

No. 728,541.

PATENTED MAY 19, 1903.

J. D. CAVE & J. F. PHILLIPS.
CAR REPLACER.

APPLICATION FILED OCT. 31, 1902.

NO MODEL.

Fig. 1.

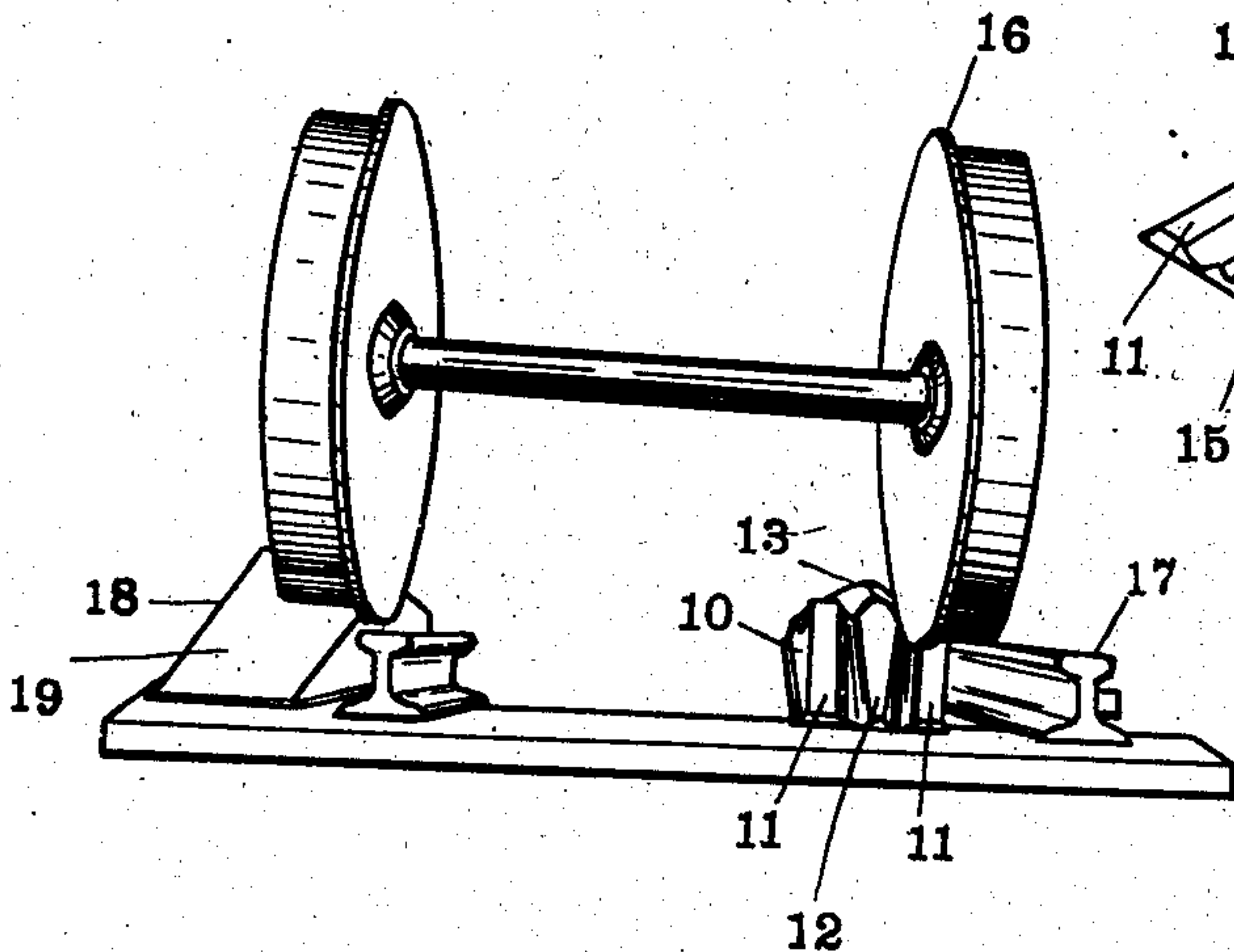


Fig. 3.

