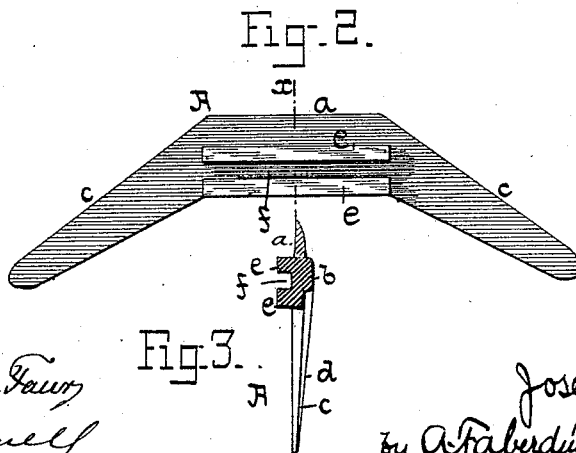
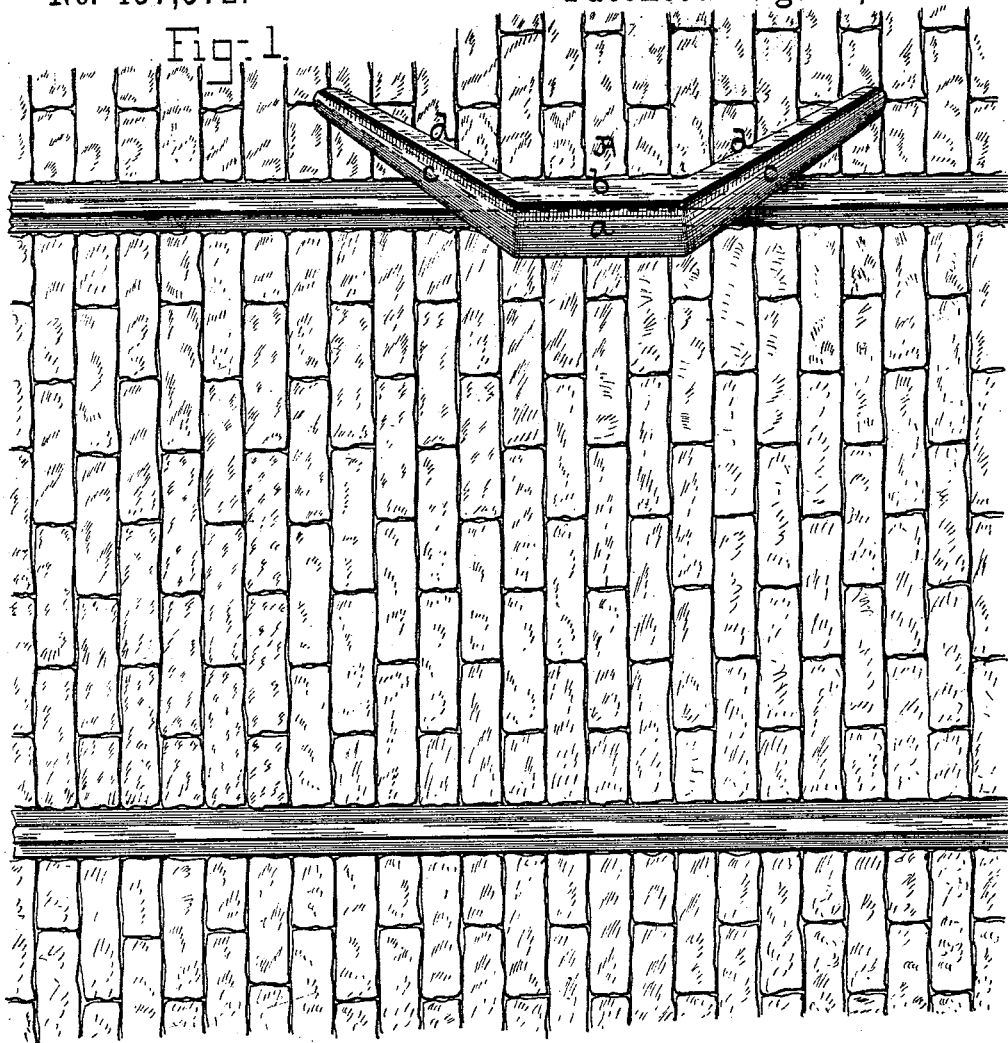


(No Model.)

J. A. McCRAY.  
CAR REPLACER.

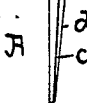
No. 457,972.

Patented Aug. 18, 1891.



Witnesses  
*A. Faber du Faur*  
*H. C. J. J. J.*

Fig. 3.



Inventor  
*Joseph A. McCray*  
by *A. Faber du Faur* Atty.

# UNITED STATES PATENT OFFICE.

JOSEPH A. MCCRAY, OF NEW YORK, N. Y.

## CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 457,972, dated August 18, 1891.

Application filed July 3, 1890. Serial No. 357,650. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH A. MCCRAY, a citizen of the United States, and a resident of New York, in the county and State of New York, have invented certain new and useful Improvements in Car-Replacers, of which the following is a specification.

My invention has reference to devices for replacing street or surface cars upon the track; and it has for its object to provide inexpensive and effective means for accomplishing this purpose, such means being so constructed that they can be conveniently carried in or on the car and readily applied to the track to quickly replace the car with little or no jar or shock.

With these objects in view my invention consists, essentially, in a car-replacer comprising in its structure a longitudinal guide-flange and rail adapted to extend parallel to the track, and wings provided with sloping guide-flanges and oblique guide-rails, all of which are fully pointed out in the following specification and claim and illustrated in the accompanying drawings, in which—

Figure 1 represents the car-replacer in position on a car-track. Fig. 2 is an inverted plan view of the replacer. Fig. 3 is a section of the car-replacer on the line *x x*, Fig. 2.

Similar letters indicate corresponding parts.

In the drawings, referring at present to Fig. 1, the letter *A* designates the replacer, formed with a guide-flange *a*, a longitudinal guide-rail *b*, adapted to extend parallel to the track when the replacer is in position, and with wings having oblique sloping guide-flanges *c* and oblique guide-rails *d d*.

To secure the replacer in position any suitable means may be used—such, for instance, as the longitudinal projections or lugs *e e*, forming a socket *f*, Figs. 2 and 3, adapted to fit over the rail. Of course the nature of this

fastening device will vary with the general character of the road-bed or with the cross-section of the rail. Consequently I do not restrict myself to the means herein shown.

In practice I so arrange the fastening device with reference to the parallel or longitudinal guide-rail *b* that the inner edge of the latter is approximately in line with the inner edge of the rail, whereby the car will be guided truly and squarely to the rail. The guide-flanges *a* and *c c* are made comparatively thin along their outer edges and thicker toward the guide-rails *b* and *d d*, so that the top surface slopes toward the track, whereby the wheels are gradually lifted and guided toward the rails. The wings of the guide rail and flange, instead of being oblique, may be curved and meet the central parts tangentially.

It is evident that one of the wings of the replacer could be omitted; but by the use of two wings the device can be used for cars moving in either direction and can be placed on either side of the track.

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

A portable car-replacer composed of a center body and opposite obliquely-placed wings, the former provided with parallel projections on its under side to take hold of the car-track and a guide-flange on its upper side, and the latter formed with inclined planes and flanges in continuation of the said center body, as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 1st day of July, 1890.

JOSEPH A. MCCRAY.

Witnesses:

A. FABER DU FAUR,  
W. C. GUNNEY.