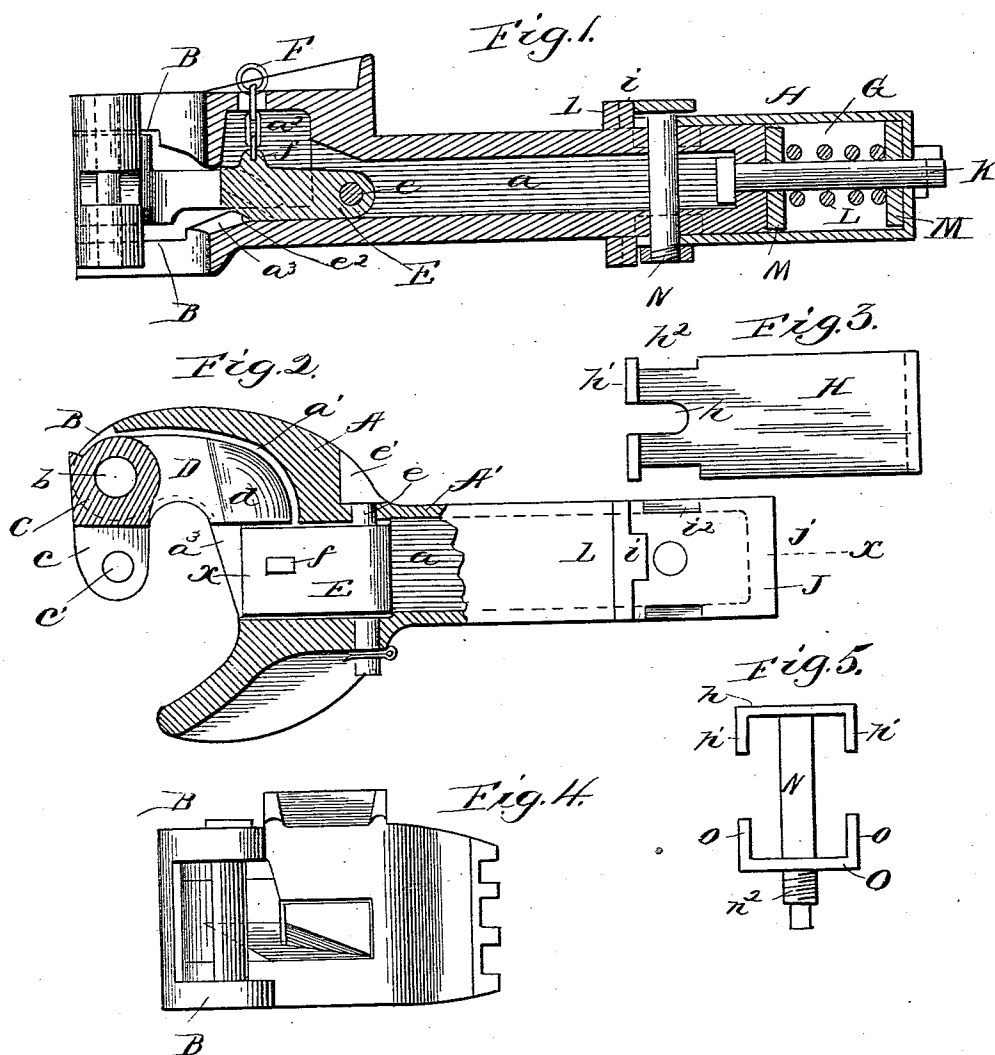


(No Model.)

S. KELLER.
CAR COUPLING MECHANISM.

No. 557,826.

Patented Apr. 7, 1896.



Witnesses:
Caleb J. Richer,
David Luan

Solomon Keller

Inventor.

By *[Signature]*

Attorney.

UNITED STATES PATENT OFFICE.

SOLOMON KELLER, OF READING, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO WILLIAM R. EYRICH AND WILLIAM EHRLING, OF SAME PLACE.

