(No Model.)

C. D. SCHRADER.

SAFETY ATTACHMENT FOR CARS.

No. 555,908. Patented Mar. 3, 1896.

Fig. 1.

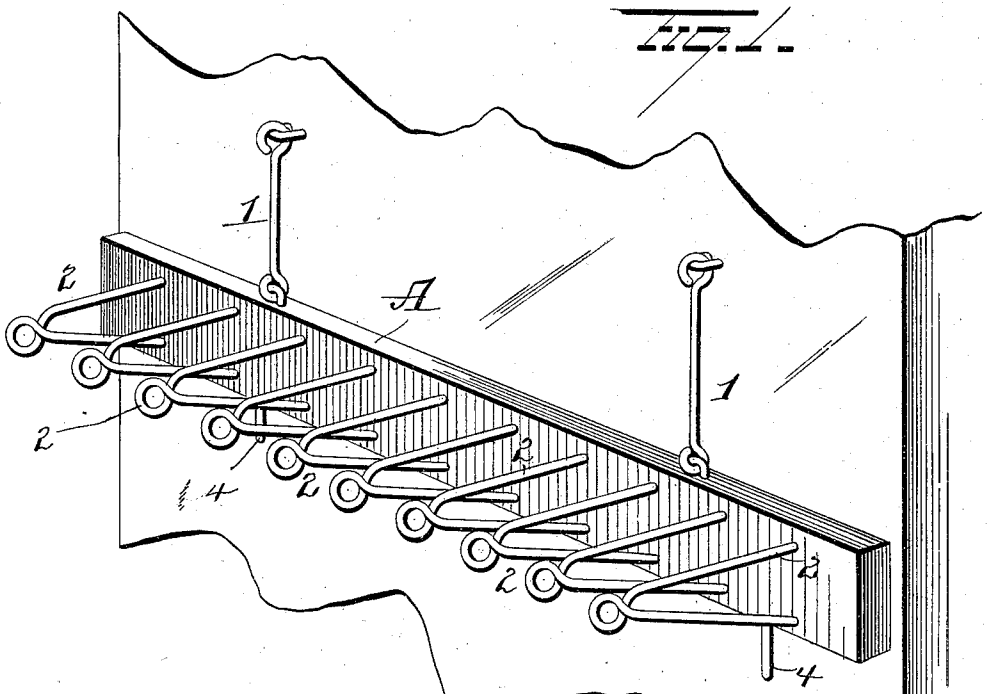


Fig. 2.

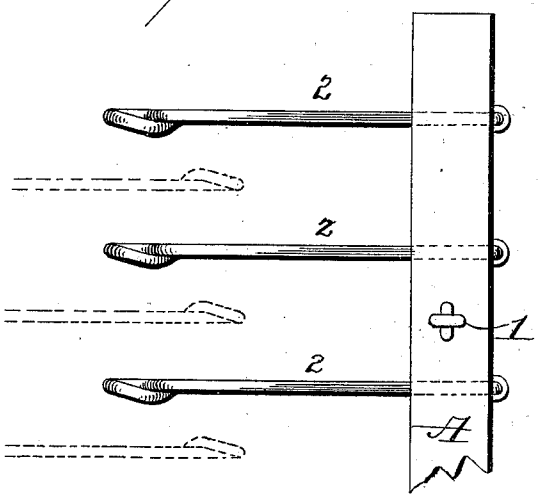
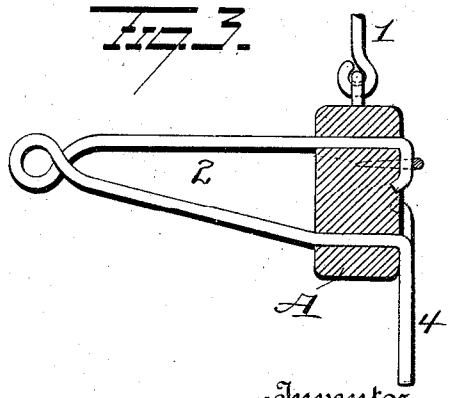


Fig. 3.



