

J. I. FORD.
CAR AND ENGINE RETRACKER.
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936,439.

Patented Oct. 12, 1909.
2 SHEETS—SHEET 1.

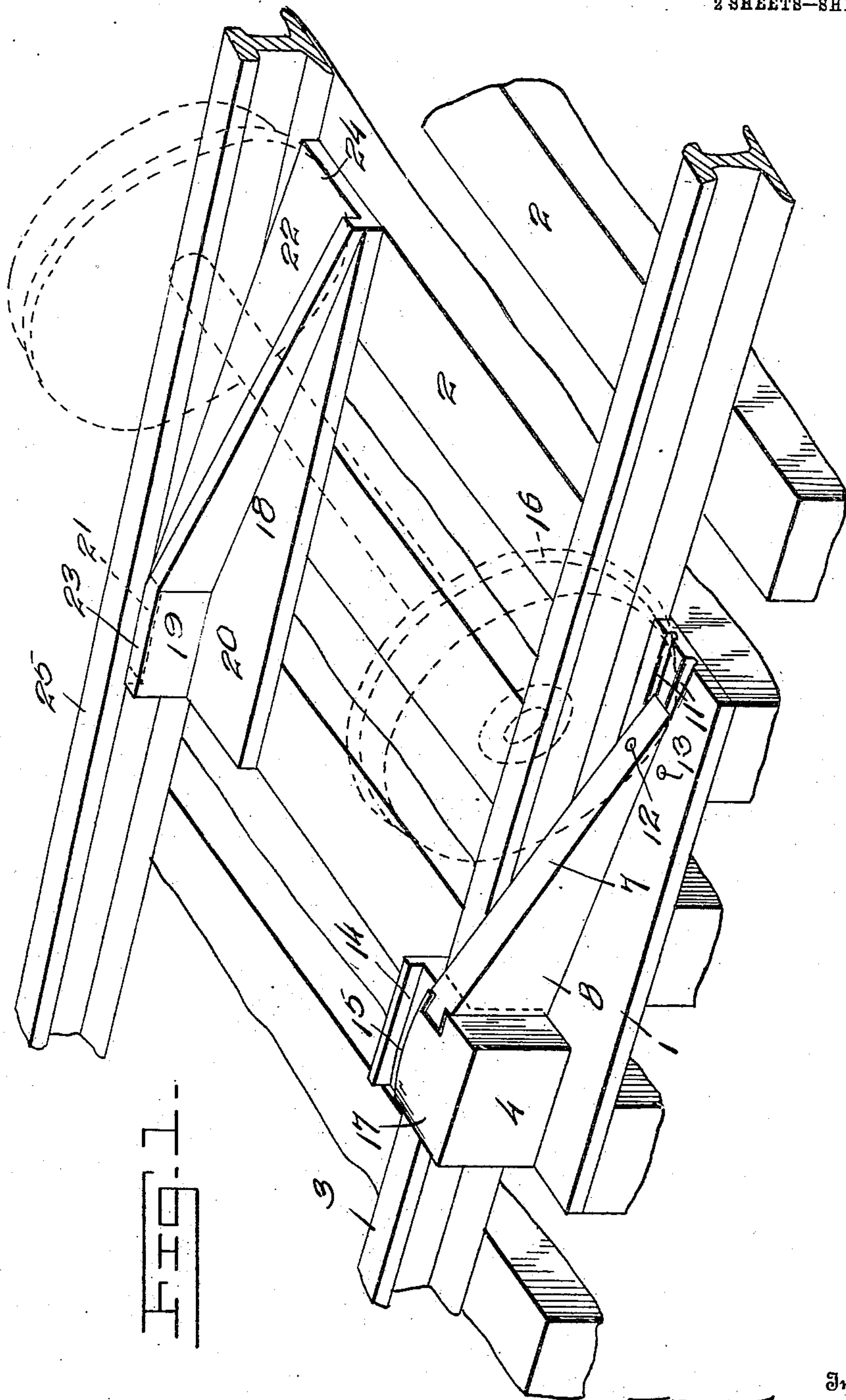


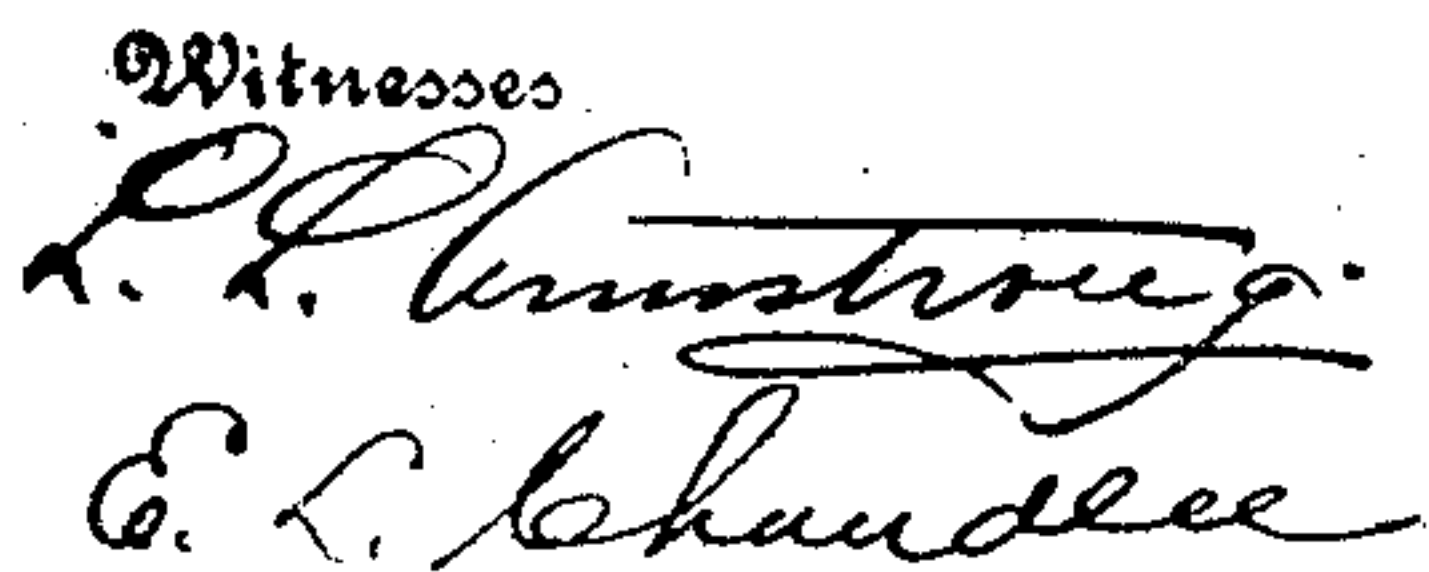
FIG. 1

Witnesses.
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

JAMES I. FORD, OF NIAN TIC, ILLINOIS.

CAR AND ENGINE RETRACKER.

936,439.

Specification of Letters Patent.

Patented Oct. 12, 1909.

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To all whom it may concern:

Be it known that I, JAMES I. FORD, a citizen of the United States, residing at Niantic, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Car and Engine Retracker, of which the following is a specification.

This invention relates to devices for replacing derailed cars upon the rails.

The invention has for its object to provide an improved device of this kind by means of which the wheels of a derailed car will be effectually directed to and guided upon the rails, and liability of overrunning the rails be avoided.

The invention further has for its object an improved car replacer of this kind which will prevent the weight of a car from being brought entirely on the flanges of the wheels as the wheels move onto the rails and thereby avoid any danger of breaking said flanges.

With these and other objects in view the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described and particularly pointed out in the appended claims, it being understood that changes in the specific structure shown and described may be made within the scope of the claims, without departing from the spirit of the invention.

In the drawings forming a part of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 shows in perspective the replacer in position for use with a pair of track rails. Fig. 2 is a detail top view of the wedge used with the wheel on one side of the car. Fig. 3 is a detail view of the wedge used with the off wheels. Fig. 4 is an end view of the wedge. Fig. 5 is an end view of the block 4 and slab 1.

In car replacers, devices have been provided in which a grooved block surmounting one rail has been employed in conjunction with an inclined wedge or rail extending outside of and along the rail, and an inclined wedge block has been employed with the other rail, the said block being located next to the inside of the rail.

The present invention comprises an oblong block or slab 1, about an inch thick and preferably of steel, which is located on the ties 2, next to and outside of the rail 3. The slab 1 is provided at its forward end and next to the rail 3 with a block 4, preferably of steel, which is connected to or made inte-