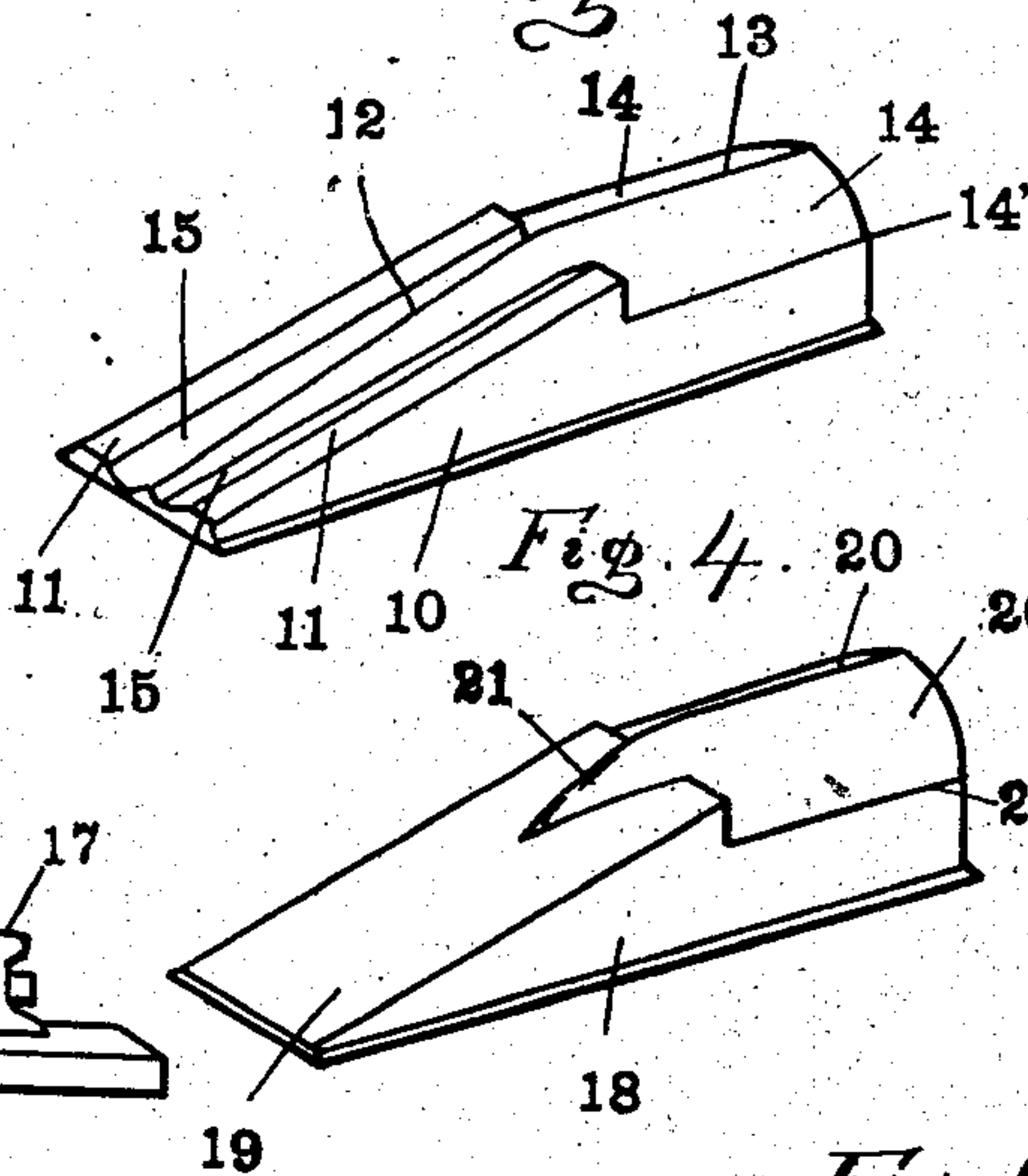


Fig. 4.