Witnesses
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SAFETY ATTACHMENT FOR CARS.

SPECIFICATION forming part of Letters Patent No. 555,908, dated March 3, 1896.

Application filed May 4, 1895. Serial No. 548,138. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. SHRADER, of Logan, in the county of Logan and State of Nebraska, have invented certain new and useful Improvements in Safety Attachments for 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.

My invention relates to an improvement in safety attachments for cars, and more particularly for freight-cars, the object being to provide a device for precluding the possibility of a train-attendant from falling between cars in stepping from the top of one freight-car to the next; and it consists in certain novel features of construction and combinations of parts which will be hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of an end of a car, showing my improved safety attachment in position thereon. Fig. 2 is a detached view of the attachment, and Fig. 3 is a sectional view.

A represents a beam preferably made of hard wood, although any material may of course be employed in its construction. This beam is intended to extend entirely across the end of the car to which it is applied, and while it may be attached in any approved manner I find it expedient to suspend it loosely by means of a pair of links 1 1 depending from the car.

A series of arms 2 2 project outwardly from this beam about eighteen inches. These arms may be constructed in a variety of ways. I have illustrated one form in which a rod is bent to constitute two members which extend at an angle to each other, the upper members being horizontal or approximately so and the lower ones inclining to brace the upper member, and the extreme ends are inserted in the beam and secured by bending them to one side and fastening them down by a staple, or it might be accomplished by turning nuts onto the protruding ends of the members, the main thing being to prevent their drawing out or pushing through. Two things will be observed—namely, that the ends are rounded and the arms are yielding—the object of which construction is to prevent injury to a person who may be caught upon the arms, which would be likely to result from too great rigidity; also, it will be noticed that the device is so suspended that it will rock slightly upon being struck and in this way yield considerably.

To prevent the beam from rocking over and dropping its load, in the event of a person falling heavily thereupon, downwardly-projecting arms 4 4 are provided, they being adapted to rest upon the end of the car and form an extended bearing below the beam.

In the practical application of my safety attachment each car is equipped with one attachment at each end. They are hung a uniform distance from the ground and the arms are so disposed that they interlace on the adjacent ends of two cars, and the attachments being suspended naturally swing together from side to side with the rocking of the cars, so that they remain practically horizontal at all times, and hence are most effectual in catching a person who may fall upon them in passing from one car to another, in which act many lives have hitherto been lost for the want of an appliance of this character.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

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

1. A safety attachment for cars comprising a series of outwardly-projecting arms rigidly connected together at one end and having a laterally-swinging connection with the car to which it is attached, the length of these arms being less than the distance intervening between the ends of adjacent cars whereby clearance is formed between the ends of the arms and the adjacent car, substantially as set forth.

2. A safety attachment for cars comprising a set of horizontally-disposed outwardly-projecting arms rigidly connected together at one end and free at the other end and having a hinged connection with the end of the car to which they are attached, substantially as set forth.

3. A safety attachment for cars comprising a cross-bar loosely suspended by its upper edge from the end of a car at a point on the car somewhat above said upper edge, and arms projecting outwardly from said cross-bar, substantially as set forth.

4. A safety attachment for cars comprising a set of arms, and links for supporting said arms, said links connected with the car to which the attachment is connected at points above the arms, substantially as set forth.

5. A safety attachment for cars comprising a beam, arms projecting therefrom, and links for supporting the beam loosely upon the end of the car whereby it is capable of swinging laterally with the motion of the car or rocking so that the arms may move in a vertical plane upon receiving the weight of a falling body thereon, substantially as set forth.

6. In a safety attachment for cars, the combination with a cross-beam, and arms projecting outwardly therefrom, of arms projecting downwardly from the beam and adapted to lessen the tendency of the attachment to rock, and links connecting the attachment loosely with a part of the car, substantially as set forth.

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

CHARLES D. SHRADER.

Witnesses:
LEW WILLIAMS,
J. J. STORM.