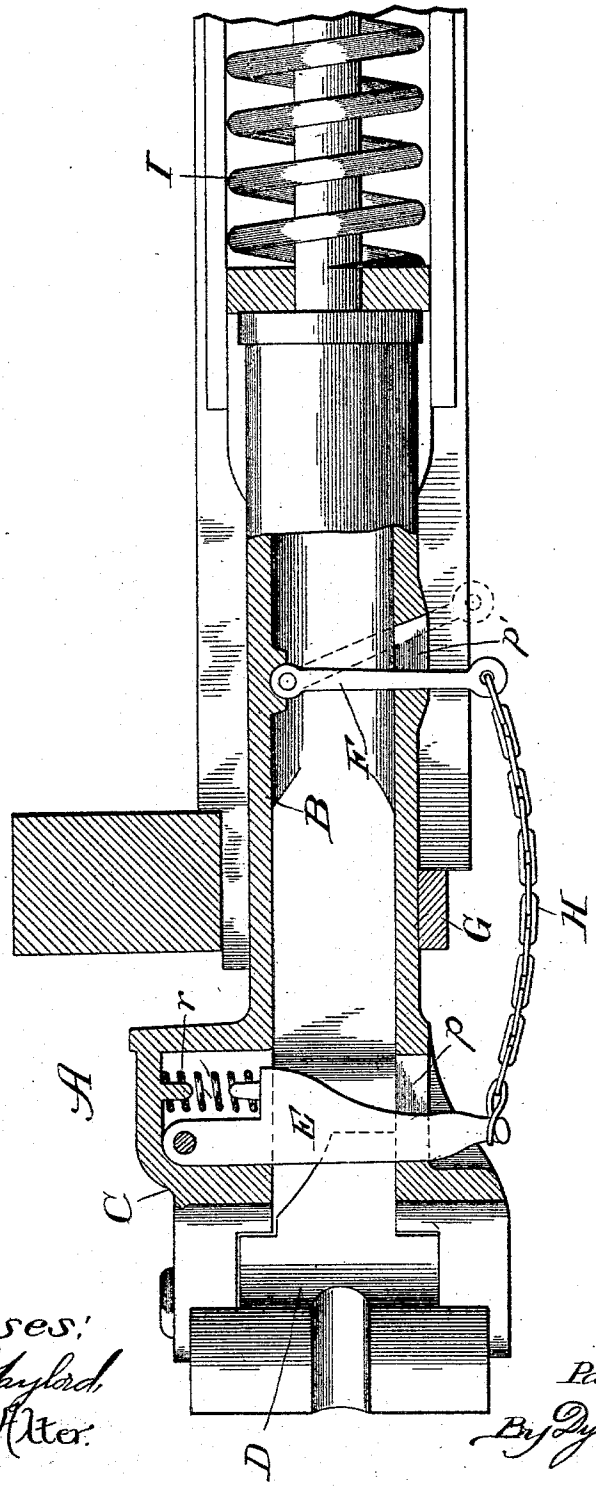
(No Model.)

P. M. REAGAN.

CAR COUPLING.

No. 515,719. Patented Feb. 27, 1894.



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PAUL M. REAGAN, OF CHATTANOOGA, TENNESSEE, ASSIGNOR TO THE HINSON CAR-COUPLER COMPANY, OF CHICAGO, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 515,719, dated February 27, 1894.

Application filed November 2, 1893. Serial No. 489,842. (No model.)

To all whom it may concern:

Be it known that I, PAUL M. REAGAN, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and useful Improvement in Car-Couplers, of which the following is a specification.

My invention relates to an improvement in the type of car-coupler in which a draw-bar is provided with an expanded head having pivotally supported in it, to swing laterally outward and inward, a jaw or knuckle, and a locking bar extending normally into the path of the tail-piece of the jaw or knuckle to obstruct it against outward swinging and consequent uncoupling action.

The objects of my invention are, first, to provide means which shall cause automatic uncoupling of the coupler in case of its attachments to the car being broken or giving way; and second to adapt said means, in case of fracture of the head-portion of the draw-bar, to sustain the fractured portion against falling upon the track, where it would be liable to cause damage, such as derailing of cars.

My invention is illustrated in the accompanying drawing by a view of a car-coupler involving it and shown in longitudinal sectional elevation.

A is a coupler of any desired construction in the type referred to, to which my improvement is applicable, and comprising a draw-bar B terminating in an expanded head C carrying at one side the pivotal jaw or knuckle D, and a lock for the jaw of the kind tending to obstruct the swinging of the jaw and prevent uncoupling by extending normally into the path of the tail-piece of the jaw. The form of lock illustrated is that of a bar E suspended in the head to hang across the path of the tail-piece of the jaw, being controlled by a spring r which tends to force it into its normal position. At its lower end the locking bar protrudes through the base of the head through a slot p. Behind the bar E, in the hollow draw-bar B, is a lever F, fulcrumed at its upper end in the upper side of the draw-bar to hang at its fulcrum, and passing through a longitudinal slot p' in the base of the draw-bar to project beyond the same. The space between the bars E and F is that at which the draw-bar rests on the support G, forming part of the base of the draw-bar housing on a car; and the distance of the lever F behind its rest G is greater than the extent of natural longitudinal play of the draw-bar, whereby in the normal longitudinal forward movement of the latter the projecting end of the lever shall not strike against the stop afforded by the rest G. The projecting end of the lever F is connected with that of the locking-bar E, the medium of connection between the two being shown as a chain H, which, though preferred, is not the only means that may be used for the purpose.

As will be seen, in case of the attachments which fasten the draw-bar in place, giving way, so that the draft on the coupler will pull out the draw-bar beyond the normal limit permitted by its controlling spring I, the lower projecting end of the lever F will abut against the stop G and be forced backward; and owing to its connection with the locking-bar E, the latter will thereby also be pulled backward and out of the path of the tail-piece of the coupler-jaw, permitting the draft on the latter to swing it outward and effect uncoupling. And should the head C be broken off behind the locking-bar, it cannot fall on the track, but will hang by the connection H from the lever F.

My improved automatic uncoupling device may, obviously, be used in connection with other and known forms, than that herein shown and described, of locking-bar; hence I do not limit my invention to its use with that particular locking-bar.

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

1. In combination with a car-coupler of the character described, a lever fulcrumed at one end in the draw-bar to hang therein and project through its base behind and into the plane of the part G of the bottom of the draw-bar housing, a slot in the base of the draw-bar through which the lever projects, and a chain H connecting the lever with the locking-bar for the pivotal jaw of the coupler, substantially as and for the purpose set forth.

2. In a car-coupler, the combination with the draw-bar B, and head C carrying the piv-

otal jaw D, of a locking-bar E suspended in the head to cross the path of the tail-piece of the jaw, a lever F fulcrumed at one end on the top of the draw-bar to hang therefrom and project through its base into and behind the plane of the part G of the draw-bar housing, and a chain H connecting the lower projecting ends of the said lever and locking-bar, substantially as and for the purpose set forth.

PAUL M. REAGAN.

In presence of—
M. J. FROST,
W. N. WILLIAMS.