(No Model.)

R. J. GOOD.

GUARD FOR STREET CARS.

No. 277,564. Patented May 15, 1883.

Fig. 1.

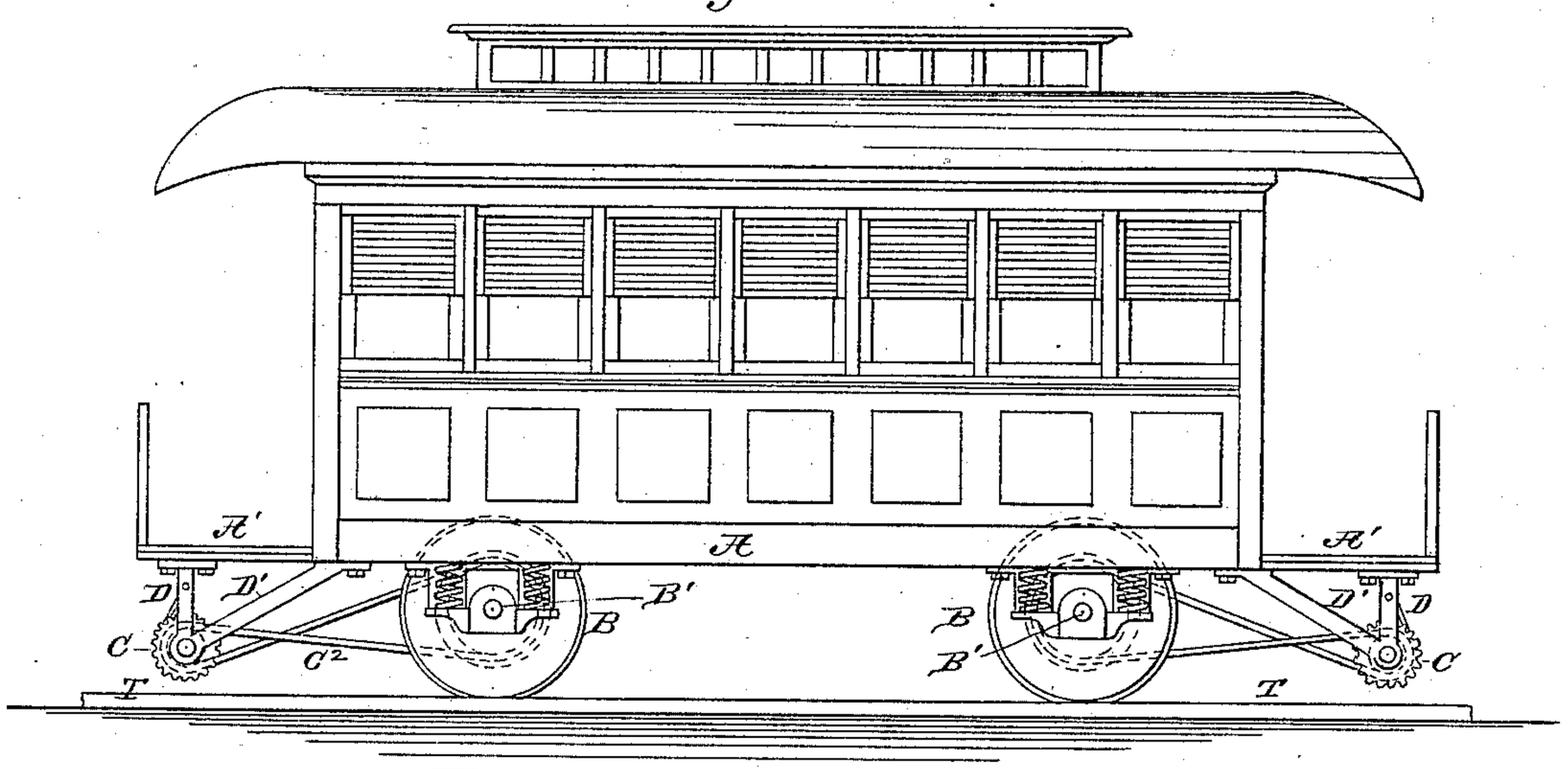


Fig. 2.

