No. 772,575. PATENTED OCT. 18, 1904.

J. G. McNICHOLS.

APPARATUS FOR REPLACING DERAILED CARS.

APPLICATION FILED MAR. 1, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1

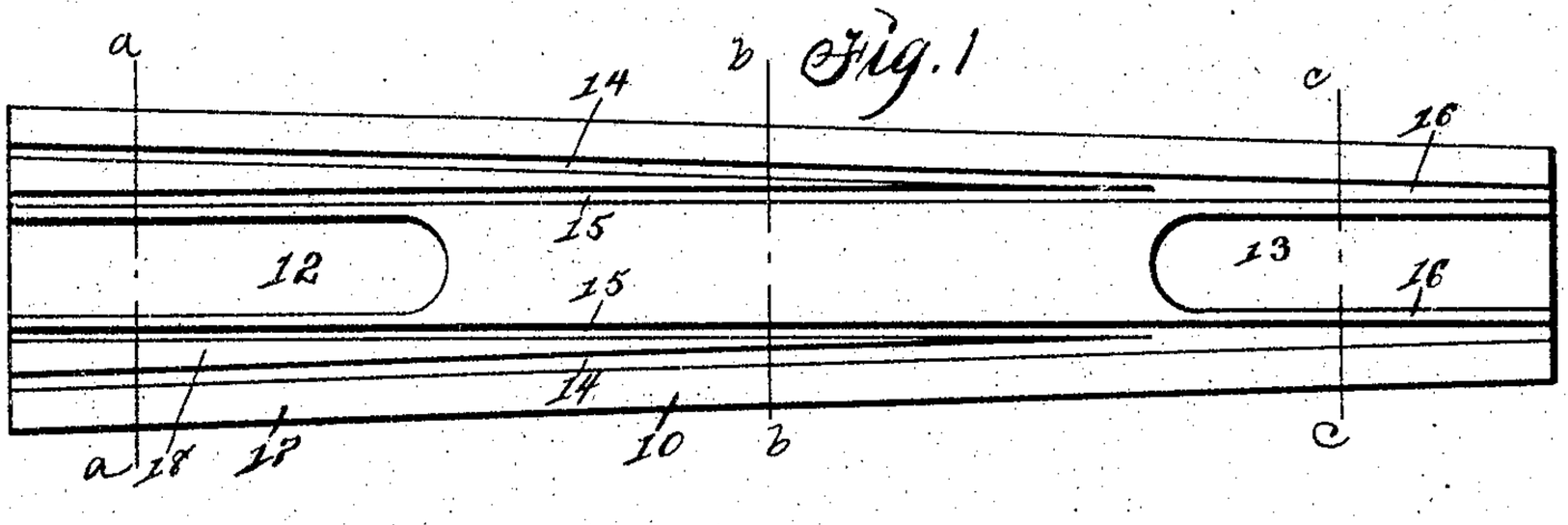


Fig. 2

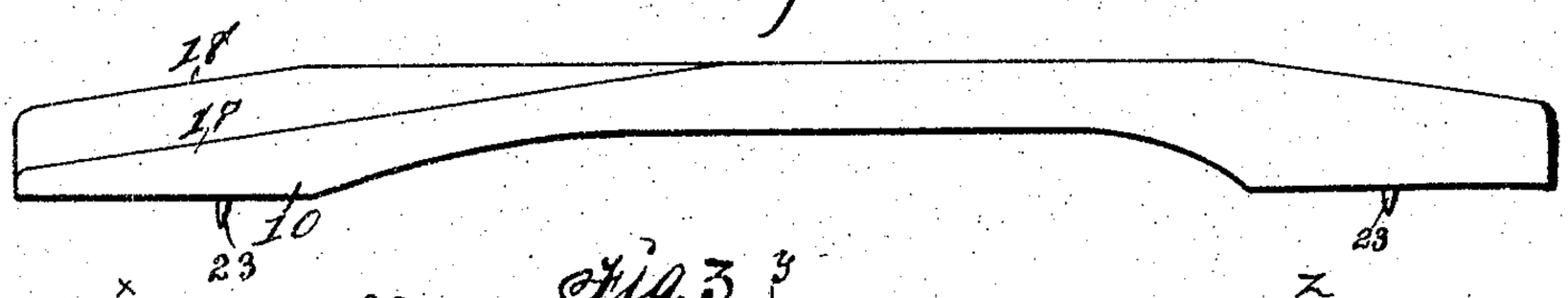


Fig. 3

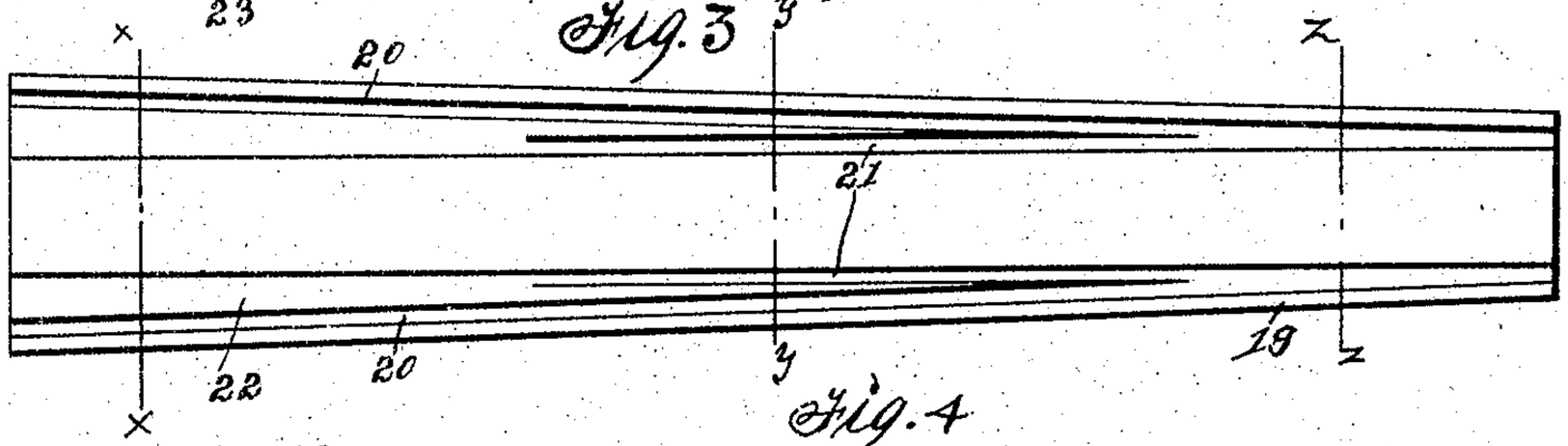


