

C. LATIMER.  
Safety-Guards for Railroads.

No. 137,694.

Patented April 8, 1873.

Fig 1.

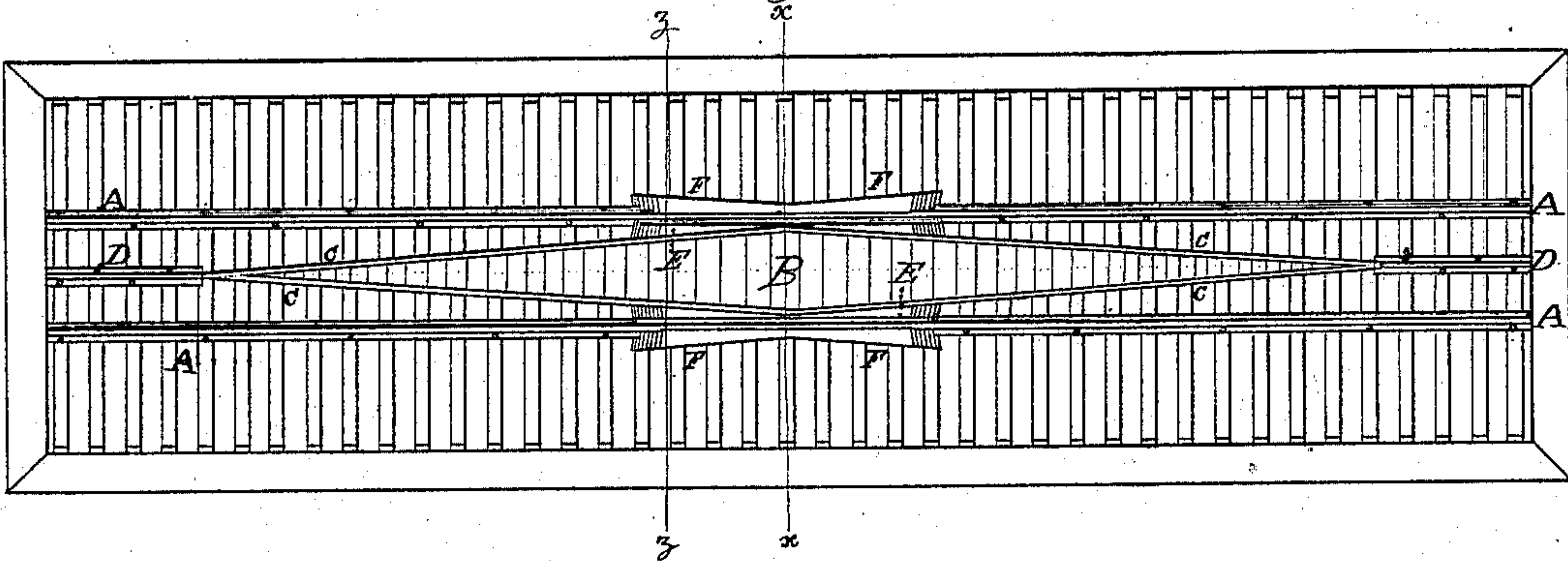


Fig 2.