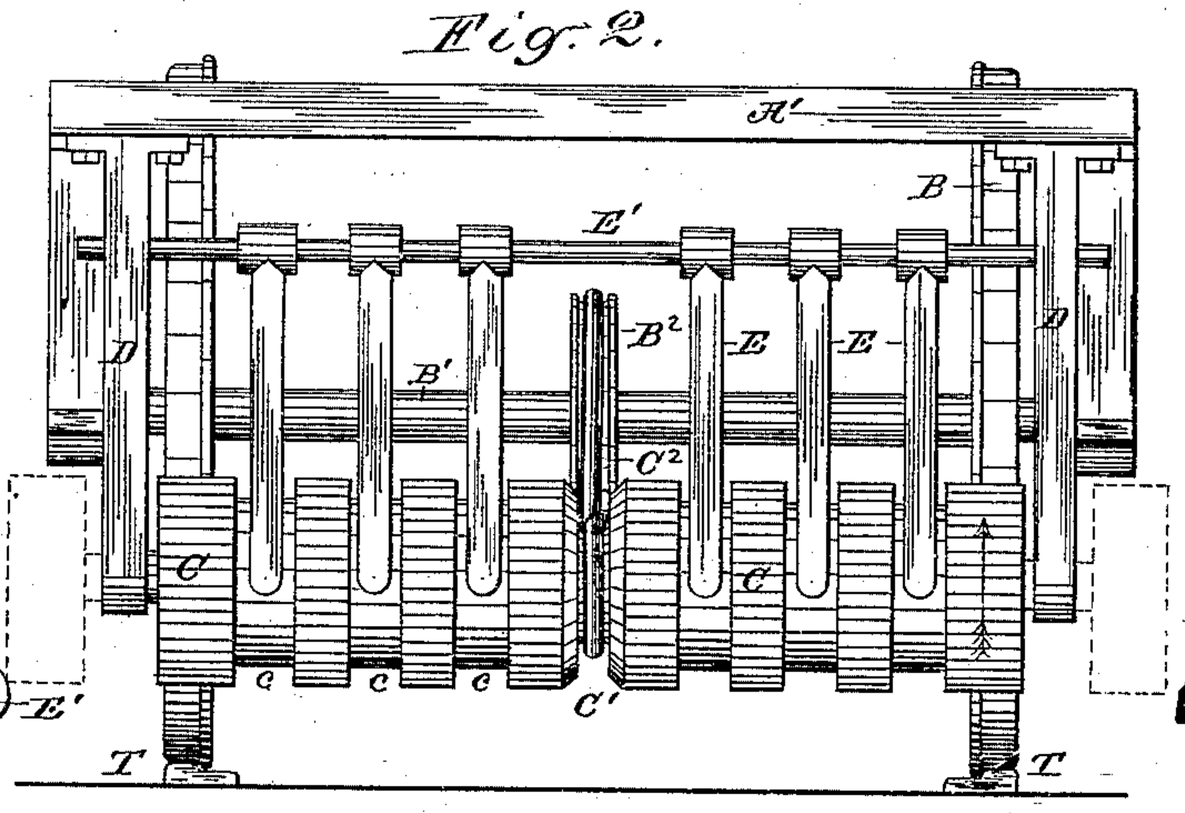


Fig. 4.

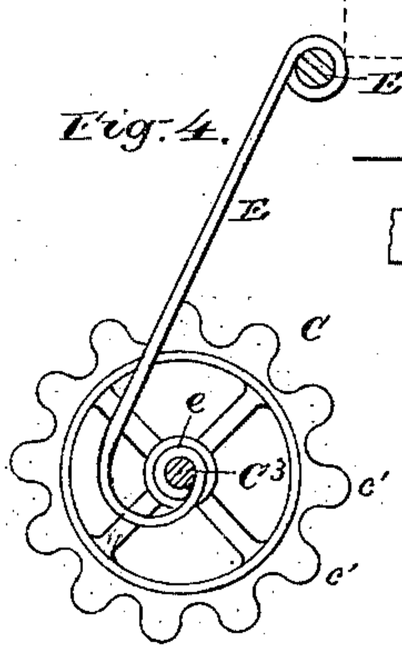


Fig. 3.