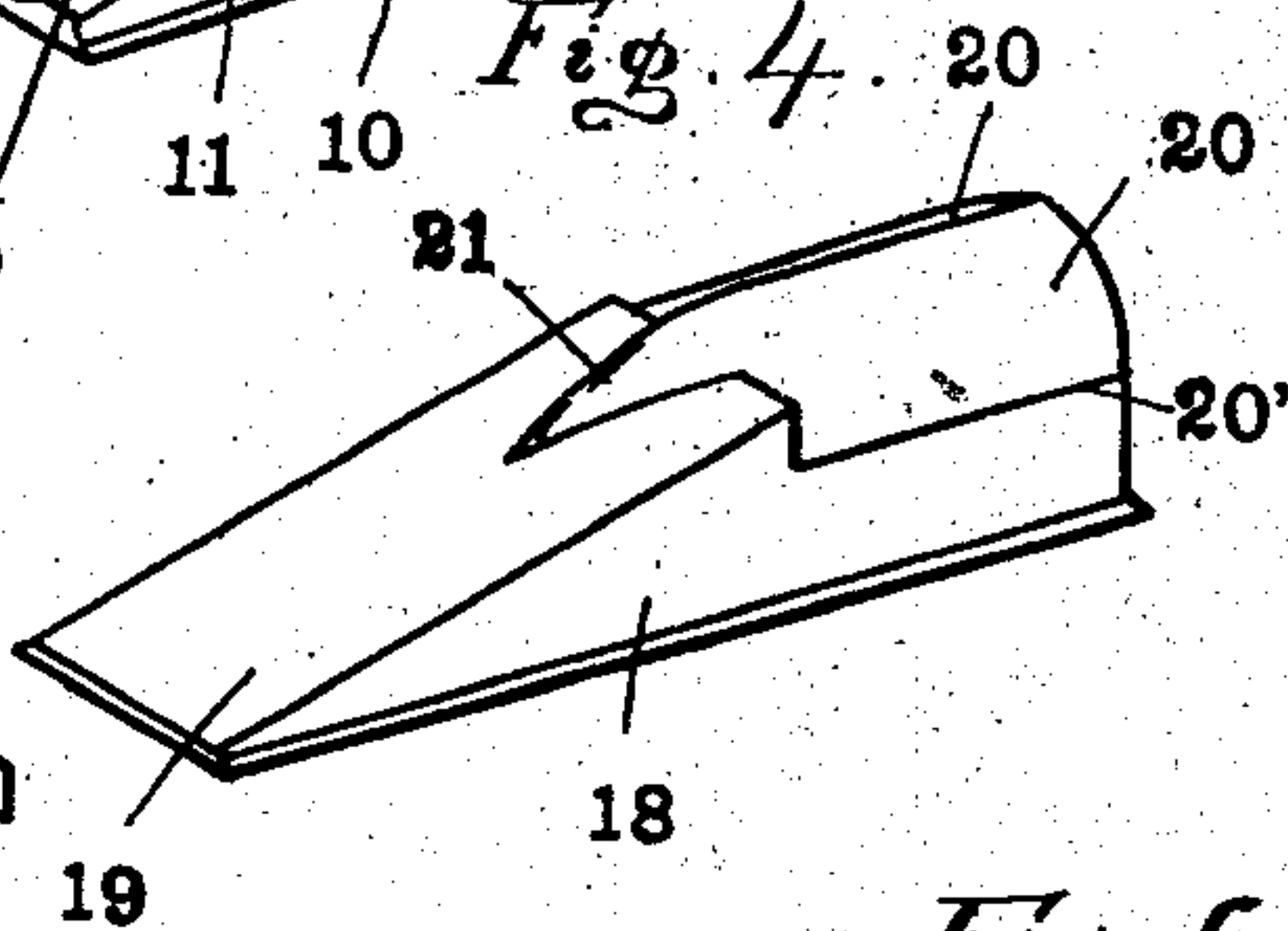


Fig. 2.

