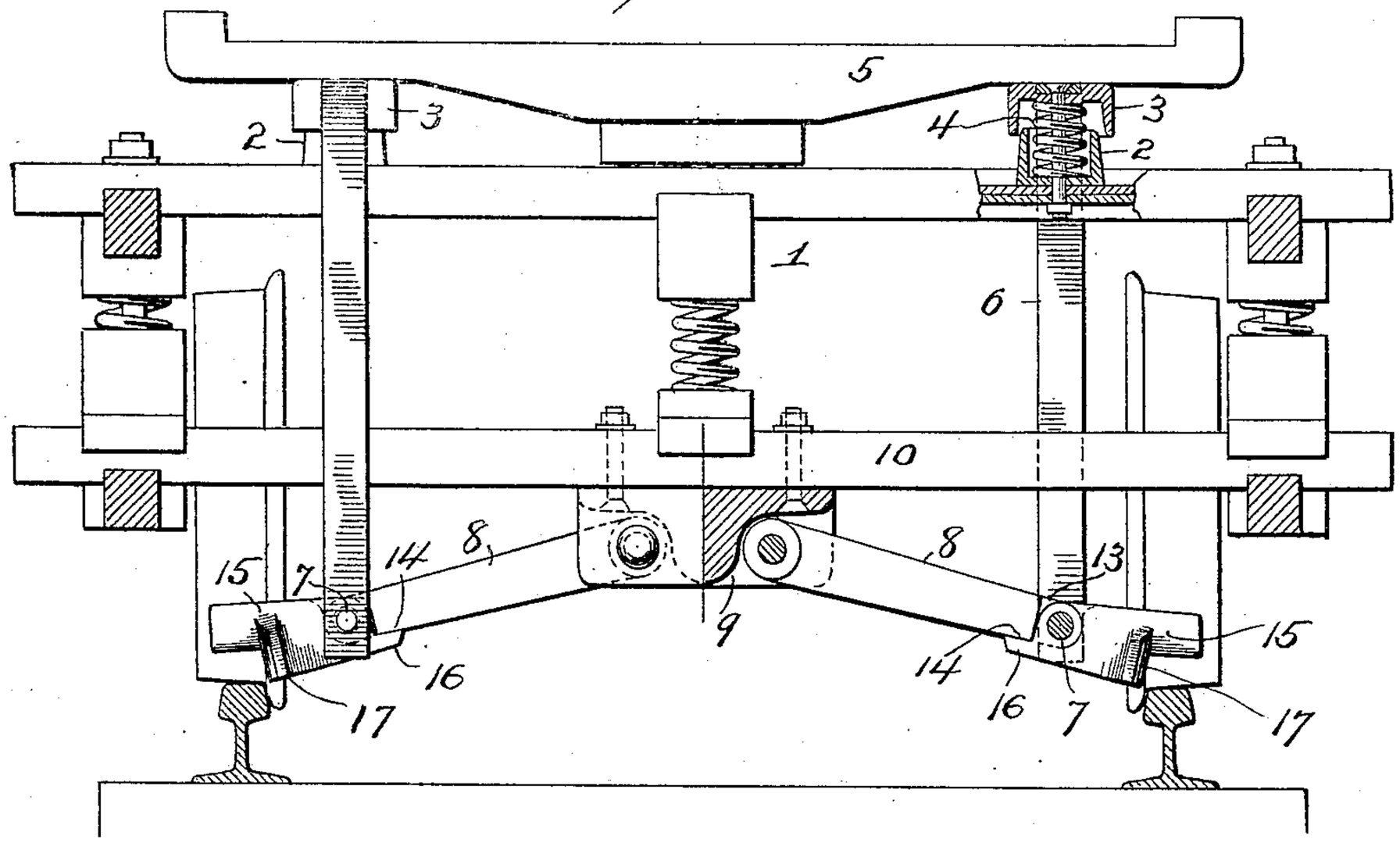
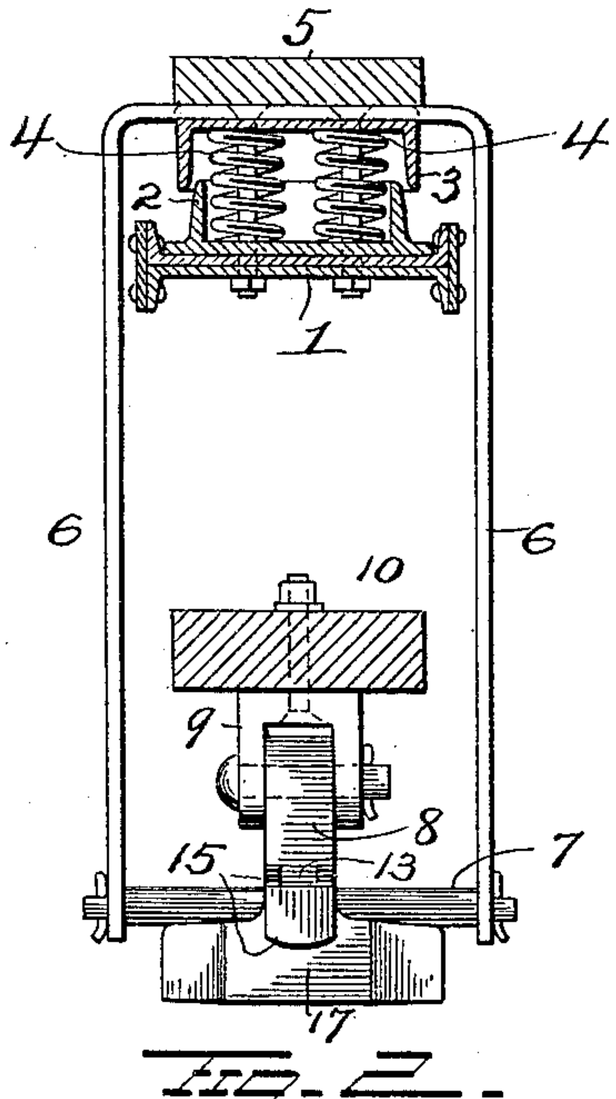


Fig. 2.