Fig. 4

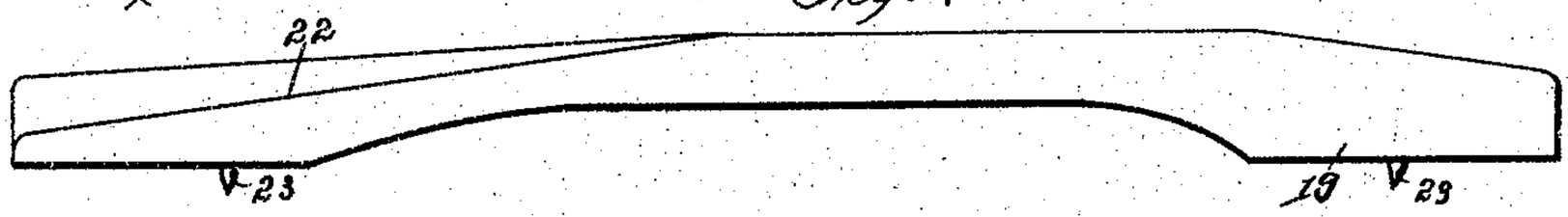


Fig. 5

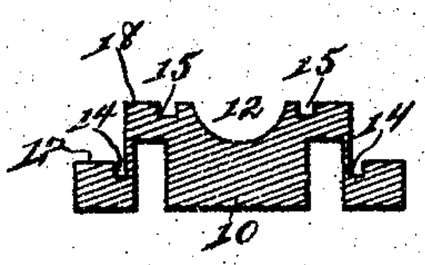


Fig. 8

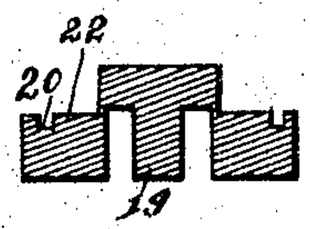


Fig. 6

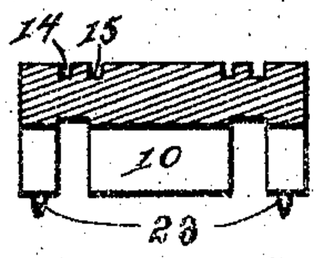


Fig. 9

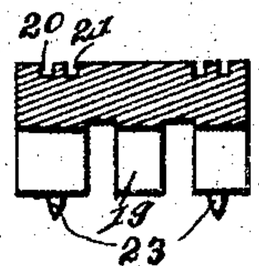


Fig. 7

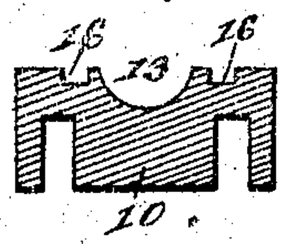
