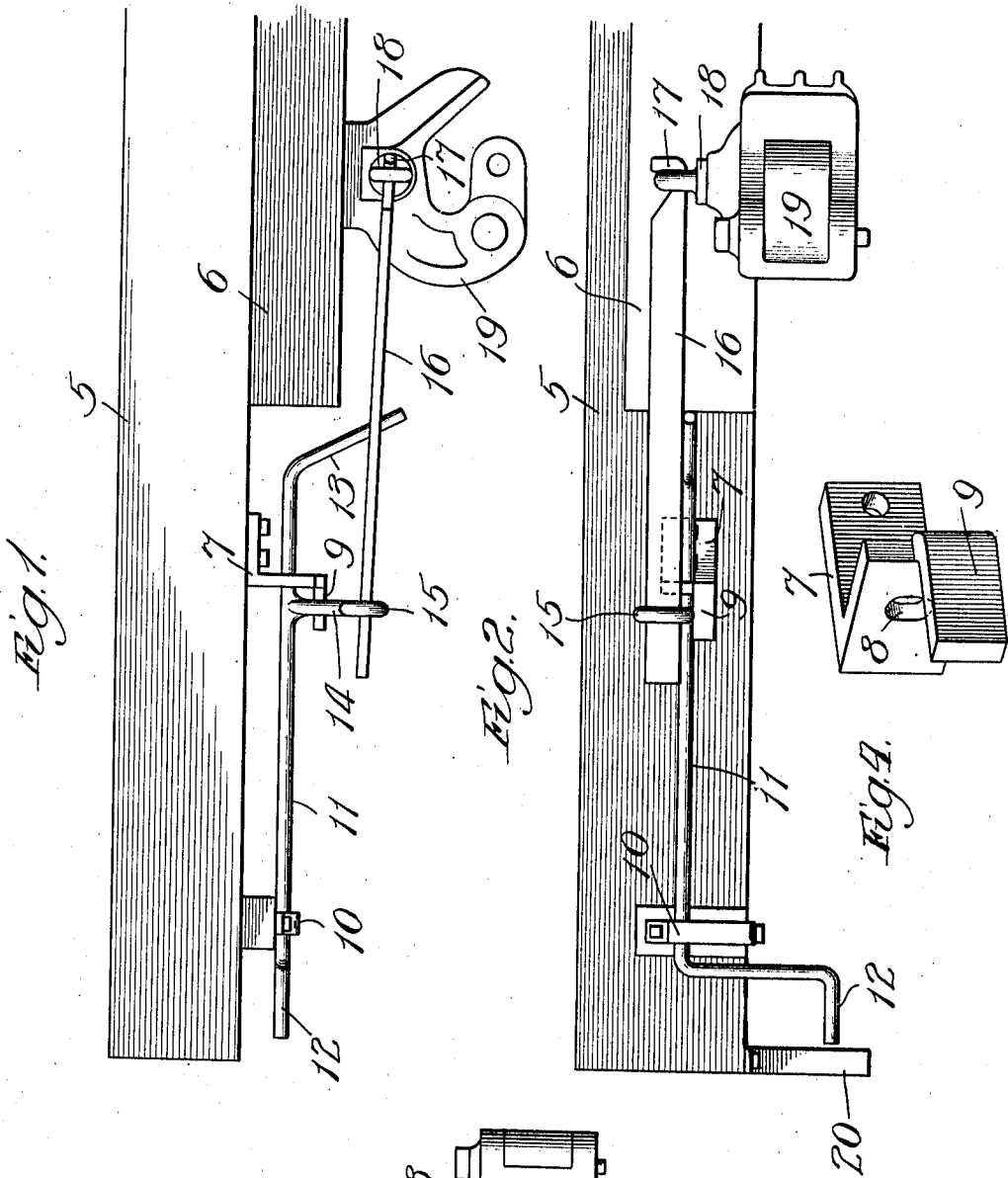


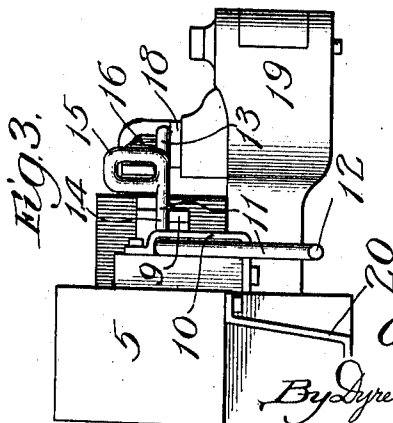
O. ANDERSON.
 UNCOUPLING MECHANISM FOR CARS.
 APPLICATION FILED APR. 30, 1910.

970,778.

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Witnesses:
 Carl O. Lyford,
 Chas. H. Buell.



Inventor:
 Olof Anderson,
 By *Dyrenforth, Lee, Christian & Mills*,
 Attys.

