

(No Model.)

2 Sheets—Sheet 1.

J. H. JENNINGS.  
GUARD FOR CARS.

No. 526,532.

Patented Sept. 25, 1894.

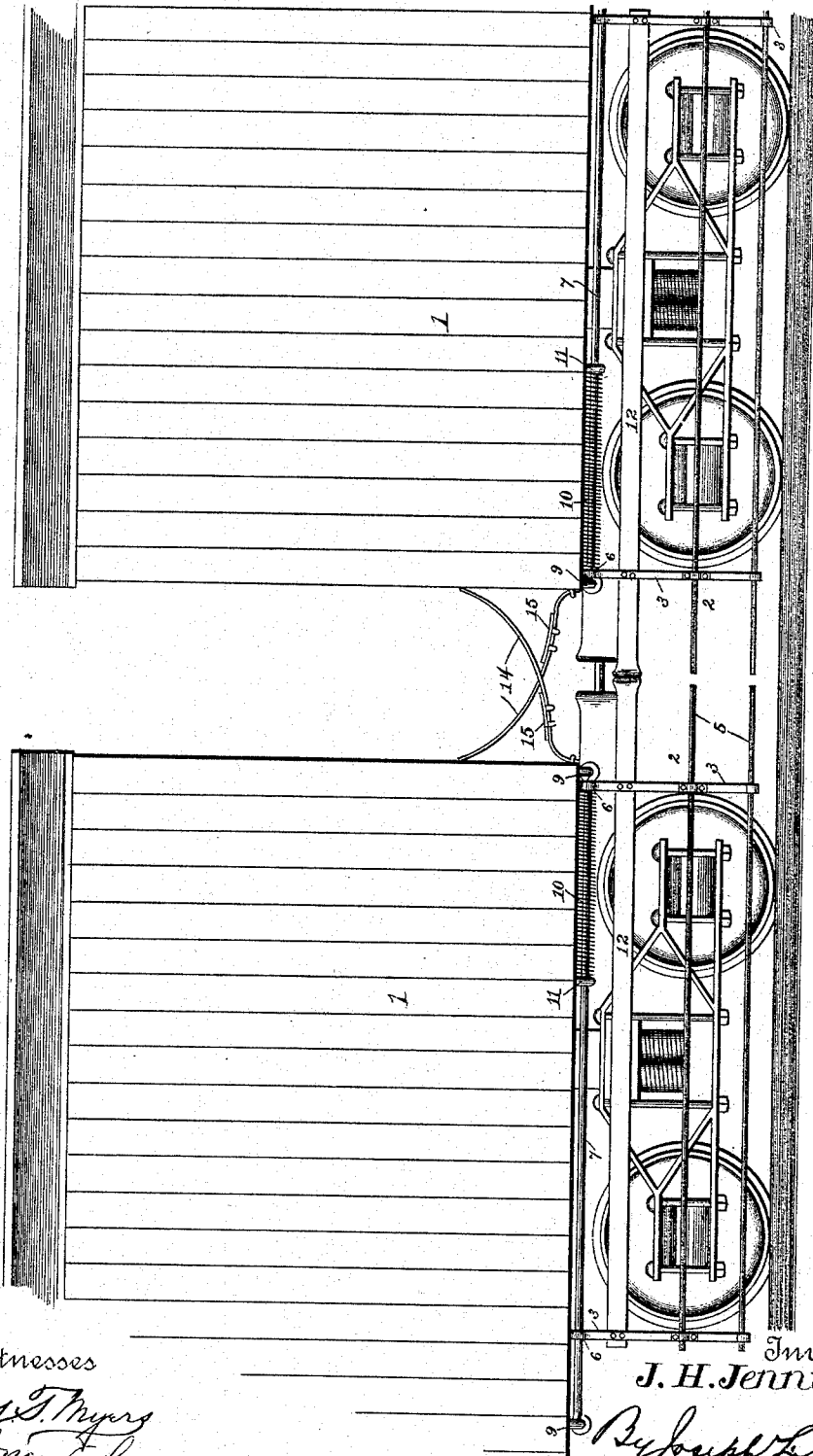


Fig. 1

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*By Joseph L. Atkins*  
Attorney

