Lane & Leathe,

Car Replacer,

No. 61,437, Patented Jan. 22, 1867.

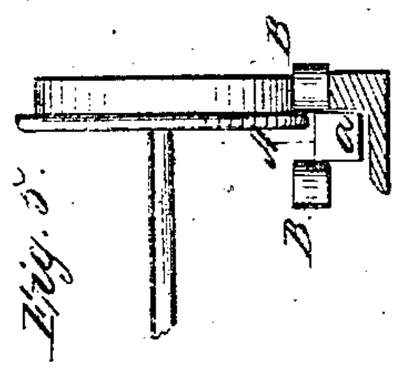
Fig. 5.

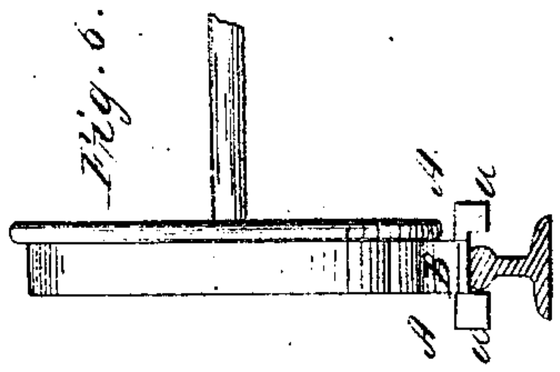
Fig. 6.

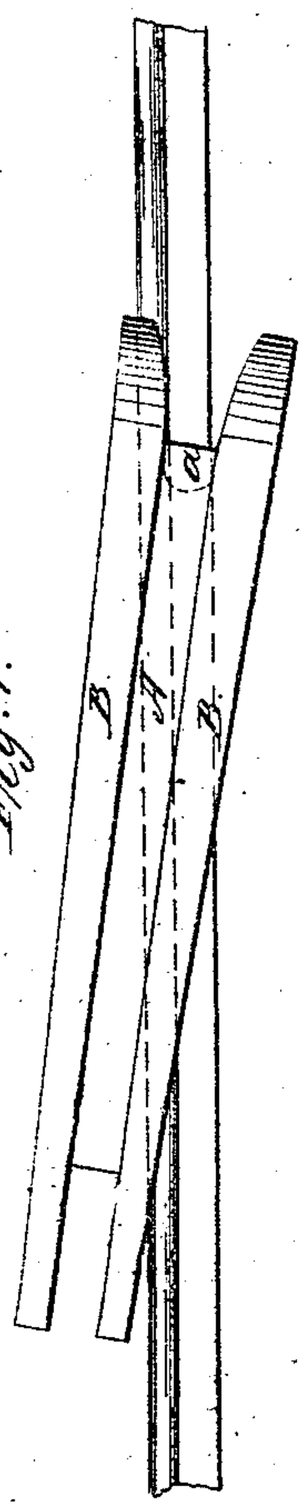
Fig. 1.

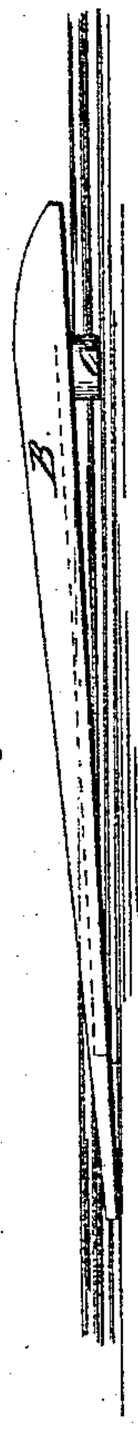
Fig. 2.

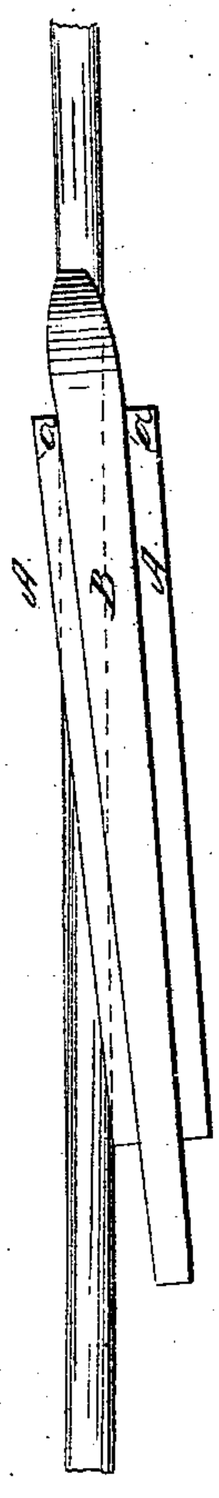
Fig. 3.

