(No Model.)

G. MARSTON.

SAFETY ATTACHMENT FOR RAILROAD CARS.

No. 346,762.

Patented Aug. 3, 1886.

FIG.1.

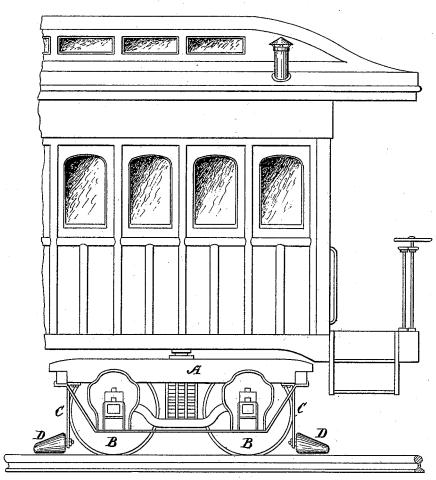




FIG.4.

W<u>itnesses</u> & Blanta UZWIN

Seo, Pravitor. Geo, Pravitore by J. Adams Attorney.

UNITED STATES PATENT OFFICE.

GEORGE MARSTON, OF HAVERHILL, MASS., ASSIGNOR TO HIMSELF, BENJAMIN M. KIMBALL, AND CHARLES M. KIMBALL, ALL OF SAME PLACE.

SAFETY ATTACHMENT FOR RAILROAD-CARS.

SPECIFICATION forming part of Letters Patent No. 346,762, dated August 3, 1886.

Application filed January 28, 1886. Serial No. 190,112. (No model.)

To all whom it may concern:

Be it known that I, George Marston, a citizen of the United States, residing at Haverhill, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Safety Attachments to Railroad-Cars, of which the following is a specification.

The object of my invention is to provide a means for preventing injury to persons happening to be on a railroad-track in front of an approaching car or train.

My invention consists in a certain construction and arrangement of parts hereinafter fully 15 described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents one end of a car with my invention as applied. Fig. 2 is an enlarged view of the spring as attached to a bar, and 20 having a covering of rubber or other material. Fig. 3 represents the spring, and Fig. 4 the covering of the spring.

A represents a truck of a railroad car, and B the wheels, all of the usual construction.

To the ends of the truck are secured rods or bars C, which extend downward, and to the lower ends of the bars C are attached coiled

springs E, the apexes of which are in front.

The springs E are made with their lower 30 curves on a line with each other, so as to be parallel with the rails, and arranged to be near the rails, but not in contact with them. The springs are to have a covering of thin indiarubber or other suitable material, D', so as to 35 prevent the clothing of a person with whom the spring should come in contact from being caught in the coils of spring, and also to ease

the force of the blow.

At the front or small end of the spring E is placed cotton waste or some material of a soft 40 or yielding nature, F, for the purpose of breaking the force of the blow in coming in contact with a person on the track. These safety attachments are designed to be attached to the truck of a railroad car in front of each wheel.

It will be seen that if by accident or otherwise a person should be upon a rail of a railroad-track in front of an approaching train or car, he or she will be thrown one side off of the rail, and in consequence of the yielding nature of the safety attachment D, the force of the blow will be very much lessened and the liability of serious injury and the breaking of limbs will be avoided.

My invention may also be applied to street- 55 cars.

What I claim as my invention is—

1. In combination with the track of a rail-road-car and suitably attached thereto, a safety attachment, D, consisting of a tapering coiled 60 spring, E, and a covering, D', of rubber or other soft material, as shown and described.

2. In combination with the tapering coiled spring E and covering D, a soft or yielding material, F, at the forward end of the spring, 65 as and for the purpose set forth.

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

GEORGE MARSTON.

Witnesses:

A. L. SAWYER, E. PLANTA.