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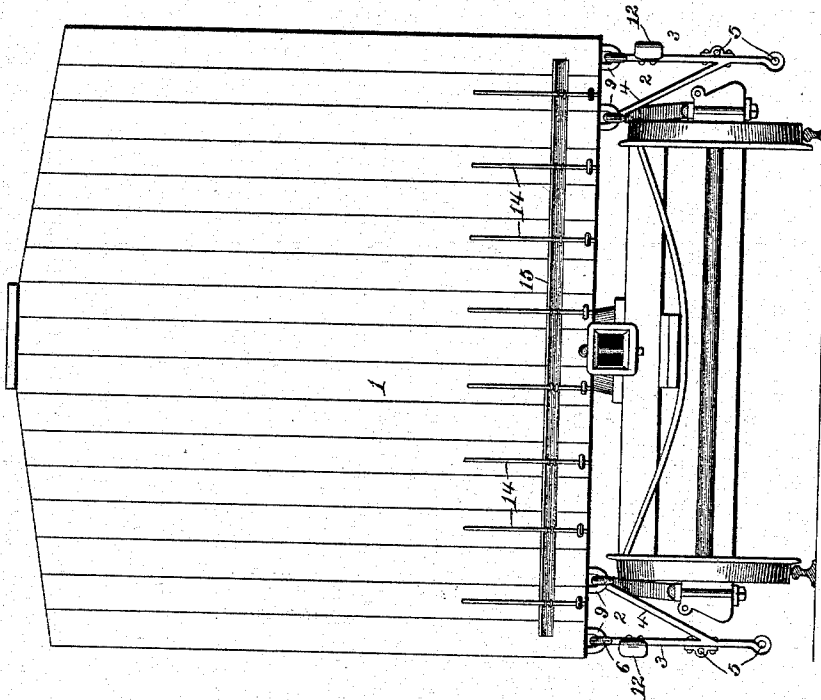


Fig. 2

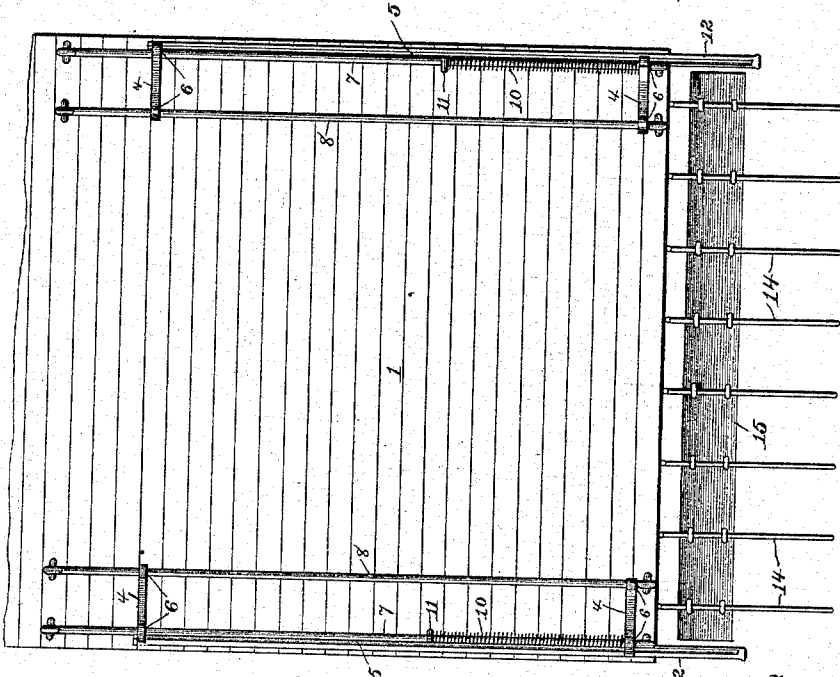


Fig. 3

Witnesses  
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# UNITED STATES PATENT OFFICE.

JOSEPH HENRY JENNINGS, OF MIDDLEWAY, WEST VIRGINIA.

## GUARD FOR CARS.

SPECIFICATION forming part of Letters Patent No. 526,532, dated September 25, 1894.

