C. L. HEYWOOD.

Device for Replacing Cars upon the Track.

No. 216,404. Patented June 10, 1879.

Fig. 1

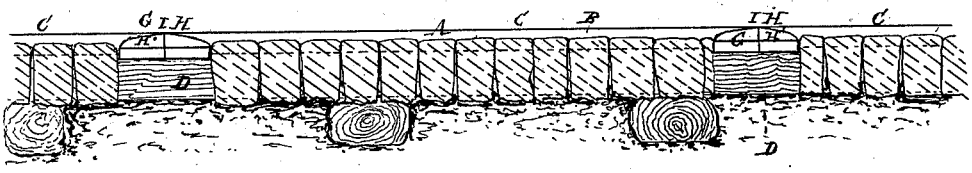



Fig. 2.

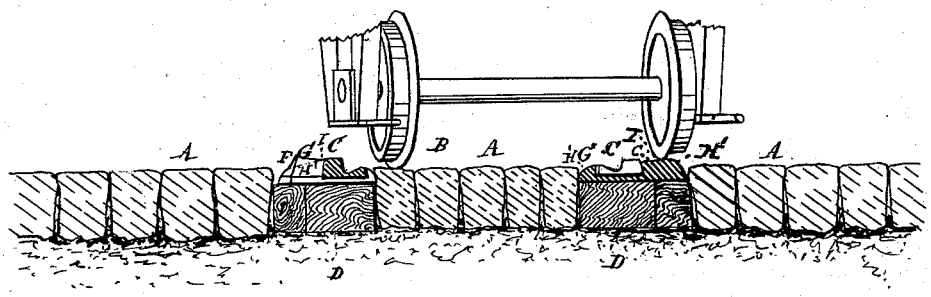



Fig. 4.

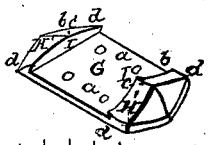
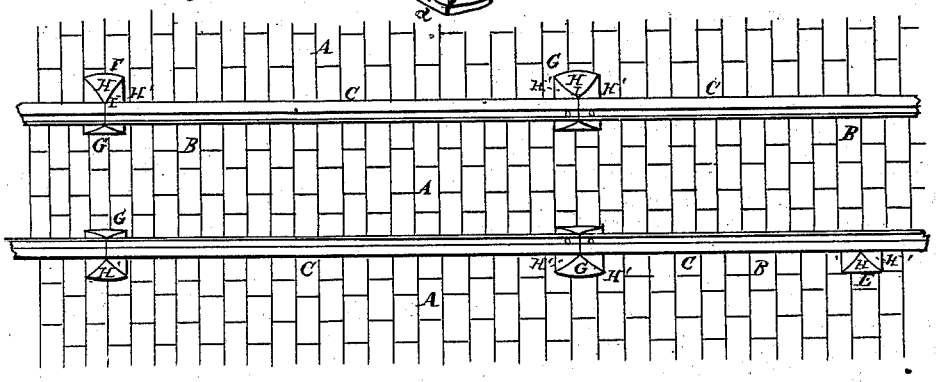



Fig. 3.




Witnesses.

Abraham Firth

Francis S. Dyer

Charles L. Heywood Inventor.

# UNITED STATES PATENT OFFICE.

CHARLES L. HEYWOOD, OF BELMONT, MASSACHUSETTS.

## IMPROVEMENT IN DEVICES FOR REPLACING CARS UPON THE TRACK.

Specification forming part of Letters Patent No. **216,404**, dated June 10, 1879; application filed December 24, 1878.

*To all whom it may concern:*

Be it known that I, CHARLES L. HEYWOOD, of Belmont, county of Middlesex, and State of Massachusetts, have invented a new and useful Device for Directing Cars that are off the Track upon the Track again, of which the following is a specification, accompanied by drawings, in which—

Figure 1 represents a longitudinal section of the street along the outside of the railroad-track with my invention applied to it. Fig. 2 is a cross-section of the track and street with said invention. Fig. 3 is a top view of the same on a somewhat smaller scale. Fig. 4 is a detached perspective view of my invention as applied to a railroad-chair.

The object of this invention is to have close to the side of the rail blocks or chairs, the tops of which have one or more incline planes rising from below or from the surface of the street to the top level of the rail, so that the driver of the car is enabled to drive the car upon such a block or chair, and thereby over the rail into the track, in case of the car having run off the track, without stopping the car.

In the drawings, A A represent the pavement; B, a railroad, of which C C indicate the different rails, and D the sleepers, on which the rails are spiked. The rails rest on chairs G, each of which has an extension, F, having inclined upper surfaces, H′ H′, which, at the outer edges, are about on a level with the surface of the pavement when in position, and at their apices are even with the top of the rail.

There may be only one inclined surface H′ on the extension of the chair; but I prefer to have the top surface, from its elevated portion I close to the rail, either with several or one declining surface from said portion toward the edges not in contact with the rail, for the purpose to allow other vehicles as well as the car to pass readily over this extension or incline.

The top surface most preferred is that shown in Fig. 4, in which the invention is shown with a railroad-chair, in which *a* represents the rail-bed, and *b b* are the shoulders, between which the rail is guided. Each of said shoulders has a nearly central raised portion, *c*, which is most elevated at the part farthest from the rail, and from it the surface inclines toward both the side edges, *d d*, so that a wagon-wheel coming from either side of the street toward the rail is readily guided over it and over the rail.

When a car is off the track the driver looks for the chair or incline nearest before him, and by guiding his horses in proper direction against the rail the wheel or wheels meet the chair or incline, which, by its inclined top surface, allows the wheel or wheels to ride over it and to mount upon the rail, and the car readily finds the track without stopping.

The ridge or top portion, *c*, and the faces H′ H′ are all made to incline a little in lateral direction toward the rail, to cause the wheels of the car to bear to the rail in mounting the incline and readily pass over the rail.

I am aware that it has been proposed to bolt to the sides of rails on steam-railways devices for replacing cars on the track; but these differ essentially in construction from my invention, and are not adapted to be used on street-railways.

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

The chair G, passing under and forming a support for the rail and provided with the inclines H′, substantially as and for the purpose specified.

In witnesses whereof I hereunto set my hand this 10th day of December, 1878.

CHARLES L. HEYWOOD.

In presence of—
FRANCIS S. DYER,
R. BOEKLEN.