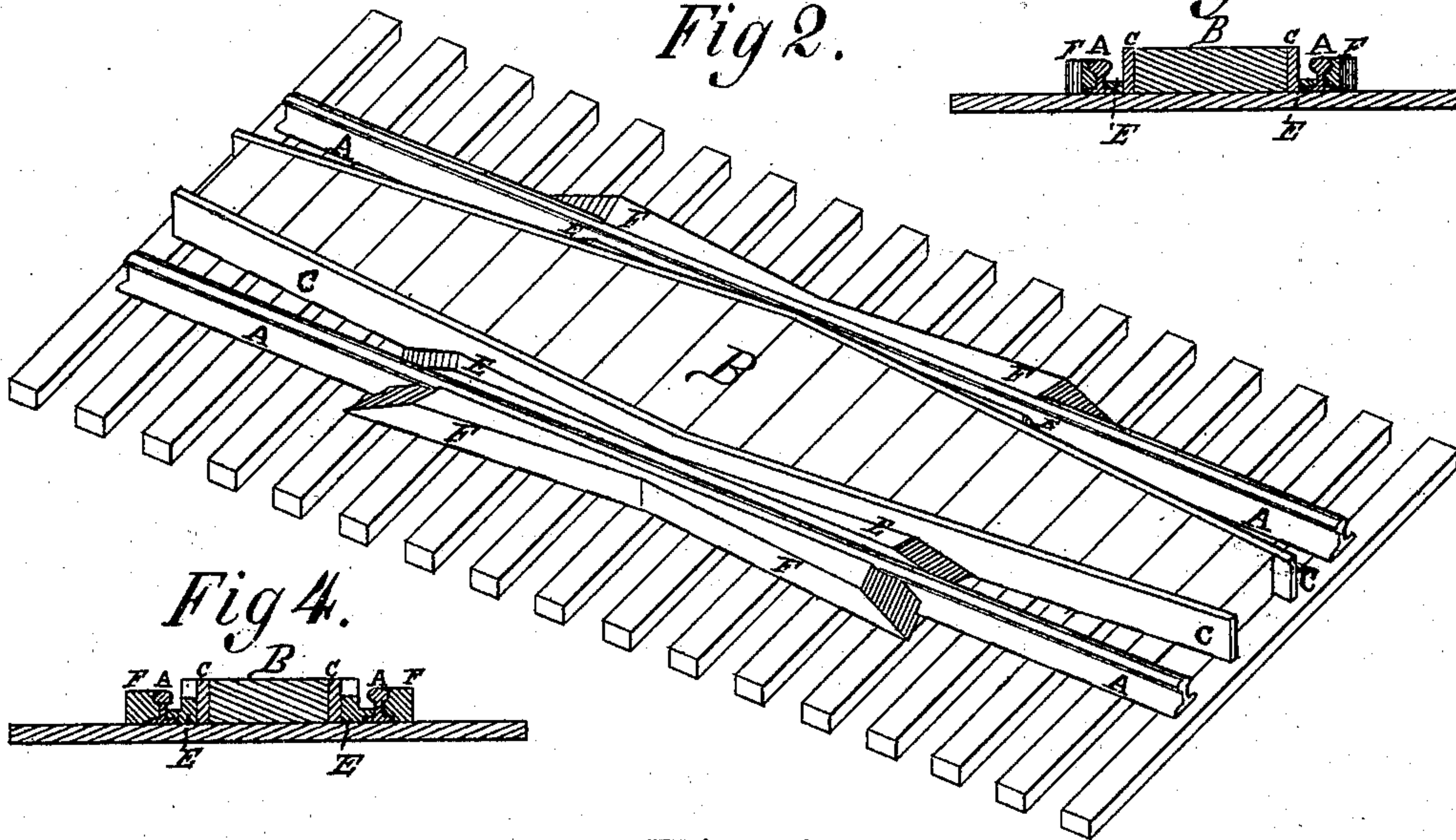


Fig 3.

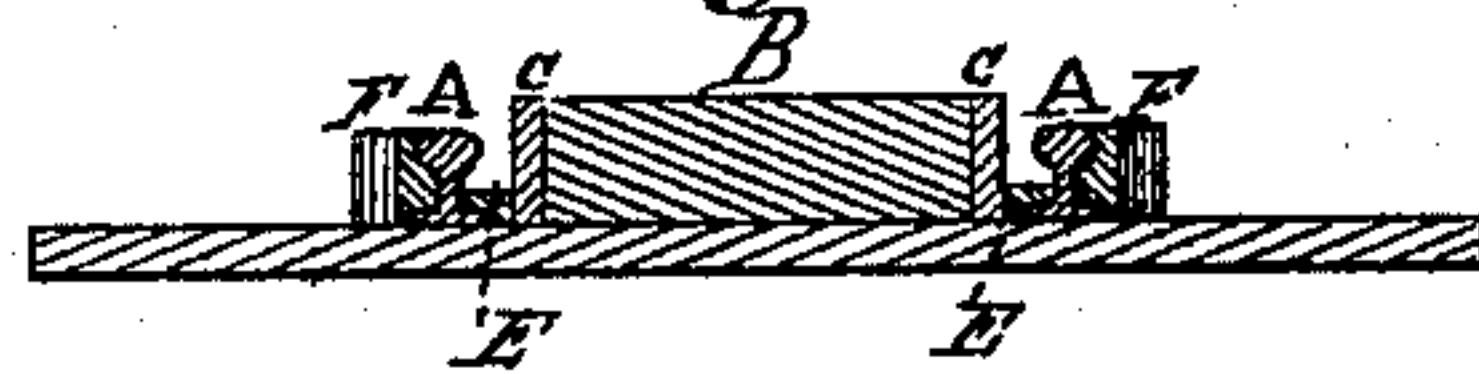
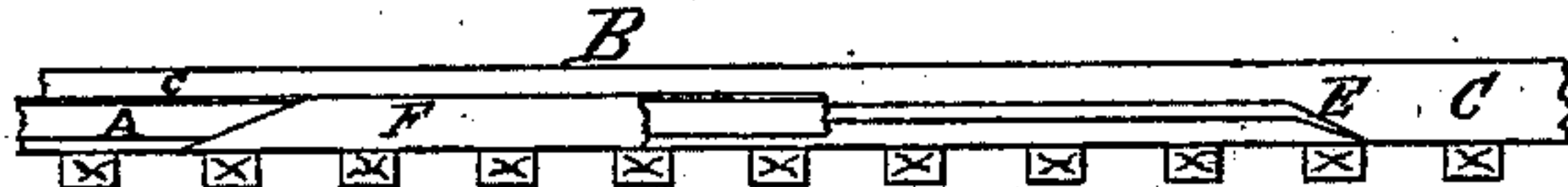


Fig 4.