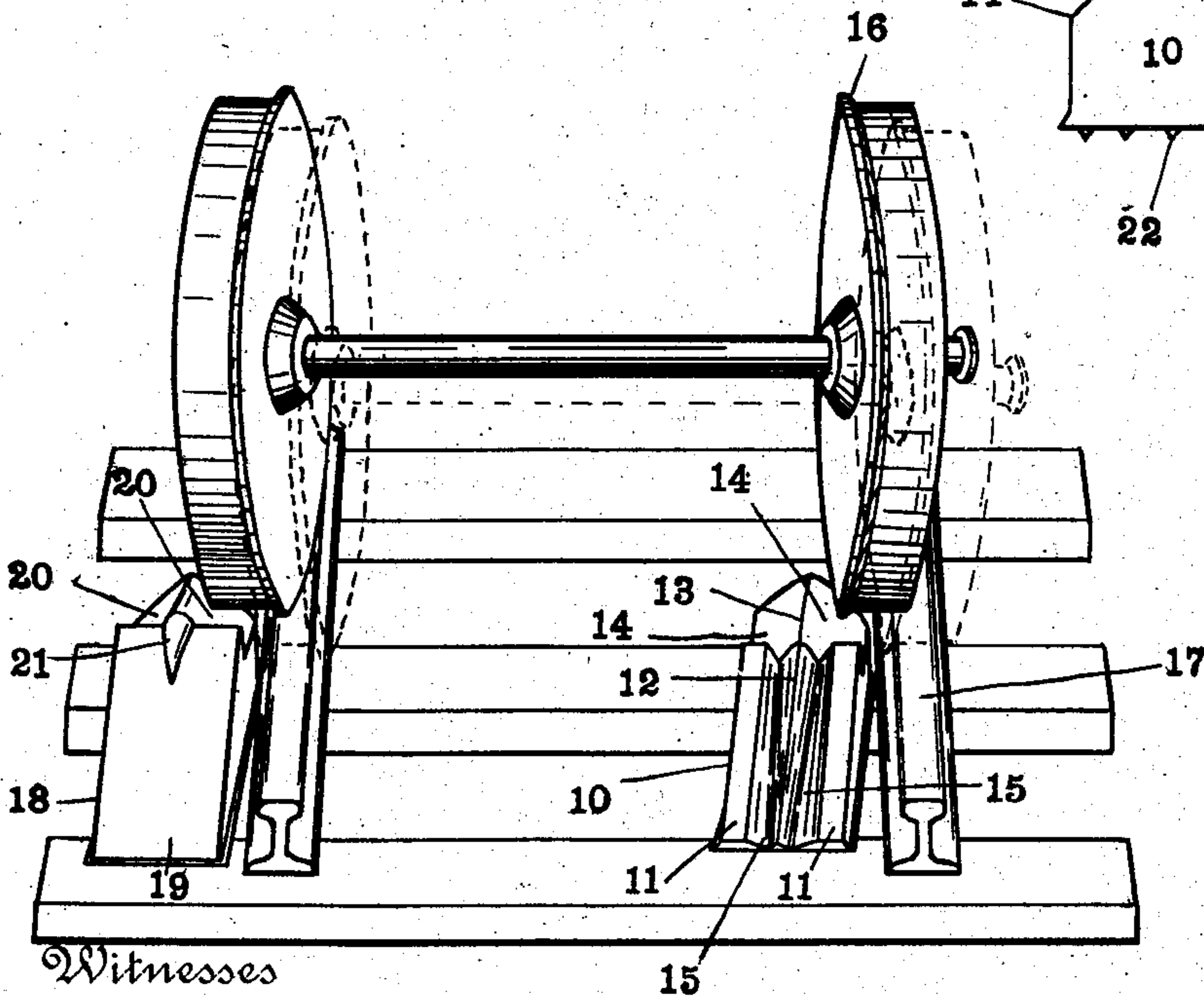


Fig. 5.

