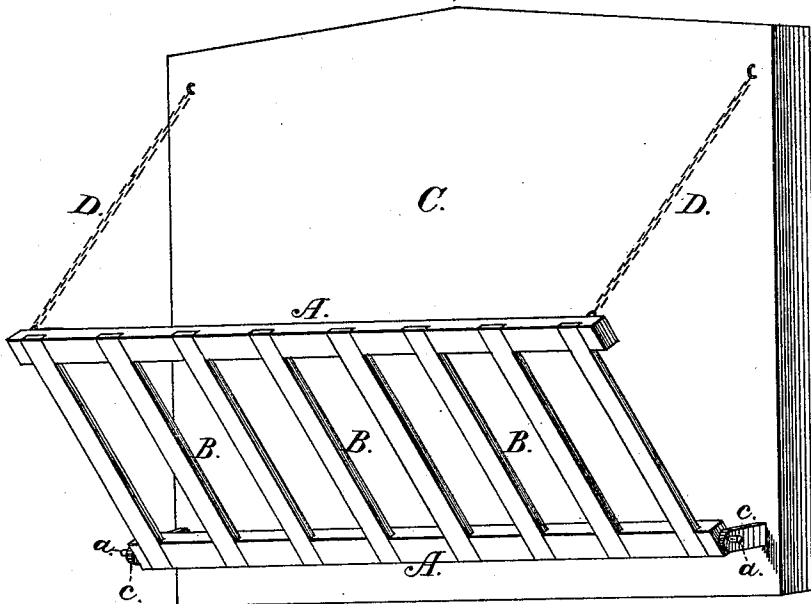


J. DAVENPORT.

SAFETY DEVICES FOR FREIGHT CARS.

No. 177,382.

Patented May 16, 1876.



Attest:

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UNITED STATES PATENT OFFICE.

JOSEPH DAVENPORT, OF MASSILLON, OHIO.

IMPROVEMENT IN SAFETY DEVICES FOR FREIGHT-CARS.

Specification forming part of Letters Patent No. **177,382**, dated May 16, 1876; application filed April 26, 1876.

To all whom it may concern:

Be it known that I, JOSEPH DAVENPORT, of Massillon, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Safety Devices for Railroad Freight-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to railroad-cars, and consists of a safety device or barrier placed on the ends of freight-cars, to prevent the men falling from the roof down between the cars while they are in motion.

In the drawings is represented a perspective view of one end of a car with the safety device applied thereto. This device or barrier consists of a light but strong frame of wood or metal, composed of top and bottom horizontal strips *A A*, and vertical bars *B*, placed such a distance apart as to prevent a man falling through them. This frame *A B* is secured to the end of the car by trunnion or journals *a a* at each lower end, in bearings *c c* on the car *C*. To the top, at each corner, are chains *D D*, secured to the top corners of the car *C*. By these chains the frame or rack *A B* is held in the proper inclined or slanting position, as shown.

When the cars, provided with these swinging racks, come together when moving along, stopping, or starting, the top edges of the racks come together and push each other inward. The provision of the chains at the top is for the purpose of allowing this inward movement of the frame or rack, but to prevent its too-far-outward movement.

Should a man by accident fall from the roof of the car into the rack, he is retained therein without injury, and thus prevented from going down between the cars and being killed. To prevent pinching or slight injury by the opposite rack forcing in the rack in which he is, should the cars come together all he has to do is to reach through his rack and press the opposite rack back against its car. Thus he is preserved from injury, and can regain his place upon the top of the car when an opportunity occurs.

By this simple provision many shocking accidents and loss of valuable human life may be averted, and with little expense or trouble.

I am aware that hinged platforms have been applied to the ends of cars for the purpose of preventing persons falling down between the cars. This, therefore, I do not claim; but these platforms entirely occupy the opening between the cars, and prevent the manipulation of the couplings or brakes, should that at any time become necessary.

The object in constructing my fender of a slatted rack and hinging it near the bottom of the end of the car, is to allow of this necessary access to the coupling or brakes, when desired, the spaces between the slats being sufficiently large to allow the legs or arms of a person to readily pass through, but not large enough to allow his entire body to pass easily through. Besides this, when the fender is made solid its supports have to be quite heavy and strong in order to resist concussion, thus greatly adding to the weight of the cars, and the parts are liable to become easily locked or get inoperative, and thus be crushed. With mine the parts are light but strong, applied directly to the cars, and easily and readily play back and forth as the cars collide or draw apart; do not in the least form an unnecessary obstruction, and, owing to the slant at which they are hung and their lightness, the liability of their being locked or injured is entirely overcome.

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

The safety device for freight-cars, composed of rack consisting of horizontal strips *A A* and vertical strips *B B*, swung upon trunnion-supports *a a c c* at the bottom or lower edge of the ends of the cars, and held in a slanting or inclined position by chains *D D* secured at the top corners of the rack and cars, substantially as and for the purposes described and shown.

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

JOSEPH DAVENPORT.

Witnesses:

CHAUNCEY C. GROVE,
ISAAC H. BROWN.