(No Model.)

# J. H. BUSTER.

## CAR COUPLING.

No. 347,919. Patented Aug. 24, 1886.

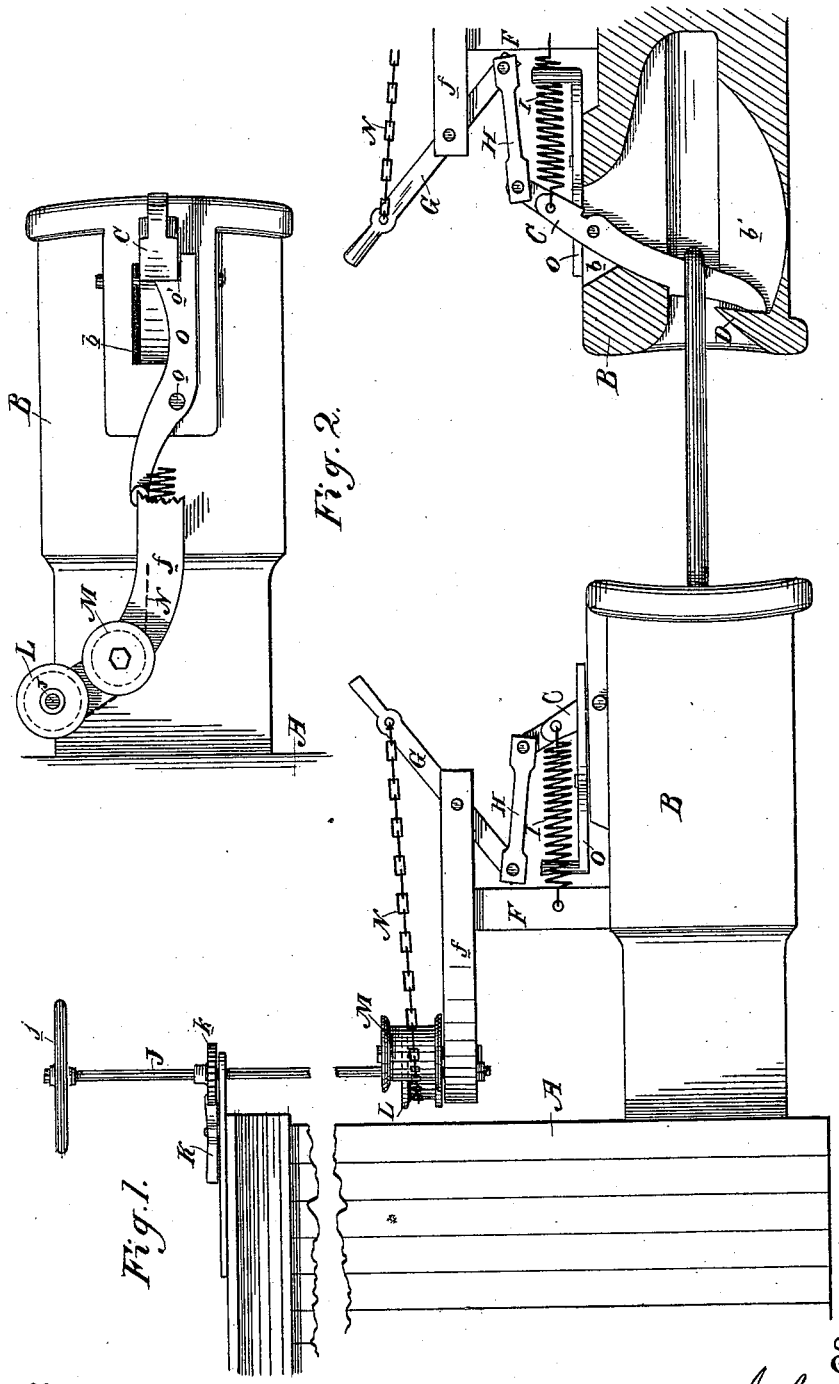

Fig. 2.



Fig. 1.

Witnesses;
Geo. H. Strong.
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# UNITED STATES PATENT OFFICE.

JOHN H. BUSTER, OF SPENCEVILLE, CALIFORNIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 347,919, dated August 24, 1886.