Application filed December 19, 1893. Serial No. 494,038. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH HENRY JENNINGS, of Middleway, county of Jefferson, State of West Virginia, have invented certain new and useful Improvements in Guards for Cars, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce an improved self-adjusting safety guard for railway cars, street cars, or the like, that are united in trains, whereby the wheels are protected on the sides and the spaces between the cars are effectually protected by a practically continuous and thoroughly efficient guard.

My device is especially applicable to freight cars, but may be employed to advantage elsewhere, as above suggested.

In the accompanying drawings: Figure 1 is a side elevation of the contiguous ends of a pair of cars. Fig. 2 is a top plan view of the same. Fig. 3 is a bottom plan view of one of the cars with the running gear detached.

Referring to the figures on the drawings: 1 indicates a box of an ordinary car, for example.

2 indicates a guard piece which preferably consists of frame pieces 3 and brace pieces 4 made of suitable material, as for example metal, such as heavy steel wire, or the like. The frame pieces are united by cross rods 5 which, united therewith, constitute in effect a net that offers an effective guard against such objects as might be injured by being thrown under the wheels of the car, or which might derail the car while running. The upper ends of the brace pieces and frame pieces are provided with eyelets 6 by which the guard may be movably carried underneath the cars upon rods 7 and 8 fastened, as by suitable supports 9, to the bottom of the car.

10 indicates springs preferably coiled, respectively, around rods 8 and seated at one end against stop pieces 11 and bearing at the other end against the forward eyelets of the guard frame piece. This spring serves to yieldingly sustain the guard in proximity to the forward end of the car.

12 indicates a buffer piece secured by suitable means to the frame piece of each guard.

It serves as a part of the net work which composes each guard, but in addition to that presents a broad, flat end 12 to receive the impact from a like buffer piece upon the contiguous end of the adjoining car. The forward end of the buffer piece projects considerably beyond the end of the car to the ends of the rods 5. They are held by the spring 10 against the guard of the adjoining car and so serve effectually to close and guard laterally the space between the cars. The springs 10 serve to accommodate the guards to the movements of the cars, while they afford at all times a perfect protection.

Upon the ends of the cars, I provide yielding or spring arms 14 which are curved upwardly and, crossing the ends of like arms upon the adjoining car, serve to completely close from above the space between the cars. The spring arms are preferably united, for the sake of strength and security, by a cross piece or cross pieces 15.

What I claim is—

1. The combination with a car, of guards carried at the bottom of the sides thereof provided with buffers and longitudinally yielding with respect to said car, substantially as specified.

2. The combination with a car, of longitudinally yielding guards consisting of parallel rods extending beyond the car, and a buffer whereby the guards will yield to the shock incident to coupling and the rods serve as a ladder or steps for getting on or off of the car, substantially as specified.

3. The combination with a car, and longitudinally yielding guard panels on the sides thereof and below the body, whereby the wheels and spaces between them are protected, of upwardly extending spring arms projecting from the ends of the car, whereby the space between the cars is guarded and a person falling from the top of the car is caught without injurious shock, substantially as specified.

4. The combination with a car, of guard frames pivoted at the bottom of the sides thereof longitudinally yielding with respect thereto, provided with buffers and adapted to be swung laterally when desired, substantially as specified.

5. The combination with a car, of guards composed of frame pieces, and brace pieces movably carried thereon, rods secured to the car, and a spring adapted to actuate the frame  
5 pieces upon the rod, substantially as set forth.

6. The combination with a car, of a guard composed of frame pieces and brace pieces movably carried upon rods secured underneath the car, a spring actuating the frame  
10 pieces, and a buffer piece secured thereto, substantially as set forth.

7. The combination with a car, of a yield-

ingly supported guard, a buffer piece secured thereto and projecting beyond the end of the car, and rods constituting the cross piece of  
15 the guard and also projecting beyond the ends of the car equi-distantly with the ends of the buffer piece, substantially as set forth.

In testimony of all which I have hereunto subscribed my name.

JOSEPH HENRY JENNINGS.

Witnesses:

N. R. ROBERTS,

W. B. BURNES.