

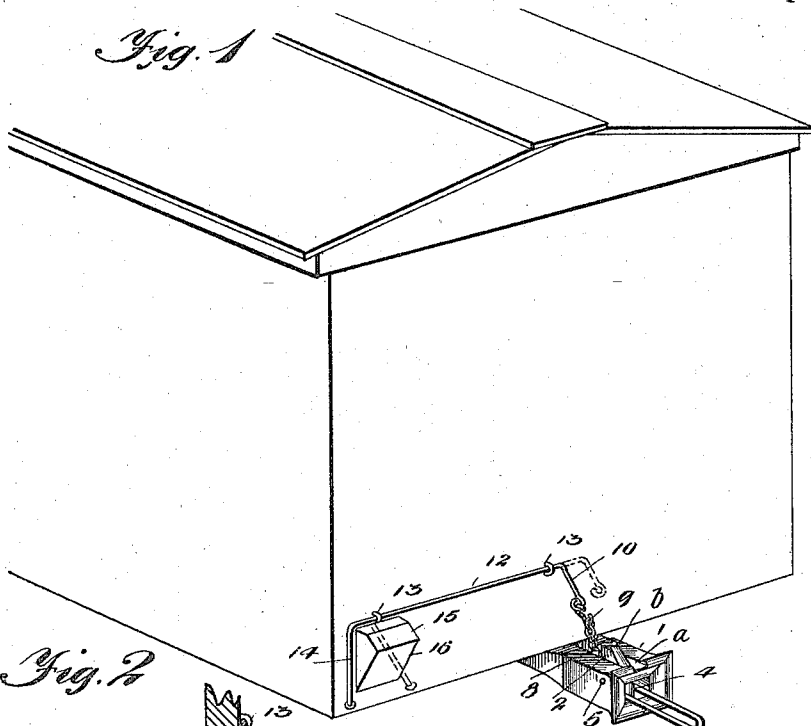
(No Model.)

A. M. HARDIN & W. B. PENDLETON.  
CAR COUPLING.

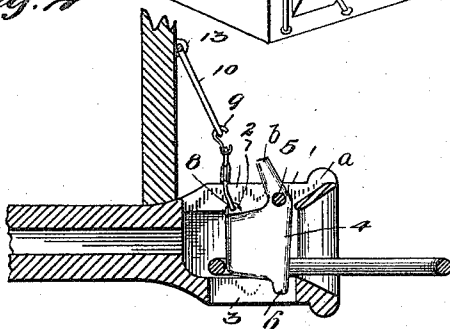
No. 580,487.

Patented Apr. 13, 1897.

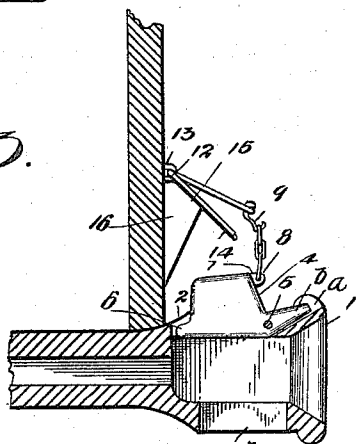
*Fig. 1*



*Fig. 2*



*Fig. 3.*



Witnesses

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# UNITED STATES PATENT OFFICE.

ASIA M. HARDIN AND WILLARD B. PENDLETON, OF LODIBURG, KENTUCKY.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 580,487, dated April 13, 1897.

Application filed November 19, 1896. Serial No. 612,775. (No model.)

*To all whom it may concern:*

Be it known that we, ASIA M. HARDIN and WILLARD B. PENDLETON, citizens of the United States, residing at Lodiburg, in the county of Breckinridge and State of Kentucky, have invented certain new and useful Improvements in Automatic Car-Couplings; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention has relation to improvements in automatic car-couplings; and the object is to provide a simple, durable, and reliable device of this kind.

To this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same letters and figures of reference indicate the same parts of the invention.

Figure 1 is a perspective view of our invention. Fig. 2 is a longitudinal section of the same in position for coupling, and Fig. 3 is a similar view with the parts in position for uncoupling.

1 represents the draw-head, formed with longitudinal slot 2 in its top and a similar though smaller slot 3 in its bottom. A longitudinal recess *a* is formed in the top of the forward end of said draw-head. A T-shaped coupling-pin 4 is pivoted on a rod 5 so as to swing freely in the upper slot 2, its lower arm 6 engaging the lower slot 3 in the bottom of the draw-head. The upper integral arm *b* of said coupling-pin 4 is adapted to engage the longitudinal recess *a* in the draw-head and limit the upward movement of said pin when the cars come together. 7 represents an integral eye on the shank 8 of said coupling-pin, and it is connected by a short chain 9 to the depending arm 10 of a transverse shaft 12, sliding laterally in bearings 13 13 on the end of the car. The outer end of this shaft terminates in a hand-lever 14, which, when it is hanging downward, allows the coupling to rest by gravity in the position shown in Fig. 2, and

while in this position, if the link on the opposite car be inserted in the draw-head, it pushes the arm 6 backward and upward, the link riding under it until the link has passed the end of the arm, which then falls by gravity through the open end of the link back to its first position, thereby locking the link in the draw-head.

To release the link and uncouple the cars, the lever 14 is raised, which raises the arm 10 and by means of the chain 9 lifts the coupling-pin to a horizontal position and releases the link. If it is desired to retain it in this position, the lever 14 is forced inwardly a short distance until it rests on the inclined face 15 of the block 16, which holds the coupling-pin in an elevated position, the arm *b* of the coupling-pin resting snugly in the recess *a* in the draw-head to secure the same against accidental displacement.

To release the pin, so that the cars will couple automatically, the lever 14 is pulled outwardly from the block 16 and allowed to drop down. This releases the coupling-pin, and it is left free to act by gravity when a link is inserted in the draw-head.

Although we have specifically described the construction and relative arrangement of the several elements of our invention we do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of our invention without departing from the spirit thereof.

Having thus fully described our invention, what we claim as new and useful, and desire to secure by Letters Patent of the United States, is—

The draw-head 1, formed with the aligned longitudinal slots 2 and 3, the former provided with a continuous inclined recess *a*, the coupling-pin 4, pivoted on the transverse rod 5, and provided with the integral arm 6, projecting into the slot 3, and the eye 7, in the integral shank 8, in combination with the horizontal transverse sliding shaft 12, formed with the integral hand-lever 14, and the integral longitudinal depending arm 10, the solid bearings 13 13 in which said shaft is mounted, said bearings so arranged with reference to the lever 14 and the arm 10 as to limit the

longitudinal movement of said shaft in either direction, the chain 9, connecting the outer end of the arm 10, with the eye 7 of the coupling-pin, and the detached block 16, formed  
5 with an inclined face 15, and secured to the end of the car in the path of said lever 14, substantially as shown and described.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

ASIA M. HARDIN.

WILLARD B. PENDLETON.

Witnesses:

J. A. HAYNES,

SAML. ROBERTSON.