CAR-COUPLING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 557,826, dated April 7, 1896.

Application filed December 19, 1895. Serial No. 572,668. (No model.)

To all whom it may concern:

Be it known that I, SOLOMON KELLER, a citizen of the United States, residing at Reading, county of Berks, State of Pennsylvania, have invented certain Improvements in Car-Coupling Mechanism, of which the following is a specification.

My invention relates to certain improvements in car-coupling mechanism, which are fully described in connection with the accompanying drawings, and the novel features of which are specifically pointed out in the claim.

Figure 1 is a sectional elevation of the complete mechanism, taken on the line $x x$ of Fig.

2. Fig. 2 is a plan view showing the draw-head in section and the buffer-spring strap removed. Fig. 3 is a separate view of the buffer-spring strap. Fig. 4 is a front view of the draw-head with the coupling-jaw removed. Fig. 5 shows the T-bolt and washer separately.

The coupling-jaw or knuckle C is pivoted between the jaws B B of the draw-head A on a knuckle-pin at b in the usual manner for this class of couplings, except that considerably more space is allowed between the jaws B B for vertical movement of the coupling-jaw on the knuckle-pin for a purpose hereinafter described. The coupling-jaw is provided with a locking-arm D, the outer end of which is tapered off on top, as indicated at d , Fig. 2. This arm swings back into the side-wise extension a' of the central cavity a , extending through the body of the bar, and in so doing its lower face rides upon an inclined surface a^3 in the interior of the draw-head. This compels the whole coupling-jaw to rise on the knuckle-pin a considerable distance above its normal uncoupled position, as indicated in Fig. 1, the purpose of this construction being to cause the coupling-jaw to automatically open outward when it is not locked in coupled position. This is effected by the weight of the coupling-jaw, which causes it to fall to its natural resting-place upon the lower jaw B of the draw-head, which movement causes the locking-arm D to ride outward upon the inclined surface a^3 , thus swinging the coupling-jaw automatically into proper position for coupling with another car.

The locking device which I employ consists of a catch or latch E, which is pivoted at its rear or inner end on a transverse bolt or pin

and is free to be swung upward into an extension a^2 of the central draw-head cavity. This I arrange to be effected in either of two ways—first, by means of a chain F, attached to its forward end and extended through a top opening in the draw-head to a convenient lever mechanism, such as is commonly used, and, second, automatically by the inward movement of the locking-arm D, the tapering surface d of which is adapted to wedge in under the correspondingly-tapered front e^2 of the catch, so as to raise the latter out of its path until it has passed fully into the cavity extension a' , when the catch automatically drops and locks it there, only to be released by the operation of the lever mechanism referred to.

At the other end of the draw-bar A', I provide a buffer-spring pocket G by means of a separately-formed strap H, which spans the end of the bar and is clamped thereto in the following manner: The ends of the strap are formed with heel-pieces h' h' , separated by a slotted opening h for the passage of a clamping-bolt N. These heels engage offsets formed on the top and bottom of the draw-bar. Recesses h^2 h^2 in the edges of the strap and i^2 i^2 in the draw-bar are engaged at the top by the depending portions n' n' of the T-bolt N and at the bottom by the portions $o o$ of a washer O, which is clamped in place by a nut on the threaded end n^2 of the bolt. The buffer-spring L is strung upon the longitudinal bolt K between follower-plates M M, the ends of which are guided, as usual, in suitable pockets fixed to the sills of the car. The bolt K is introduced from the coupling end of the bar through the central cavity a .

What I claim is—

The combination with the rear end of a draw-bar such as described, of a strap H spanning the bar and provided with heels h' h' , side recesses h^2 h^2 and bolt-openings h , corresponding offsets and recesses on the draw-bar end, and a T-bolt N and washer O engaging the strap and bar substantially as set forth.

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

SOLOMON KELLER.

Witnesses:

CHAS. A. CORNETT,
CAMERON E. STRAUSS.