Fig 5.



Witnesses:

James S. ...  
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Inventor:

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# UNITED STATES PATENT OFFICE.

CHARLES LATIMER, OF ST. JOSEPH, MICHIGAN.

## IMPROVEMENT IN SAFETY-GUARDS FOR RAILROADS.

Specification forming part of Letters Patent No. 137,694, dated April 8, 1873; application filed May 4, 1871.

*To all whom it may concern:*

Be it known that I, CHARLES LATIMER, of St. Joseph, in the county of Berrien and State of Michigan, have invented a certain Safety-Guard for Railroad Trains, of which the following is a specification:

### *Nature and Object of the Invention.*

The invention relates to providing a bridge, curve, or other place on a railroad track where there is danger of the wheels of a truck running off the track, with a means of replacing the wheels upon the track, and at the same time preventing their moving so far from the track as to pass over the ends of the ties or sides of a bridge. The device consists of a lozenge or diamond shaped platform of somewhat greater height than the rails, and placed between them at one or both ends, or in the center of a curve or bridge. The said platform is provided with guides of even height therewith, which are united at either end of the platform and prolonged on the center of the track a desired distance. About the center of the platform, between it and the rails, are placed bars of proper dimensions, of less height than the platform, grooved on the side toward the rails, and having an upward and outward transverse inclination at each end. Opposite these, outside of and corresponding in height with the rails, are placed the other bars, which have at each end an upward and transverse inward inclination.

### *Description of the Accompanying Drawing.*

Figure 1 is a plan view of a device embodying the elements of the invention. Fig. 2 is a perspective view of same, showing the inclination of the lifters. Fig. 3 is a vertical transverse section through the line  $x x$ . Fig. 4 is a similar view through the line  $z z$ . Fig. 5 is a side elevation with certain parts broken out.

### *General Description.*

A in the accompanying drawing are the rails of a railway, between which, as shown, is constructed the platform B, of wood or any other suitable material, and of a lozenge or diamond shape—that is, tapering to a point at each end, on a line with the center of the track.

The platform is of somewhat greater height than the rails, and is faced on its sides with the guides C, which are composed of bars of metal or other suitable material firmly secured in a vertical position to the backing, and are or may be inclined at their upper edges toward the platform, at each end whereof they are united into the single guide-rail or prolongation D of the same height as the platform B, and extending upon the central line of the track a proper distance. The space between the guides C is filled with a backing of timber or other suitable material of even height with the guides, and is intended to support the wheel or wheels should the truck run off the rails at a point adjacent to the platform; and also to brace the guides one against the other, thus rendering the entire construction compact and capable of resisting lateral pressure. The center of the platform B forms on each side an obtuse angle, adjacent to which and between which and the rails are placed the bars or lifters E, which are of less height than the platform B, widest at their ends, and correspondingly decreasing in width until they vanish, or nearly so, at the obtuse angles of the platform B. They are provided from end to end with a channel running parallel to the rail, and at each end have an upward and transverse inclination, the latter being toward the rail. The bars or lifters F are placed in contact with the rails outside of and directly opposite the lifters E, with which they correspond in length and height, having their upper surfaces flush with the rail, and their ends having an upward and transverse inclination, the latter being toward the rail. The guides C are formed with plain surfaces, that form being preferable to the ordinary T-rail, as being less liable to catch snow.

It is obvious that the device may be divided at its center and one section placed at each end of the curve or bridge.

### *Operation.*

The truck of a car running off the track A is guided by the contact of the wheels with the guide-rail D and guides C until they reach the inclines at the end of the lifters E and F, up which they ride, being directed on each side toward the rails, the wheels outside the track

ranning upon the top of the lifter F, while the flanges of the other wheels, being in contact with the guides C or lifter E, draw the opposite wheels constantly toward the track until the obtuse angle of the platform B is reached, when the flange of the opposite wheel is drawn over the rail and drops into the channel between the lifter E and the rail, while the other wheels pass at once upon their rail, thus re-tracking the car-truck.

*Claims.*

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The platform B provided with the guides C, in combination with the lifters E and F, substantially as shown and described.

2. The guide-rail D, for the uses and purposes substantially as shown and described.

3. The platform B provided with the guides C, in combination with the lifters E and F and guide-rail D, substantially as shown and described.

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Witnesses:

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