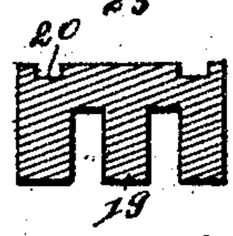


Fig. 10.



Witnesses:
L. L. Leibrock
R. H. Orwig.

Inventor: Joseph G. McNichols.
By Thomas G. Orwig, Attorney.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 11

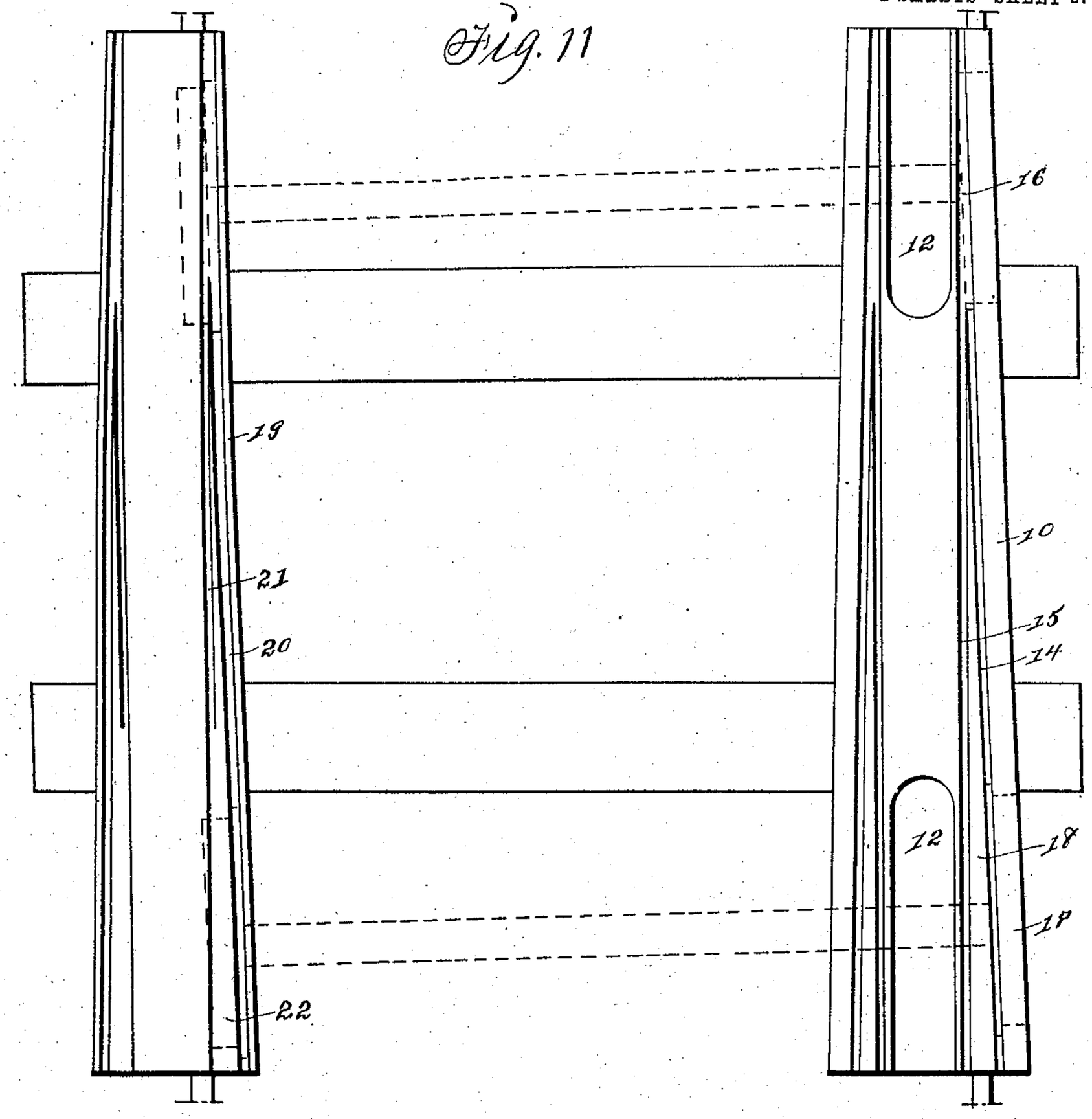
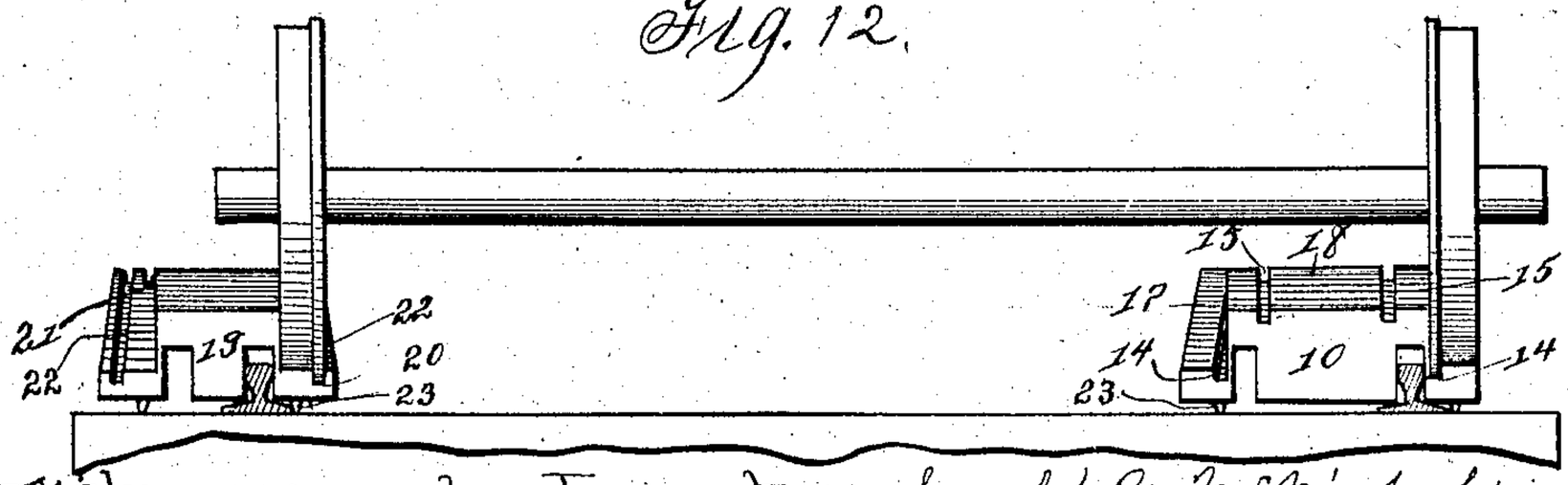