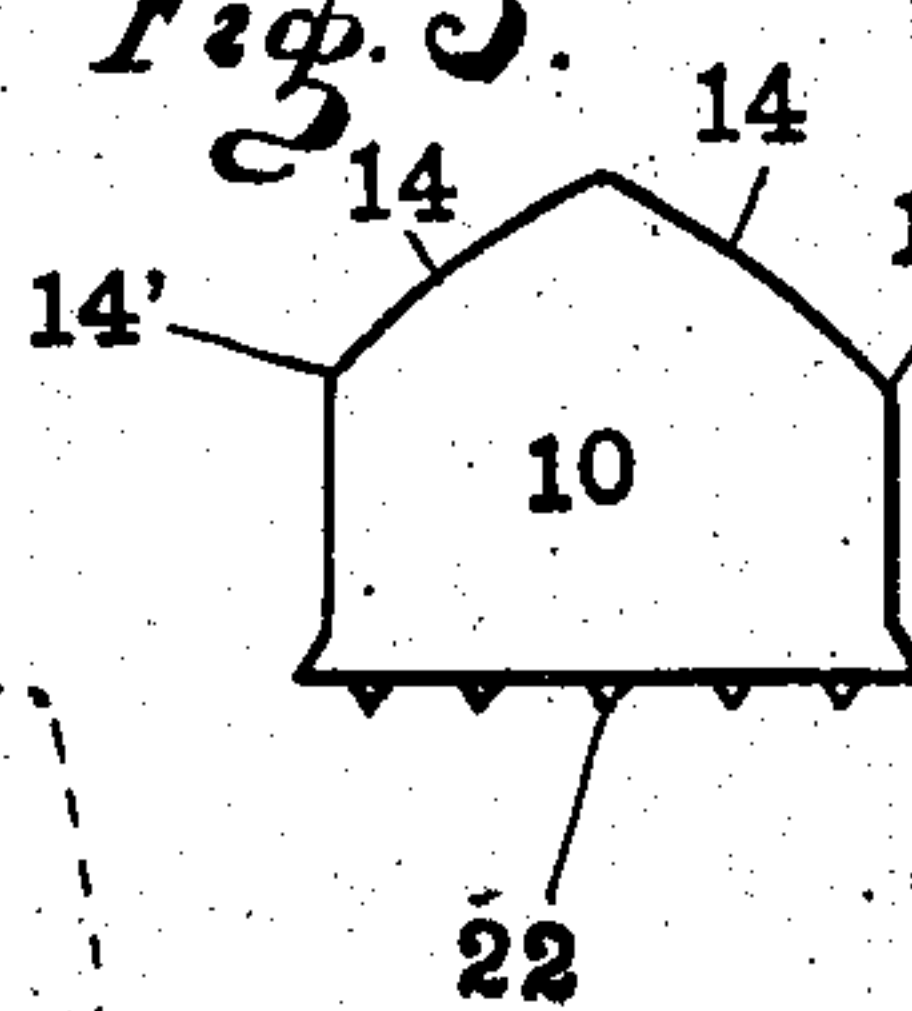
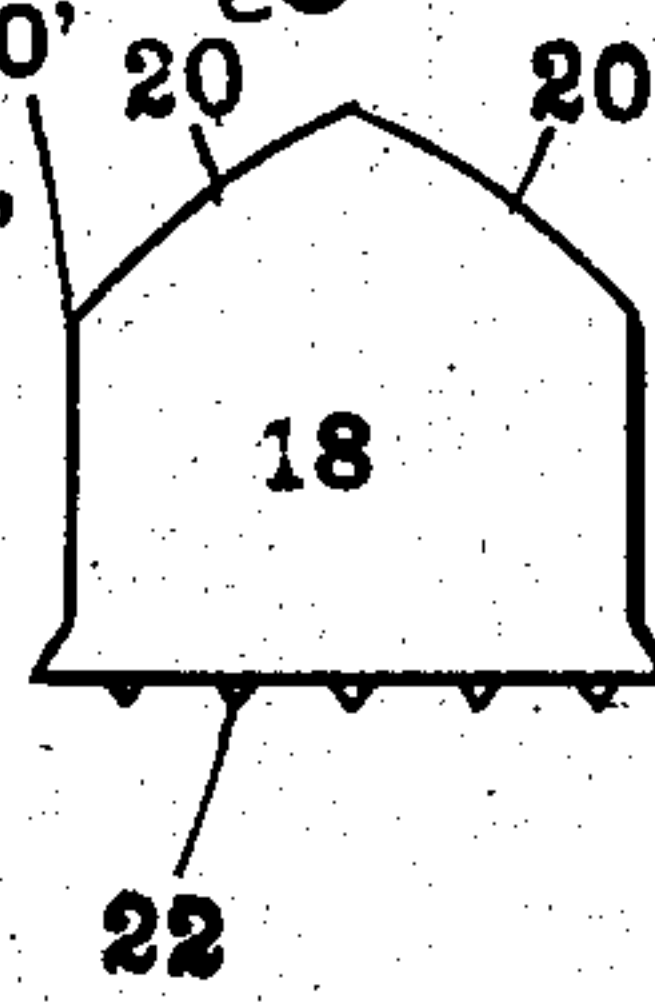


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN D. CAVE AND JAMES F. PHILLIPS, OF INDIANAPOLIS, INDIANA.

CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 728,541, dated May 19, 1903.