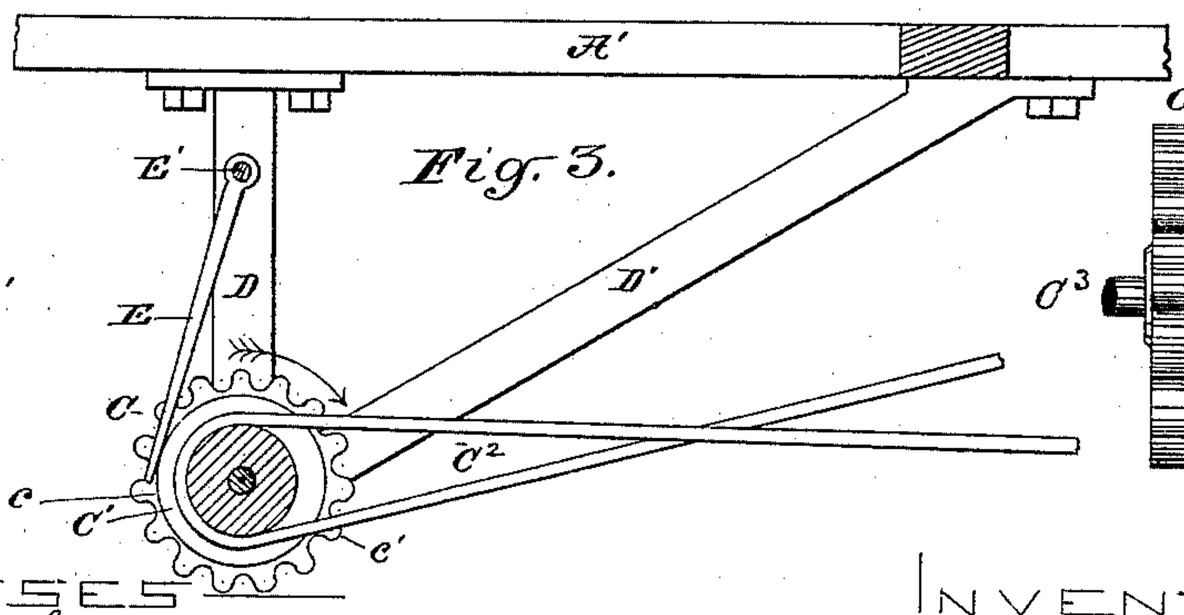
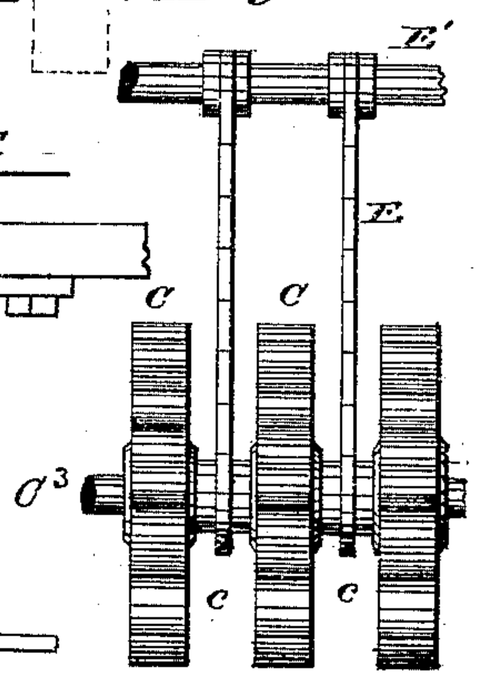


Fig. 5.



WITNESSES

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GUARD FOR STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 277,564, dated May 15, 1883.

Application filed July 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT JESSE GOOD, of Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Safety-Guards for Street-Railway Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to devices for preventing persons from falling beneath the wheels of street-cars; and it consists in the matters hereinafter set forth and claimed.

