P. CARTWRIGHT.

Improvement in Car Replacers.

No. 124,251. Patented March 5, 1872.

Fig. 1

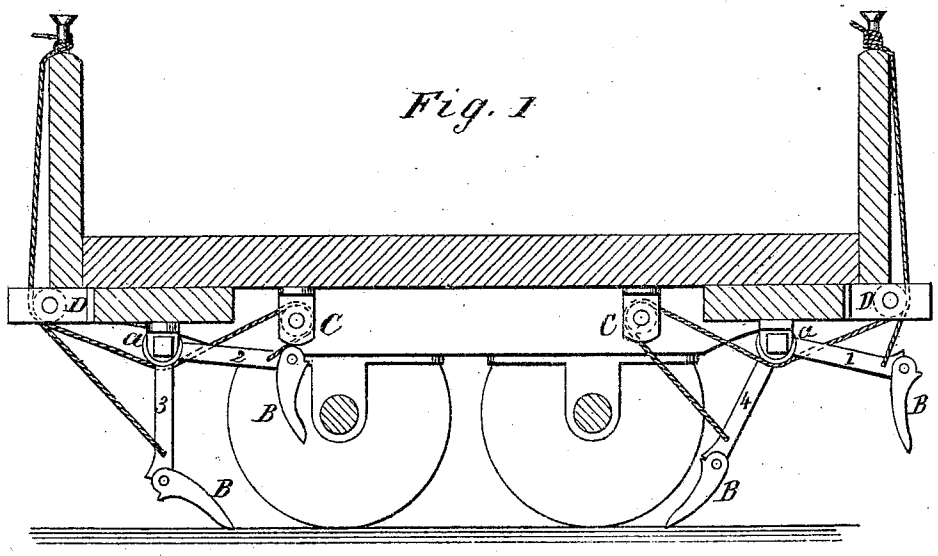


Fig. 3

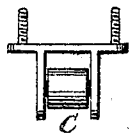


Fig. 2

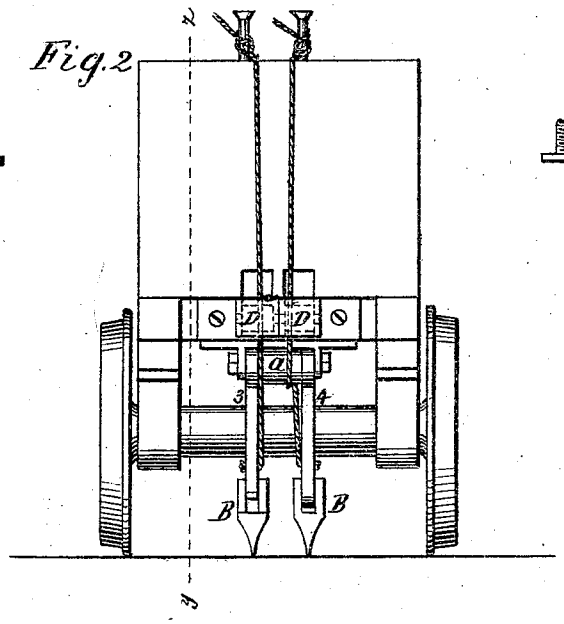
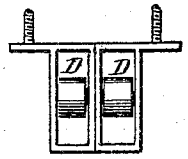


Fig. 4



Witnesses.

John J. Thomasson
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Inventor.

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124,251

UNITED STATES PATENT OFFICE.

PETER CARTWRIGHT, OF NEW YORK, N. Y.

IMPROVEMENT IN CAR-REPLACERS.

Specification forming part of Letters Patent No. 124,251, dated March 5, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, PETER CARTWRIGHT, of the city, county, and State of New York, have invented a new and improved machine or apparatus for replacing or lifting railroad cars upon the track; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters and figures of reference marked thereon making a part of this specification.

The nature of my invention consists in attaching to the bottom of the car, at each end, two movable legs, ending in jointed and slightly-curved feet, the legs and feet, when hanging down, to be somewhat longer than the height of the car from the ground, one of the legs at either end to be used when it is desired to replace the front wheels upon the track, and the other to replace the rear wheels. When not being used, the legs are drawn up to the bottom of the car, and the feet hang down. When the car is entirely off the track, or it is desirable to throw it off, the proper leg to replace the front wheels is allowed to drop forward to the ground while the car is in motion, and there catching in the ground, it will act as a lever and lift and sway the car on or off the track, as may be desirable; then, to replace or throw off the rear wheels the proper leg to replace them is dropped As the car passes over the legs, the joint bends, and they may be drawn up out of the way. If only the front or rear wheels are off the track, it is only necessary to use the front or rear leg.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I attach to the bottom, at each end of the car, two legs of iron or other material, as shown at A in the accompanying drawing. These legs are fitted loosely to a concave shoulder, so as to allow their being drawn up when not in use, and also in order that the shoulder should protect the car-bottom and bear part of the strain. The legs end in a foot, B, fitting loosely by a single joint on the legs. The foot is made with a curve forward, and the joint is not straight, but is out of the perpendicular. The foot must be of sufficient length to allow the leg to easily clear the ground when the joint bends and the leg is being drawn up. When the leg is drawn up the foot hangs down. I find by experiment that the foot works better when so curved and jointed, as a leg with a straight joint would not take hold in the ground. The legs, whether used to replace the front or rear wheels, are made exactly similar. Those used to replace the front wheels, however, are drawn up by means of ropes or chains under and toward the end of the car, and when dropped fall forward. The others are drawn up by means of ropes or chains passed over a roller, C, toward the center of the car, and when dropped fall in toward the center of the car, thus pointing, when dropped in the opposite direction, to the legs used to replace the front wheels. When not in use, the legs are held up to the bottom of the car by ropes or chains, which are brought up over rollers D at the end of the car, and there fastened within reach, in case of horse-cars, of the driver and conductor; or all four of the legs may be worked by the driver by carrying the ropes or chains over rollers attached to the bottom of the car. If all the wheels are off the track, I first drop the leg 3 at the front of the car, intended to raise or replace the front wheels. This catches in the ground, and the front of the moving car will be raised up and swayed upon the track as the leg becomes perpendicular. As the car passes over the leg, the joint at the foot bends and the leg may be drawn up. I then drop the leg 4 at the rear of the car, intended to raise or replace the rear wheels, with a similar result as to them, thus preventing the necessity of unloading the car or of dragging it across the track.

Figure 1 of the drawing represents the position of the front apparatus just after having been used to replace the front of the car upon a track, and Fig. 2 shows the position of the rear apparatus as having been dropped to replace the rear of the car.

In the case of horse-cars, one leg at each end of the car will be sufficient, necessitating, however, that the car should be pulled with the leg intended to replace the front wheels in front.

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

The combination and arrangement of the jointed legs, feet, rollers, and chains, substantially as herein described, whereby a car in motion may be lifted on or off the track when the apparatus is put in operation.

PETER CARTWRIGHT.

Witnesses:

JOHN J. THOMASSON,

GEO. BOND GOUGH.