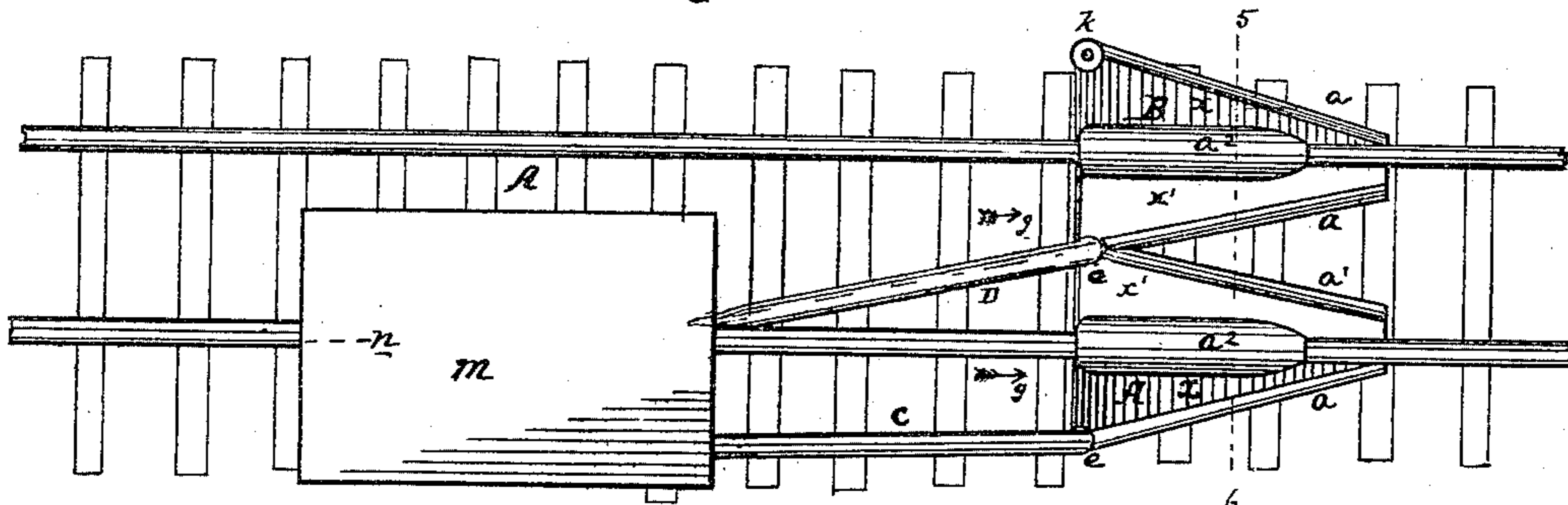


CAR-REPLACER.

Patented April 18, 1876.

fig 7



fz 2



fig 3,

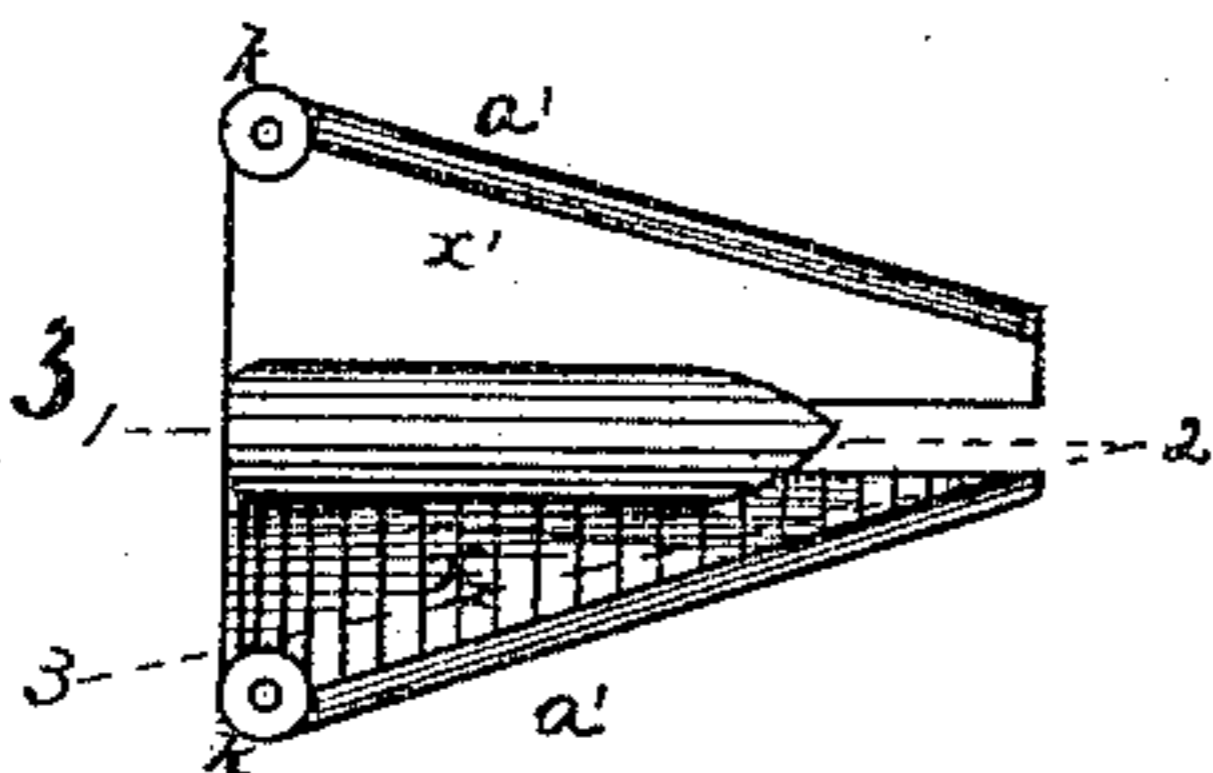


fig 4.