Fig. 12.



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No. 772,575. Patented October 18, 1904.

UNITED STATES PATENT OFFICE.

JOSEPH G. McNICHOLS, OF OSCEOLA, IOWA.

APPARATUS FOR REPLACING DERAILED CARS.

SPECIFICATION forming part of Letters Patent No. 772,575, dated October 18, 1904.

Application filed March 1, 1904. Serial No. 196,103. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH G. McNICHOLS, a citizen of the United States, residing at Osceola, in the county of Clarke and State of Iowa, have invented a new and useful Apparatus for Replacing Derailed Cars, of which the following is a specification.

My object is to prevent the delays and labors incident to replacing derailed cars upon the track; and my invention consists in the construction, application, and operation of the apparatus hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a top view, and Fig. 2 an edge view, of a rail-cover adapted to be placed on a rail to facilitate the replacing of a car-wheel upon a rail when the flange of a wheel is on the outside of the track-rail. Fig. 3 is a top view, and Fig. 4 an edge view, of a rail-cover adapted for replacing a car-wheel when the flange of the wheel is on the inside of a track-rail. Figs. 5, 6, and 7 are tranverse sectional views on the lines *a*, *b*, and *c* of Fig. 1 and show the grooves in the top of the cover adapted to receive the flange of a car-wheel and also show two parallel grooves in the bottom of the cover that are adapted to admit a track-rail. Figs. 8, 9, and 10 are transverse sectional views on the lines *x*, *y*, and *z*, Fig. 3, and show the grooves in the top for admitting the flange of a car-wheel and also show parallel grooves in the bottom for receiving a track-rail. Fig. 11 is a top view of a section of a railway-track and shows my apparatus applied as required for replacing a derailed car. Dotted lines indicate the position of the axles and wheels of a derailed car. Fig. 12 is a transverse sectional view of the railway-track and shows an axle and wheels and the wheels on top of the track-covers and the covers on top of the parallel track-rails.