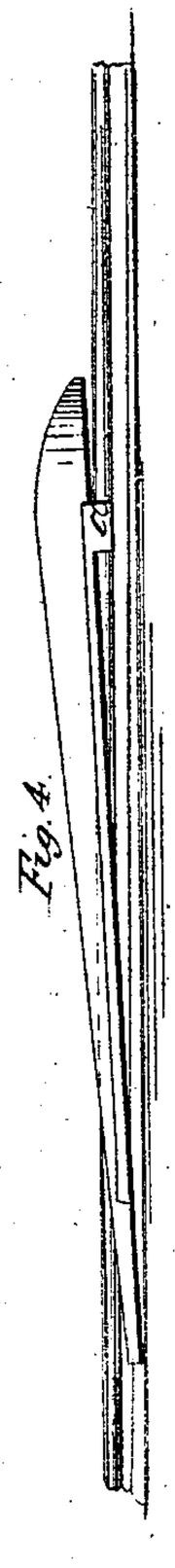
Fig. 4.

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GEORGE T. LAPE AND JEPTHAH LEATHE, OF NEW YORK, N. Y.

Letters Patent No. 61,437, *dated January* 22, 1867.

IMPROVEMENT IN RAILROAD SWITCHES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, GEORGE T. LAPE and JEPTHAH LEATHE, of the city, county, and State of New York, have invented a new and improved Device for Guiding Railroad Car-Wheels on or off the Track; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of the device of our invention as applied to a street railroad.

Figure 2 is a side elevation of the same.

Figure 3 is a top view of a modification of the same applied to a steam-car railroad.

Figure 4 is a side elevation of the same.

Figure 5 is a cross-section of the device as applied to a street railroad.

Figure 6 is a cross-section of the same as applied to a steam-car railroad.

Similar letters of reference indicate like parts.

This invention relates to a device to be used for guiding railroad cars on or off the track, the form being modified to adapt it to the rail either of a street horse-car railroad or to a railroad for steam cars. It often happens that cars, and especially street cars in cities, get off the track, and occasion great delay and inconvenience to passengers in consequence of the difficulty of replacing the wheels on the rails; and frequently it is desirable to run a car off the track on city railroads, for which purpose it is a common practice to jump or bounce them off by placing a stone or other obstacle on the track, and violently forcing the wheels against it. To provide for these contingencies is the object of this invention, which consists in an iron bar of very simple construction, designed to be carried by each car on a street railroad, and by the engineer on a locomotive.

Figs. 1, 2, and 5 represent our car-guiding device, in the form used for application to street cars on horse railroads, which is a strong iron bar about three feet long, of equal or nearly uniform breadth, as seen in fig. 1, and thick enough at one end for the required strength, while, at the other end, it is a little less in thickness than the depth of the flange of a car wheel, to which it is to be applied, as seen in fig. 2. A groove, A, runs down the middle of the top of the bar longitudinally, wide and deep enough to receive the flange of a car wheel freely, leaving sides, B B, for the tread of the wheel to bear upon. The sides B B project more or less at either end beyond the bottom of the groove A, and at the thicker and front end of the bar they are curved or tapered down from the top to the lower side, and on the inside, as shown at fig. 2. On the bottom, under the front end of the groove A, is a stout projection, *a*, which may be as long as the depth of the top or tread of the rail of a street railroad, and by preference is made a little curved or rounded on the back part. This device may be used on either side of the track, and applied to any of the wheels of a car, but ordinarily, when a car is off the track, it will be necessary only to apply it to the front wheel on the outside of the track, which may be guided upon it by placing the projection *a* against the inside of the rail, and the front end of one of the sides B lying on the top of the rail, while the other end projects outside of the track at any required angle to allow the wheel to be run upon it, so that the flange shall enter the groove A, and the tread of the wheel shall rest upon the side B, as seen at fig. 5, and thus be run upon the rail. The front wheel on the opposite side of the car will take its place inside of the rail without difficulty, and when both front and hind wheels are off the track, the guiding device may then be applied also to the hind wheel on the outside in the same manner. Figs. 3, 4, and 6 represent the car-guiding device in the form used for application to railroads operated by steam, which is a modification in form to adapt it to the rail of different construction, the position of the part B for bearing the tread of the wheel being reversed, so that instead of being at the side it is in the middle of the guiding bar, with flanges or wings, A A, on both sides, corresponding in function to the groove in the middle, previously described. On the bottom of the front end of the flanges A A are projections, *a a*, which are placed on both sides of the rail, as shown at fig. 6, when, by the same operation and mode of proceeding before described for guiding the car wheels on the track of a street railroad, the wheels of a car on a railroad operated by steam may be guided upon the rail.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent—

The street-car replacer, consisting of the side pieces B B, groove A, lug *a*, when constructed and operating as herein set forth for the purpose specified.

The above specification of our invention signed by us this 9th day of October, 1866.

GEO. T. LAPE,
JEPTHAH LEATHE.

Witnesses:
WM. F. MCNAMARA,
ALEX. F. ROBERTS.