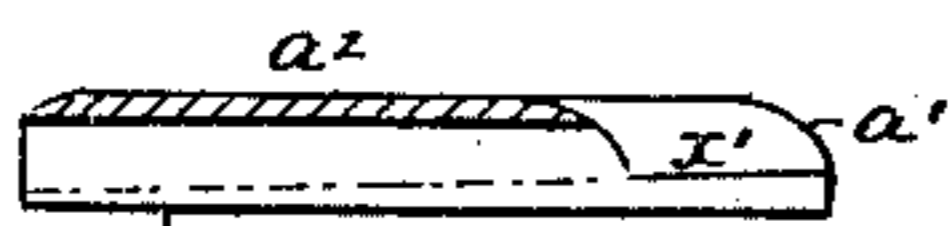
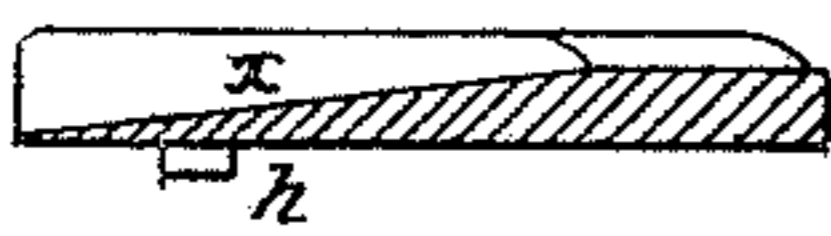


fig. 5.



f. 2 q. 6.



fig. 7.



Inventor

D. I. K. Pine
B. L. Johnston.

Samuel D Robison
By a c Johnston
His Attorney

UNITED STATES PATENT OFFICE.

SAMUEL D. ROBISON, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR TO
REBECCA ROBISON, OF SAME PLACE.

IMPROVEMENT IN CAR-REPLACERS.

Specification forming part of Letters Patent No. **176,196**, dated April 18, 1876; application filed
February 19, 1876.

To all whom it may concern:

Be it known that I, SAMUEL D. ROBISON, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Car-Tracker; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The object of my invention is to replace cars which have been thrown from the tracks of railways; and this I accomplish by the device illustrated in the accompanying drawing, in which—

Figure 1 is a plan view showing my improved car-replacer arranged to restore a displaced car; Fig. 2, a side elevation of Fig. 1; Fig. 3, a plan view of part of the device; Fig. 4, a section in the line 1 2, Fig. 3; Fig. 5, a section on the line 3 2, Fig. 3; Fig. 6, a transverse section on the line 5 6, Fig. 1; and Fig. 7, a view looking in the direction of the arrows, Fig. 1.

The replacing device consists essentially of two triangular metal blocks or frogs, A B, with which may be employed two rails, C D. Each frog has at the center a bridge, a^2 , for receiving the rail upon which the frog is placed, as shown in the drawing, and at opposite inclined sides of the frog are ribs, $a a^1$. The rib a of each frog extends to the side of the rail, and the face x between the rib a and the bridge gradually inclines upward from the wide end until it is level with the tread of the rail, as shown in Fig. 5. The opposite face x' is also inclined, but not to so great a degree, and there is sufficient space between the rib a^1 and the rail for the flange of a car-wheel to pass. Each rib $a a^1$ terminates in a stud, k , having an eye or socket for the reception of a pin, l , projecting from the under side of one of the frog-rails C D, the stud of one frog being arranged to overlie the adjacent stud of the other frog, as shown in Figs. 1 and 6, so that the pin l of the rail D will secure both frogs together, lugs h at the un-

der sides of the frogs bearing against the sleepers and preventing the frogs from sliding on the rails.

The sides of each rail C D are beveled near the end, as shown in Fig. 1, and when the rail D is in the position shown, and a car is moved in the direction of the arrow, the flanges of the inner wheels bearing against the side of the rail will be guided to the inclined face x' of the frog B, will rise upon said face, and will be guided by the rib a until the tread of the wheel is upon the face of the rail.

As the inner wheels pass to the face x' of the frog B, the outer wheels pass the face x of the frog A, and are gradually elevated until the flanges run upon the face of the rail, which they will cross, finally descending inside the rail, the treads resting on the face.

In this operation the rail D serves as a guide to direct the inner wheels to the frog B, and the outer rail may be dispensed with, or it may be brought beneath the treads of the outer wheels; but when the car passes entirely to one side of the track, and the ground is soft, both rails may be placed beneath the treads, both frogs being arranged on the same rail until the inner wheels are within the track, when the car is restored, as above described. It will be apparent that in some cases, where the displacement is not great, the rails C D may be dispensed with.

I claim—

1. A car-replacer, consisting of triangular metal frogs A B, each having a central bridge, a^2 , inclined ribs $a a^1$, and faces $x x'$, having different inclinations, substantially as set forth.

2. The frogs described, provided with recessed eyes or studs, $k k$, arranged to rest one upon the other, and to receive the pin l of a detachable frog-rail, substantially as and for the purpose described.

SAM. D. ROBISON.

Witnesses:

A. C. JOHNSTON,
B. L. JOHNSTON.