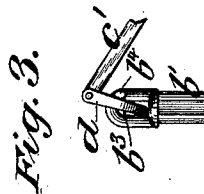
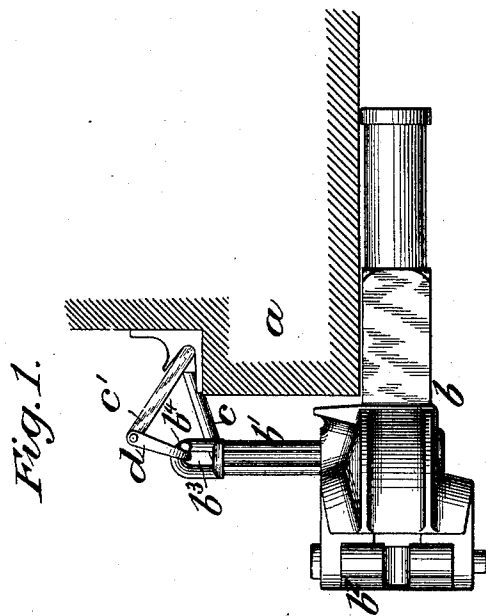
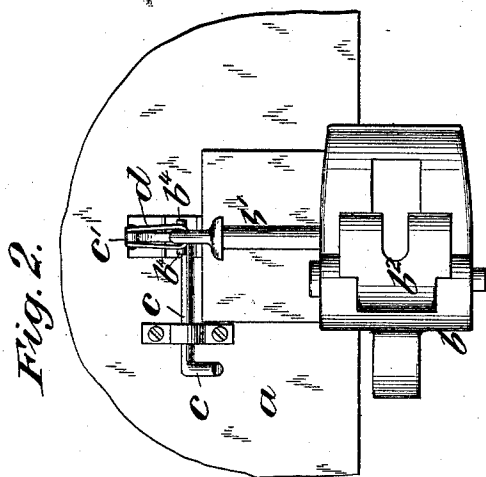


(No Model.)

S. J. MEEKER.
CAR COUPLING.

No. 469,327.

Patented Feb. 23, 1892.



Witnesses:-
O. N. Hayward
Annie L. Hayes.

Inventor:-
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by his attorney
Chas. F. Dane.

UNITED STATES PATENT OFFICE.

STEPHEN J. MEEKER, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE SMILLIE COUPLER AND MANUFACTURING COMPANY, OF NEW JERSEY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 469,327, dated February 23, 1892.

Application filed September 11, 1891. Serial No. 405,362. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN J. MEEKER, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Car-Couplers, of which the following description, taken in connection with the drawings herewith accompanying, is a specification.

My invention relates more particularly to the coupler-operating mechanism, consisting of the several parts usually employed for operating the locking pin or bolt of the coupler from a point at the exterior of the car to raise the same from engagement with the rotating hook or knuckle and allow the latter to open and disconnect the cars.

The object of my present invention is to provide a simple and positive means for preventing the locking pin or bolt from being jerked from its opening in the draw-head of the coupler by a too sudden upward movement of the same when raised by its operating-lever or be otherwise withdrawn therefrom. This object I accomplish by the combination of the several parts, as will hereinafter be set forth in detail, and pointed out in the claims.

Referring to the drawings, Figure 1 represents a section of a car with a coupler and its operating mechanism (constructed according to my invention) supported thereon, showing the locking pin or bolt in its normal raised position when elevated by its operative mechanism; Fig. 2, a front view of the same; and Fig. 3, a detail view of a section of the locking pin and its connecting operating parts, showing the relation of the same when the locking-pin is raised or jerked upward to its limit.

To explain in detail, *a* represents a section of a car and *b* a car-coupler, *b'* the locking pin or bar supported in a vertically-arranged opening in the draw-head of the coupler and adapted to engage with the rotating hook or knuckle *b²* to lock the same in a closed position when connected with another coupler and be raised from engagement therewith to allow the knuckle to open and disengage with the con-

necting-coupler in a manner well understood by those skilled in the art.

The locking pin or bolt *b'* is adapted to be operated in the present instance illustrated by means of a horizontally-arranged lever *c*, supported in suitable bearings on the face of the car. This lever is provided with an arm *c'*, which extends at right angles, or nearly so, therefrom to a point above the locking pin or bolt *b'* and has connection with the latter through the medium of a link *d*. The upper end of the pin *b'* is slotted, as shown at *b³*, for the connection therewith of the link *d*, such link connection between the end of the arm *c'* of the operating-lever and the pin *b'* being necessary for the proper operation of these several parts and to allow the pin *b'* to move vertically, or nearly so, and prevent its binding against the sides of its opening in the draw-head of the coupler, as will obviously appear.

Now it has been found in practice that the locking-pin, if raised or thrown up quickly, is apt to be jerked from its position in the draw-head by reason of the free movement of parts allowed by the loose connection between the locking-pin and its operating-lever, as described, or the upper end of the locking-pin when in a raised position, as shown in Figs. 1 and 2, may be moved forward and drawn from its said opening in the draw-head by any person, if so disposed; and to prevent any such accident I have provided said locking-pin with a lug or projection *b⁴*, located at the side thereof and adjacent to its upper end, as clearly shown, which is adapted to engage with the rear side of the link *d* when the locking-pin is raised to its limit, as shown in Fig. 3, and act as a lock to prevent the latter from being moved forward and withdrawn from its said opening in the coupler, as will be readily understood.

Having thus set forth my invention, I do not wish to be understood as confining myself to the use of the horizontally-arranged lever *c* as a means for operating its connecting arm or lever *c'*, as it is obvious that the latter may be pivotally supported at its inner end in suitable bearings on the car and be operated by a rod or chain connected therewith

without departing from the spirit of my invention.

Having thus set forth my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a car-coupler, the combination, with the locking pin or bolt provided with a slotted end, and a lifting apparatus for said locking-pin, consisting of a lever pivotally supported on the face of the car or part thereof and connected with the slotted end of said locking-pin through the medium of a link, of means for engaging said link to limit its forward or outward movement, substantially as described, and for the purpose set forth.

2. In a car-coupler, the combination, with the locking pin or bolt provided with a slotted head, of an operating-lever pivotally supported on the face of the car or part thereof and connected with the slotted head of said locking pin or bolt through the medium of a link, and a lug or projection located on said locking pin or bolt adjacent to its upper end for engaging with said link, substantially as described, and for the purpose set forth.

STEPHEN J. MEEKER.

Witnesses:

CHAS. F. DANE,
ANNIE L. HAYES.