UNITED STATES PATENT OFFICE.

OLOF ANDERSON, OF CHICAGO, ILLINOIS.

UNCOUPLING MECHANISM FOR CARS.

970,778.

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Application filed April 30, 1910. Serial No. 558,564.

To all whom it may concern:

Be it known that I, OLOF ANDERSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Uncoupling Mechanism for Cars, of which the following is a specification.

My object is to provide uncoupling lever-mechanism for, more especially, freight-cars, whereby displacement of the locking-pin, to unlock the coupler, may be effected by the operator with either his hand or foot from one side of the car and with little effort.

In the accompanying drawing—Figure 1 is a broken top plan view of a car end-sill, buffer-block and coupling-member with my improvements in place; Fig. 2, a view of the same parts in front elevation; Fig. 3, a side elevation of the same; and Fig. 4, an enlarged perspective view of a detail of the construction.

Secured against the face of the end-sill 5 of the car-frame, beyond one end of the buffer-block 6, is a bracket 7 having a bearing-opening 8 through it and a reduced extension 9, at an angle to the main arm of the bracket. Also secured to the end-sill 5, in the position shown, is a stirrup-frame 10.

The numeral 11 designates an uncoupling-rod passing through the stirrup 10 and bent at its outer end to form the crank or handle 12. The inner end-portion of the rod 11 is bent, as shown at 13, to extend laterally in a horizontal direction. The rod 11 passes loosely through the opening 8 in the bracket 7 and is provided adjacent to said bracket with an off-set 14 terminating in an eye, or socket-piece, 15 and resting normally on the bracket-extension 9.

The numeral 16 designates a bar having a hook-shaped end 17 engaging the eye of the locking-pin 18 of the coupling-member 19. The bar passes over and in contact with the bent or short arm 13 of the rod or lever 11, and passes loosely through the eye 15. The turning of the handle 12 to the right in Fig. 3 produces axial movement of the rod or lever 11 and causes it in turning, in the bearing-opening 8, to lift the bar 16 bodily, owing to the engagement with said bar of the short arm 13 and off-set 14. Raising of the bar, as described, lifts the locking-pin and unlocks the coupling member. The turning of the handle 12, as described, would be per-

formed by the operator with his hand. Downward pressure upon the handle 12 will swing it upon the fulcrum formed by the bracket-extension 9, causing the short arm 13 to swing the bar 16 upward on the shiftable fulcrum formed by the eye 15. The offset 14 and arm 13 are comparatively short, while the crank or handle 12 is comparatively long, so that in turning the latter the bar 16 and locking-pin may be lifted with little effort, or under considerable leverage, as is desirable in case the locking-pin is not easily displaced. Downward pressure upon the handle 12 may be effected by the operator, for example, while standing upon the sill-step 20, and the lifting of the locking-pin is rendered easy by the compound lever formed by the rod 11 with its fulcrum at 9, lifting at its short arm against the lever 16 with its fulcrum at 15. It often happens, in practice, that a coupler locking-pin has to be displaced while the car is moving; and frequently, from one cause or another, the resistance of the pin against displacement is hard to overcome. As the bar 16 passes loosely through the eye 15 it may swing horizontally and move longitudinally under movement of the draw-bar carrying the coupling-member 19.

The compound lever-mechanism which my construction provides greatly facilitates displacement of a locking-pin while the car is moving, because the operator may not only stand upon the sill-step while performing the operation but may bear his whole weight, if necessary, upon the handle 12, which, with the aid of the compounded leverage, raises the locking-pin no matter how it may resist such movement, in practice, and without danger of accident to the operator.

While I prefer to construct my improved uncoupling-mechanism as shown and described it may be variously modified in the matter of details of construction without departing from the spirit of my invention as defined by the claims.

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

1. In an uncoupling-mechanism for cars, the combination with the car-frame and coupler locking-pin, of a lever having a short arm and an axially-movable and vertically-swinging long arm provided with an operating crank, a laterally-extending offset on the long arm of the lever, a fixed bearing and fulcrum on the car-frame with which

said long arm engages, and a bar at one end engaging the locking-pin, engaging, toward its opposite end, said offset, and in the path between its ends, of said short arm.

- 5 2. In an uncoupling-mechanism for cars, the combination with the car-frame and coupler locking-pin, of a lever having a short arm and an axially-movable and vertically-swinging long arm provided with an
10 operating-crank, a laterally-extending offset on the long arm of the lever forming a loop,

a fixed bearing and fulcrum on the car-frame with which said long arm engages, and a bar at one end engaging the locking-pin, passing loosely, toward its opposite end, 15 through said loop, and in the path, between its ends, of said short arm.

OLOF ANDERSON.

In presence of—

R. A. RAYMOND,
F. D. DAUPHIN.