WITNESSES

E. Nottingham

G. J. Downing.

INVENTOR

R. J. Edwards

By H. G. Seymour

Attorney

ANDREW. B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RICHARD JAMES EDWARDS, OF GALENA, ILLINOIS.

CAR-TRUCK.

943,666. Specification of Letters Patent. Patented Dec. 21, 1909.

Application filed August 28, 1909. Serial No. 515,102.

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 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.

My invention relates to an improvement in car trucks and more particularly to guards for preventing the derailment of the truck.

In Patent No. 799,316, granted to me September 12, 1905, I show and describe a car truck having derailment guards and also show, describe, and claim side bearings carried by the truck bolster and yieldingly supporting the body bolster, the side bearings being provided with springs whereby they give or yield under the pressure or weight of the car body while rounding curves.

The object of the present invention is to provide means whereby the position of the bearing blocks regulate and control the position of the derailment guard so that the latter will be automatically raised and lowered as the truck enters and leaves a curve in the track thereby permitting the derailment guard to normally run in a plane above the rail except at curves thus avoiding frogs and switches and to be lowered automatically into operative position to prevent derailment on curves.

With these ends in view the invention consists in certain novel features of construction and combinations of parts as hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in end elevation partly in section of a truck embodying my invention and Fig. 2 is a view in transverse section through the yielding bearings showing the derailment guard carrying stirrups.

1 represents a car truck of any approved construction. This truck may consist simply of side frames mounted on axles and carrying a bolster or it may be of the form shown in my patent above referred to. The truck bolster or other part of the truck on which the body bolster rests is provided with the blocks 2 on which the bearing caps 3 rest and move and by which they are guided, springs 4 being interposed between the blocks and caps to hold the latter elevated and up into contact with the underside of the body bolster 5. With the construction thus far described it will be seen that in turning a curve the weight of the body of the car will be thrown on to the yielding cap adjacent to the outer side of the curve, thus depressing the latter and it is this feature of my patented device that I now utilize for automatically actuating the derailment guards. Secured to these caps are the stirrups 6 which latter pass downwardly on opposite sides of the bolster and provided at their lower ends with a bolt or other cross member 7 which seats under or engages the derailment guards 8. These guards are pivotally mounted at their inner ends to the bracket 9 depending from the spring-board 10, and each guard arm is provided at its outer end with a lug 13 and shoulder 14.

To the lug 13 of each guard arm is pivotally attached a shoe 15 capable of vertical movement and each shoe is provided with an inwardly projecting lip 16 which engages the shoulder 14 to retain the shoe normally in line with the guard arm and prevent it from falling below the plane of the guard arm. That portion of the shoe immediately to the inside of the rail is provided with a depending flange 17 located in a position when the guard arm and its shoe are lowered to a plane below the top of the rail at the inner side of the rail. On a straight track, and when the parts are in their normal position, the spring caps 3 and their depending stirrups 6 hold the flanges 17 in a plane slightly above the tread of the rails and consequently above all switches and frogs, thus obviating altogether all danger of contact between the flanges of the shoe and parts of the track equipment. When however, the truck enters a curve the weight of the body of the car falling on the cap 3 adjacent to the outer or longer side of the curve depresses the cap thus lowering the shoe until its flange rests in the plane of and adjacent to the inner face of the rail and in a position to prevent derailment. As the truck leaves the curve the car body and truck assume their normal position and the elevation of the spring cap again raises the guard arm and its shoe to its normal position above the track.

It is evident that changes in the construction and relative arrangement of the several parts might be made without avoiding my invention and hence I would have it under-

stood that I do not restrict myself to the particular construction and arrangement of parts shown and described, but,—

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

1. The combination in a car truck, of a yieldable bearing against which the weight of the car body falls, a derailment guard having a depending flange adapted when the guard is lowered to rest adjacent to and in the horizontal plane of the track rail, and means connecting the derailment guard and yieldable bearing, whereby the position of the guard with relation to the track rail is regulated and controlled by the yieldable bearing.

2. In a car truck, the combination with yieldable bearings against which the weight of the car body falls, and derailment guards carried by said truck and overhanging the track rails, of means connecting the yieldable bearings and derailment guards whereby the latter will be lowered to a position to engage the track rails, when the yieldable bearings are depressed by the car.

3. The combination with a car truck and yielding bearings thereon adapted to receive the weight of the car body, of guard arms pivoted to the truck, shoes carried by the outer ends of the arms, each shoe having a depending flange to engage the inner face of the rail and means connecting said arms and shoes with the yielding bearings whereby the positions of the shoes with relation to the rails are regulated and controlled by the yielding bearings.

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

RICHARD JAMES EDWARDS.

Witnesses:

FRANK J. MELLER,

MARTIN E. COLTMAN.