

H. HUGHES.
Car Coupling.

No. 55,870.

Patented June 26, 1866.

Fig. 1.

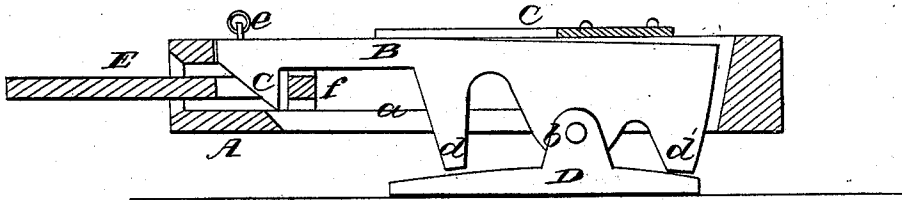
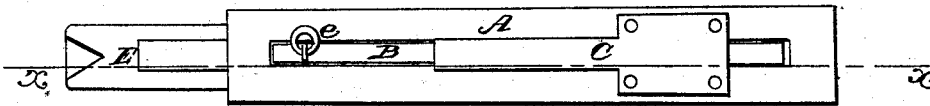


Fig. 2.



Witnesses
J. W. Blount
Wm. Dean Couell

Inventor
Hiram Hughes
Per *M. W. L.*
Attorneys

UNITED STATES PATENT OFFICE.

HIRAM HUGHES, OF SAVONA, NEW YORK.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. 55,870, dated June 26, 1866.

To all whom it may concern:

Be it known that I, HIRAM HUGHES, of Savona, Steuben county, State of New York, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention; Fig. 2 a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved car-coupling of that class which is commonly called "self-coupling;" and it consists in a pivoted latch and a suspended bar arranged within a draw-head and used in connection with a link or shackle, as hereinafter fully shown and described, whereby a simple and efficient self-acting or self-connecting coupling is obtained, and one which will admit of being readily disconnected when desired.

A represents a draw-head, which may be attached to a car in the usual way. This draw-head has a mortise, *a*, made vertically through it, in which a latch, B, is fitted and works on a pivot, *b*, which is about two-thirds the length of the latch from its front end. (See Fig. 1.)

The front end of the latch B is provided with a pendent hook, *c*, and the rear part of the latch is formed with two pendent projections, *d* *d'*, one at each side of the pivot *b*, which projects down through the mortise *a* of the draw-head, and the pivot *b* passes transversely through the lower part of the draw-head some distance below the line of the hook *c*, as shown clearly in Fig. 1.

To the top of the draw-head there is attached a spring, C, which has a tendency to keep the latch pressed down; and on the pivot *b* there is suspended a bar, D, out of center, the front part of said bar (the portion in front of the pivot) being considerably longer than the rear part, and proportionally heavier, so that the rear part of the bar will, in consequence of the

superior gravity of the front part, press against the rear pendent projection, *d*, of the latch and assist the spring C in keeping the hook *c* down, and by pressing or drawing up the front end of the bar D the front part of the latch B will be forced up and the link or shackle disengaged. This bar D may have a cord or chain attached for the purpose of thus actuating it. This result may also be attained by a chain or cord secured to a ring, *e*, on the front end of the latch B. This chain or cord, as well as that connected to the pivoted bar D, may be carried to any part of the car so as to be convenient for the brakeman or other employé to operate.

The link or shackle (designated by E) will, on entering the draw-head, force up the front part of the latch B, so that the hook *c* will be forced into it, and this link or shackle may be so constructed that it may be fitted in either the ordinary draw-head or in my improved draw-head, or one end fitted in my improved draw-head and the other in the ordinary draw-head, my improved draw-head being provided with shoulders *f*, to serve as bearings for the end of the link or shackle.

This coupling cannot casually disconnect itself, while it will connect or engage itself with certainty in the event of two cars coming in contact. The frequent accidents now caused by railroad employés passing between the cars to couple and uncouple them will be avoided. In consequence of the pivot *b* being below the line of the hook *c*, the pull on the latter by the link or shackle will have a tendency to press the hook down in the link or shackle.

I disclaim the hook *c* separately considered.

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

The combination of the latch B, with its catch *c* and pendants *d* *d'*, of the form shown, and the pivoted bar D, operating in combination with a suitable link, E, in the manner and for the purpose herein specified.

HIRAM HUGHES.

Witnesses:

J. C. MALLORY,
J. D. BARNES,
G. W. HAMMER.