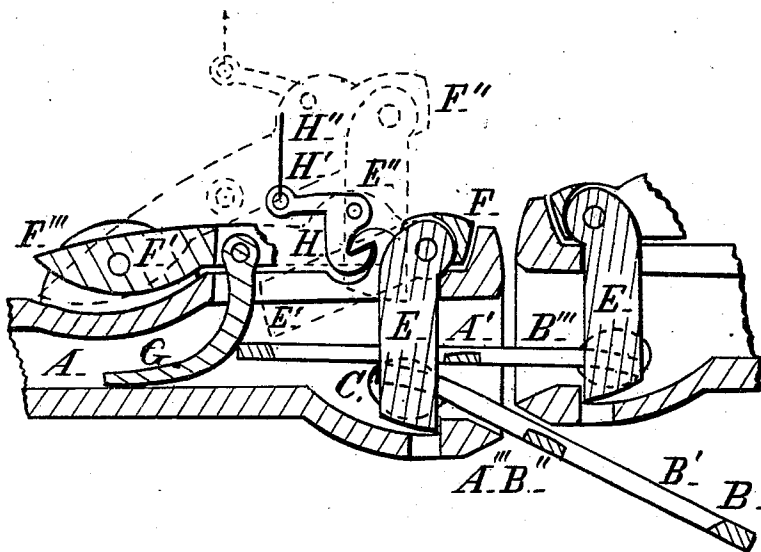


W. REES.  
Car-Couplings.

No. 148,323.

Patented March 10, 1874.



Witness: ~ }  
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# UNITED STATES PATENT OFFICE.

WESLEY REES, OF KEOKUK, IOWA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 148,323, dated March 10, 1874; application filed February 15, 1873.

*To all whom it may concern:*

Be it known that I, WESLEY REES, of Keokuk, Lee county, Iowa, have invented an Improvement in Car-Couplings, of which the following is a specification:

The object of this invention is to make an improved and automatic coupling for railway-cars. It is made substantially as hereinafter set forth, referring to the accompanying drawings, in which the figure is a vertical section of portions of two draw-bars in the act of coupling.

The draw-bar A is made of cast or wrought metal, consisting of an outside shell and an open center space, opening forward at A'. The link B projects forward and down at an angle, resting on the beveled lower lip A'' of draw-bar. It is formed of two side parts, B', connected, in front, to form the drawing-loop. These, at their back ends, turn outward, each to its own side, through holes C in the draw-bar shell, for attachment. The link is made of wrought metal, and is put in by bending the two back ends together to go in the draw-bar, and then spreading them into their holes. They are then kept apart by a connecting part, B'', which is connected with one side only, and bent up between when in place. This reaches not quite to the top level of the link, so as not to interfere with the link sliding up over it.

When the draw-bars of two cars come together, each with its link projecting, as at B, the one which is the highest will strike on top of the other, and slide up along it, and enter the draw-bar at A', the lower link acting as a guide therefor. Then the incoming link B''' will strike the pin E, pivoted in a holder, F, and push it back to position E', (shown in dotted lines,) so the pin will fall into the link, and complete the coupling.

The holder part F lies on top of the draw-bar, and is pivoted to it at F', so it may be raised into position, as shown in dotted lines at F'', to lift the pin up into position E'', so it will either enter or release the link

B'', to complete or disconnect the coupling. The projection F'' at the back end strikes on the draw-bar, to keep part F from being raised too high. Hook H, pivoted to part F, engages with a catch on the draw-bar, (part F being partly broken away in the drawing to show it,) to hold part F and the pin from flying up while running. This is disengaged, and part F is lifted into position F'' by means of cord H'', attached to the back part H' of the hook. When part F is lifted into position F'', part G, pivoted to it, and hanging into the draw-bar by a slot in its top, strikes with its lower end onto the bottom of draw-bar, and holds part F up, so the link B''' may enter or pass out of the draw-head. When link B''' enters, in coupling, it strikes part G, as shown, and pushes it back, letting part F and pin E down automatically, completing the coupling.

The pin E is broad lengthwise of the draft, for strength. It swings back in a slot in top of the draw-bar. A place for an ordinary-shaped pin is made in the draw-bar at the ordinary place, wider than that slot, so that a common pin may be used in case of accident.

The link B projects as shown when the cars are coupled, the lower lips A''' of the draw-bars being beveled above and below to fit it, and let the draw-heads come together without obstruction, as shown.

The space between the draw-heads for play may be taken up by buffers, or shorter links may be used, without swinging the pins.

I claim—

1. The draw-bar A, with lower lips beveled above and below, the pivoted coupling part B, arranged to act alternately as a guide and as a coupling, and pin E, combined for automatic operation, substantially as set forth.

2. The pin E, in combination with the part F and hook H, substantially as set forth.

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Witnesses:

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