Application filed April 9, 1886. Serial No. 198,401. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. BUSTER, of Spenceville, Nevada county, State of California, have invented an Improvement in Car-Couplings; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of car-couplings in which a spring-actuated latch pivoted in the draw-head is forced back by the incoming link and springs down again to engage it; and my invention consists in the arrangement of the latch in the draw-head, a guide flange or lip in the front of the draw-head, the means for releasing the latch from the top of the car, and the means for holding it back when desired, all of which I shall hereinafter fully describe.

The object of my invention is to provide a car-coupling automatic in its coupling action, and which can be uncoupled without the necessity of passing between the cars, thus avoiding the danger of accident.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is an elevation of one-half the coupling, and a section of the opposite draw-head and elevation of the remaining parts. Fig. 2 is a plan of the top of the draw-head.

A are the cars, and B are the draw-heads, secured thereto in suitable manner. Through the top of the draw-head, near its forward end, is made a slot, *b*, in which is pivoted the latch C, which traverses the draw-head chamber, its lower end playing in a groove, *b'*, in its base, while its upper extends above the draw-head.

In the front or mouth of the draw-head chamber is a backwardly-inclined guide lip or flange, D, for supporting and directing the link. Upon the top of the draw-head is a standard, F, having a horizontal top arm, *f*. In the forward end of the arm is pivoted a lever, G, the lower end of which is connected by a link, H, with the upper end of the latch C. A spring, I, is secured to said upper end of the latch and to the base of the standard F, and its tendency is to draw the upper end of the latch back, whereby its end within the draw-head is held forward to its position.

J is a spindle journaled on the end of the car, and provided with a crank-wheel, *j*, on its top, said spindle being controlled by a ratchet, *k*, and pawl K, in the usual manner. The lower end of the spindle is pivoted in the rear end of arm *f*, and carries a pulley or sheave, L. Upon arm *f* is also a guide pulley or sheave, M. A chain, N, is secured to and winds upon sheave L. It thence passes around sheave M, and is connected with the upper end of lever G.

Pivoted at *o* upon top of the draw-head is a hand-lever, O, the end of which has a notch, *o'*, which is adapted to pass behind the upper end of the latch and to hold it pressed forward, so that its end within the draw-head is held back and will not engage the link.

The operation of my car-coupling is as follows: The links being secured in one draw-head and held in a horizontal position by the guide-flange D, is guided by the opposing lip or flange into the opposite draw-head. Here meeting the latch, it forces it back until the latter, slipping over the link, is thrown forward by its spring and engages said link, offering the necessary resistance to the pulling strain by bearing against the front of the draw-head chamber.

In order to uncouple, the crank-wheel *j* is turned, whereby the chain N is wound up on sheave L, and thus, through the lever G and link H, the upper end of the latch is forced forward, whereby its lower end is withdrawn from its engagement with the link. When the crank is released, the latch moves to position again under the influence of its spring. The lever O is used when a car is standing on a side track and is not to be coupled. To this end the latch is held back by said lever and the link finds no engagement if it should enter the draw-head.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, the draw-head B, in combination with the latch C, pivoted therein, and adapted to receive and engage the link and the means for operating the latch, consisting of the spindle J on the end of the car, having crank-wheel *j*, the sheave L on its lower end, the pivoted lever G, and the link H, connecting the lever with the upper end of the

latch, the chain N, connecting the lever with the sheave L, and the spring I, for returning the latch, all arranged and adapted to operate substantially as herein described.

2. In a car-coupling, the draw-head B, having a slot, *b*, in its top and a groove, *b'*, in the botton of its chamber, the latch C, pivoted in the slot and having its lower end playing in the groove of the draw-head chamber, the flange or lip D in the front of the draw-head, and the coupling-link E, in combination with the standard F on the draw-head, having arm *f*, the lever G, pivoted in said arm, the link H, connecting the lever with the upper end of the latch, the crank-spindle J on the end of the car, having sheave L on its lower end, the guide-sheave M on arm *f*, the chain N, winding on sheave L, guided by sheave M, and connected with the lever G, and the spring I for returning the latch, substantially as herein described.

3. In a car-coupling, the draw-head B and the spring-actuated latch C therein, its upper end projecting above the draw-head, in combination with the pivoted lever O on top of the draw-head, having a notch, *o'*, for engaging the upper end of the latch and holding it out of engagement with the coupling-link, substantially as herein described.

In witness whereof I have hereunto set my hand.

JOHN H. BUSTER.

Witnesses:
JOHN STINEMAN,
G. W. MANWELL,