gral with the slab 1. The block 4 is formed with a groove 5 on its under side through which the rail 3 extends, the outer depending side of the block 4 resting on the ties 2 inwardly of the rail, and the intermediate portion of the block 4 resting on the top of the rail 3. In conjunction with the slab 1, and block 4 there is employed a short inclined rail 7, extending from the top of the block 4, to the slab 1, at a point adjacent to its rear end. The rail 7 is provided with the depending flange 8 to maintain it in position, strengthen it, and prevent it from turning over. The upper end of the rail may be fixed to or integral with the block 4, but is preferably hinged thereto in any suitable manner and so it can be detached therefrom. As here shown it has a hinged connection with block 4 by means of a knob-like projection 9 at its forward end which loosely rests in a socket 10 in the top of the block 4 and permits the rail 7 to be swung laterally. By means of this construction the rail 7 may be moved laterally and have its lower end swung to a position in alinement with one of the short entrance grooves 11 at the rear end of the slab 1. The rail 7 is held in its adjusted position next to one of the grooves 11 by means of a pin 12 in the rail 7, which may engage one of the holes 13, adjacent to the grooves 11. It will be noted that the surfaces of the block 1 between the grooves 11 are rounded so as to slope downward toward each side, thus insuring the engagement of wheel flanges positively in one or another of the grooves 11. Thus the superposition of the wheel tires on the lift rail may be insured by engaging the pin 12 in the hole 13 adjacent the groove 11 in which the flange engages, so that the inner edge of the rail 7 engages closely against the flange and beneath the tire. The upper hinged end of the rail 7 is located next to the end of a groove 14 in the top of the block 4 which groove is parallel with and spaced inwardly of the rail 3 extending beneath the block 4. The inner end of the groove 14 is provided with an inner turned side 15 which guides the flange of the wheel 16 into the groove 14 from the rail 7. The upper surface 17 of the block 4 adjacent to the groove 14 gradually curves and slopes downward toward the forward end of the groove 14, so as to direct the wheel easily onto the rail 3.

At 18 is a wedge which is used with the

off wheels of the car. The wedge 18 consists of an oblong block or slab preferably of steel and having its forward elevated portion 19 formed with a suitable broad support 20 to prevent the wedge from turning over. The top of the wedge 18 is formed at its forward end with a horizontal portion 21, and with an inclined portion 22 sloping down to its rear end. The forward portion 10 of the wedge 18 is formed next to its inner edge with a horizontal, longitudinal shouldered portion 23, and the inclined portion 22 is formed with a diagonal shouldered groove 24 inclined gradually downward to the lower 15 end of the inclined portion 22 adjacent to its outer side. By means of the wedge 18, placed next to the inside of the off rail 25, the flange of the off wheel entering the groove 24 will be guided by the shouldered 20 groove 24, and when it moves along on the horizontal portion 23 of the wedge will bring the tread of the wheel onto and in alinement with the rail 25. It will be noted that the wedge 18 is provided with a buttress 26 the bottom surface of which is inclined upwardly and outward and offset upwardly as at 27 to engage over and upon a rail flange, to prevent upsetting of the wedge toward the rail. The flange of the wheel 16 30 entering one of the grooves 11 will carry and direct the tread of the wheel 16 accurately onto the rail 7. The wheel 16 will then move upward on the rail 7 and onto the block 4 with its flange projecting into the 35 groove 14, whereby it will be directed easily and safely onto the rail 3. By having the rail 7 adjustable with reference to the grooves 11, the rail may be located in a position to accommodate it to any position of 40 the derailed car.

Having thus described my said invention, what I claim as new and desire to secure by United States Letters Patent is:

1. In a car replacer, a horizontal oblong

slab having a block at its forward end adapted to fit over a rail, with a groove on its top at one side and a curved surface on its top adjacent to said groove, and an inclined diverging rail connected at one end to the top of the block adjacent to its groove and at the 50 other end to the slab.

2 In a car replacer, a horizontal oblong slab having a series of grooves at its rear end and a block at its forward end adapted to fit over a rail, with a groove on its top at 55 one side and a curved surface on its top adjacent to said groove, an inclined rail hinged to said block adjacent to said groove, and means for securing the lower end of the inclined rail in adjusted position next to one 60 of said grooves in the slab.

3. In a car replacer, a horizontal oblong slab, a grooved block at the forward end and at one side of said slab and adapted to fit over a rail and having a curved surface 65 adjacent to said groove, an inclined rail with a depending flanged support resting on said slab, and hinged at one end to the top of the block adjacent to the inner end of its groove, and at the other end adjustably connected to 70 the slab.

4. In a car replacer, the combination with a base member adapted to be rested adjacent a rail, said base member having a plurality of longitudinally extending transversely 75 spaced grooves formed in its upper side and opening upon its rear end, of a lift rail pivoted adjacent the forward end of the base member and adjustable to position adjacent any of said grooves for engagement with a 80 car wheel tire outwardly adjacent its flange, for the purpose described.

In testimony whereof I affix my signature, in presence of two witnesses.

JAMES I. FORD.

Witnesses:

RICHARD BROWN,
J. H. WHITE.