Application filed October 31, 1902. Serial No. 129,551. (No model.)

To all whom it may concern:

Be it known that we, JOHN D. CAVE and JAMES F. PHILLIPS, citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Car-Replacers, of which the following is a specification.

The object of our invention is to provide a pair of blocks so formed that by properly placing them adjacent the rails of a railroad-track they will serve to automatically replace a derailed truck upon the rails when said truck is drawn thereover.

The accompanying drawings illustrate our invention.

Figure 1 is a perspective view showing our invention in operative position and a derailed truck on its way up the inclines thereof. Fig. 2 is a similar view showing the derailed truck in full lines in the position assumed immediately prior to the movement of said truck to the tops of the rails and showing said truck in replaced position in dotted lines. Fig. 3 is a perspective view of the inside replacer-block. Fig. 4 is a similar view of the outside replacer-block; Fig. 5, an end view of the block shown in Fig. 3, and Fig. 6 an end view of the block shown in Fig. 4.

Our invention consists of an inside replacer-block and a corresponding but differently-formed outside replacer-block. The inside replacer-block consists of a wedge-shaped body 10, having formed upon the upper face of the wedge a pair of tread-supports 11 11, between which is arranged the guiding-rib 12, which guiding-rib extends upward to the crown 13 of a pair of downwardly-diverging replacing-inclines 14 14. Formed between the rib 12 and each tread-support 11 is a groove 15, which is of a depth somewhat greater than the height of the flange 16 of the car-wheel. The inclines 14 are of such height from the base that their lower edges 14' shall be lower than the height of the usual railroad-rail 17.

The outside replacer-block consists of a wedge-shaped body 18, provided with a tread-plane 19, which extends upward and forward toward a pair of downwardly-diverging planes 20 20, the lower edges 20' of which are higher than the height of an ordinary rail 17. The

crown or ridge between the two planes 20 is considerably higher than the highest point of the tread-plane 19 and extends downwardly in the form of a guiding rib or tongue 21 a short distance upon the tread-plane 19, approximately along its medial line.

Each of the bodies 10 and 18 is provided upon its under face with suitable projecting spuds or teeth 22, which will serve to hold the replacers in position during operation.

In operation the two replacer-blocks are placed in position, as shown in Figs. 1 and 2, and the derailed truck drawn forward upon the two blocks, the tread of that wheel which lies outside the rails riding upon plane 19, the flange of this wheel passing between the block 18 and the adjacent rail. The tread of the other wheel passes upon that tread-plane 11 which lies adjacent the other rail, while the flange of this wheel passes into the adjacent groove 15, the entire weight being supported by the tread of the wheel, however, instead of by the flange. As the truck is drawn forward that wheel which is on plane 19 will have the outer corner of its tread drawn upon the plane 20, which is high enough to have raised the flange of this wheel considerably above the top of the adjacent rail, while the flange of the other wheel will pass from the groove 15 onto the adjacent plane 14, the truck being then in the position shown in full lines in Fig. 2. The inclination of planes 14 and 20 is such that when the truck reaches this position it will of its own weight slide down to the position shown in dotted lines in Fig. 2, the height of the incline 20 being such as to keep the flange of the co-acting wheel high enough to pass completely over the adjacent rail without touching it, while the incline 14 is low enough so that as the flange slides down this plane the tread of this wheel will drop upon the adjacent rail just as the flange leaves the incline.

We claim as our invention—

A car-replacer consisting of a pair of blocks the inside block consisting of a wedge-shaped body having a pair of tread-inclines 11, adjacent flange-receiving grooves 15, said tread-inclines leading upward to a pair of downwardly-diverging inclines 14 the lower edges of which are lower than the height of a rail; and the outside replacer-block consisting of

a wedge-shaped body, a tread-incline 19 leading upward to a pair of downwardly-diverging inclines 20 the crown of said inclines being higher than the highest point of the tread-incline and extending downward upon said
5 tread-incline to form a guiding-rib 21, and the lower edges of said inclines being higher than the height of a rail.

In witness whereof we have hereunto set our hands and seals, at Indianapolis, Indiana, on this 25th day of October, A. D. 1902.

JOHN D. CAVE. [L. S.]

JAMES F. PHILLIPS. [L. S.]

Witnesses:

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