In the drawings, Figure 1 is a side elevation of the car having my improvements thereto applied. Fig. 2 is a front elevation of the parts immediately concerned in my improvement, enlarged; and Fig. 3 is a fragmentary vertical section transverse to the rotating cylinder, which constitutes one feature of my safety device, as herein shown, and through the middle thereof. Figs. 4 and 5 are modifications.

A represents the car, and A′ the platform at either end. B B are the wheels. B′ B′ are the wheel-axles. C is a cylinder, arranged transversely to the car, beneath each platform, being supported by the brackets D D′, and rotated by the belt C^2, traveling over a central groove in said cylinder C, and over a pulley, B^2, on the axle B′ of the wheels. E E are bars suspended from a transverse shaft, E′, located above the cylinder C, and having support in the vertical parts D of the brackets, said bars being arranged to depend in front of the cylinder C, which preferably has circumferential depressions or grooves *c c*, in which the lower ends of said bars E rest.

The cylinder C is of any suitable or desired diameter—say six inches, or upward—and extends entirely across the car, and may advantageously be prolonged outside the bracket-supports D, as indicated by dotted lines of Fig. 2. Said cylinder is mounted on a suitable shaft or gudgeons rotating in bearings in the brackets D D′, and the lower portion of said cylinder should be only such distance from the track as will allow the car, resting upon its springs, to vibrate without striking said cylinder against the track. The arm D′ of the brackets which support the cylinder C is arranged to form a stout brace, so as to sustain the cylinder against any ordinary obstacle—as a person who may have fallen across the track. The cylinder may be located in the well-advanced position beneath the platform, as shown, or farther backward and nearer to the wheels. In the latter case it more nearly proximates the track T. The cylinder has an upwardly and forwardly rotating movement, imparted thereto by a cross-belt, C^2, trained over a pulley, B^2, on the car-axle B′, and over the cylinder C in a suitable groove, C′. Said belt may be a sprocket-chain, if preferred, in which case the pulley D^2 and cylinder-groove C′ are provided with the necessary projections to engage such sprocket-chain.

Instead of employing a continuous cylinder, C, having a groove, C′, for the crossed driving-belt, a number of short cylinders C may be attached to a central shaft, C^3, as shown in Figs. 4 and 5, and a suitable pulley applied to said shaft to receive the driving-belt.

The upwardly and forwardly rotating cylinder or group of cylinders C is calculated, when it comes in contact with a body, to roll the same over and over forwardly upon the ground in front of the car; and to more perfectly accomplish this end said cylinder may be provided with the longitudinal ribs *c′* on its curved surface, which ribs should be rounded, as more plainly shown in Figs. 3 and 4, in order that they may not injure the person upon whom they bear, or tear his clothing.

The bars E E serve as a suitable fender to prevent a body from falling beneath the platform and above the roller C, or from being carried over the roller by entanglement of the clothing with the latter. Said bars may hang by their weight in the dependent position shown in Figs. 2 and 3, having their lower ends resting at or about the center of the cylinder C in the circumferential grooves *c;* or they may have their lower ends attached to the central shaft, C^3, as seen in Figs. 4 and 5.

If preferred, a traveling apron may be employed in place of the rotating cylinder C, and said apron may be directed upward and properly supported to take the place and serve the purpose of the fender-bars E.

I claim as my invention—

1. In a safety-guard for street-cars, the combination, with the car bed and axle, of a suspended cylinder, C, means for rotating the same from the axle, and fender E E, substantially as described.

2. In a street-car safety-guard, the upwardly and forwardly rotating cylinder C, provided with circumferential grooves, in combination with fender-bars E E, arranged in the grooves, substantially as described.

3. In a street-car safety-guard, the upwardly and forwardly rotating roller C, provided with rounded longitudinal ribs *c' c'*, substantially as described, and for the purposes set forth.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

ROBERT JESSE GOOD.

Witnesses:

JONATHAN MILLS,

JOHN W. DAVIS.