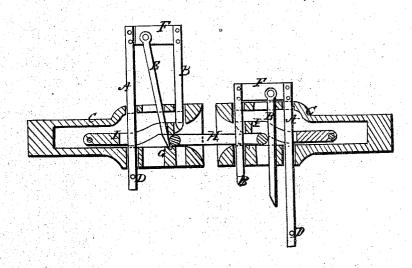
## W. J. EVANS.

Car Coupling.

No. 100,515.

Patented March 8, 1870.



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## United States Patent Office.

## WILLIAM J. EVANS, OF HOMER, IOWA, ASSIGNOR TO HIMSELF AND CHARLES WARNER, OF SAME PLACE.

Letters Patent No. 100,515, dated March 8, 1870.

## IMPROVED RAILWAY-CAR COUPLING.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, WILLIAM J. EVANS, of Homer, in the county of Hamilton, and State of Iowa, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to a new and useful improvement in car-couplings, whereby a simple and efficient device may be obtained by which the cars may be coupled self-actingly when the said device has been

properly set.

This invention consists in the arrangement with a coupling-pin having a vertical guide of a hinged setting lever for holding the pin above the opening for the link, and for being tripped by the link to let the pin fall when the link has passed in; also in the arrangement with the same of a balancing tongue to hold the links in a horizontal position so as to enter the mouth of the draw-head of an approaching car.

The drawing represents a longitudinal section of a part of coupling devices, constructed according to my

improvements.

A represents a guide for the coupling-pin B working through a vertical hole in the draw-head C, and provided with a pin, D, or other stop to prevent being drawn out. This guide maintains the coupling-pin always in line with its hole.

E represents a hinged tripping-arm, connected to the top of the guide, or to the cross-bar F, connecting the guide and the pin, and also projecting downward in a hole in the draw-head. This hole is elongated, and near the front wall thereof, in the longitudinal recess of the draw-head, is a notch, G, into which the foot of the said tripping-arm is placed when it is desired to hold the pin up to couple the cars.

The link H being forced into the bell mouth of the draw-head, will strike the tripping-arm and push it out of the notch G, when the pin B will fall and en-

gage the link.

I represents a weighted tongue arranged in the recess of the draw-head so as to receive the end of the link under its front end, and thereby maintain the link in a horizontal position, so as to enter the mouth of a draw-head on an approaching car, and thereby effect the coupling self-actingly by knocking the tilting arm out of its notch.

The mouths of the buffer or draw-heads, and the recesses behind them, should be so arranged as to permit sufficient lateral play for the links, without permitting them to be so far moved as to obstruct the falling of the pins through them.

Having thus described my invention,

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

1. The combination with the draw-heads and the pins B of the guides A and tripping-arms E, when arranged substantially as specified.

2. The combination with the draw-heads, pins, guides, and tripping-arms, of the weighted tongues L, when arranged substantially as specified.

WM. J. EVANS.

Witnesses:

ORIN WARNER, P. M. SUTTON.