The numeral 10 designates a metal rail-cover about four feet long and wider at one end than the other. It has inclined surfaces at its end portions, and to reduce its weight the central portion of its bottom is preferably removed to give it an arched appearance, as shown in Fig. 2. In its bottom are two parallel grooves that extend from end to end adapted to admit track-rails, as shown in Fig. 12. The central portion of its top is flat, and its ends are inclined planes. In the centers of the end portions are concaves 12 and 13 for purpose simply of reducing weight. On each side of the top surface are grooves 14 and 15, that incline toward each other and intersect to terminate in single grooves 16 at the narrow end of the cover and inclined plane. The outside grooves 14 start on an outside inclined plane 17, that is lower than the inclined plane 18, as shown in Figs. 2 and 5. The cover 10 is specially adapted for replacing a car-wheel when the flange of the wheel is on the outside of a track-rail, as shown in Fig. 12.

The cover 19 (shown in Figs. 3 and 4) is adapted for replacing a wheel when it is on the inside of a track-rail, as shown in Fig. 12. It is not as wide as the cover 10, but similar in construction. It has inclined planes at its ends and continuous parallel grooves on its under side to admit track-rails, as shown in Fig. 12. It has grooves 20 on each side of its top surface, that are parallel with its edges and extend from end to end, and grooves 21, that are parallel with a central longitudinal line and extend through the flat portion of the top and also the upper inclined plane 22 at the wide end of the cover and intersects the groove 20 at the inner end of the inclined plane at the narrow end of the cover, as shown in Fig. 3. Pointed projections 23 are fixed in the under sides of the end portions of the covers to bite fast in wooden ties to aid in preventing the covers from slipping when derailed wheels come into engagement with the ends of the covers as required in replacing a car-wheel upon a track-rail.

In the practical use of my invention when car-wheels are off the track-rails the covers are placed on the track-rails in front of the car-wheels and close thereto in such a manner that when the car is moved forward the wheels will rise on the inclined planes at the ends of the covers and the flanges of the wheels will enter the inclined grooves in the tops of the covers and follow them until they enter the straight parallel grooves at the narrow ends of the covers, and as they pass off

the ends of the covers the tread-surface of the wheels will engage the top surfaces of the parallel rails, and the flanges of the wheels will be in their normal positions on the inside of the rails as required to be advanced on the track.

It is obvious the covers can be placed on the rails in a reverse position from that shown in Figs. 11 and 12 to replace a derailed car as required by moving the car in a reverse direction.

Having thus set forth the purpose of my invention, its construction, and manner of use, the practical operation and the utility thereof will be readily understood by railroad men and others familiar with the art to which it pertains, and

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

1. In an apparatus for replacing derailed cars, a rail-cover wider at one end than at the other and provided with two parallel grooves in its under side extending from end to end to admit track-rails and having an inclined plane at its narrow end and two inclined planes at its wide end and parallel grooves in its top face and inclined grooves extending from its wide end and intersecting the parallel grooves near the inclined planes at the narrow end, to operate in the manner set forth for the purposes stated.

2. In an apparatus for replacing derailed cars on a track, a rail-cover having parallel grooves in its under side extending its entire length to admit track-rails, inclined planes at its ends, wider at one end than at the other end, inclined grooves in its top surface at its sides extending from the wide end and intersecting the parallel grooves at the tops of the inclined planes at the narrow end, to operate in the manner set forth for the purposes stated.

3. An apparatus for replacing derailed cars on a track comprising a rail-cover wider at one end than at the other and provided with two parallel grooves in its under side extending from end to end to admit track-rails and having an inclined plane at its narrow end and two inclined planes at its wide end and parallel grooves in its top face and inclined grooves extending from its wide end and intersecting the parallel grooves near the inclined planes at the narrow end, a rail-cover having parallel grooves in its under side extending its entire length to admit track-rails, inclined planes at its ends, wider at one end than at the other end, inclined grooves in its top surface at its sides extending from end to end and parallel grooves extending from the wide end and intersecting the parallel grooves at the tops of the inclined planes at the narrow end, to operate in the manner set forth for the purposes stated.

J. G. McNICHOLS.

Witnesses:
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A. A. Nowers.