

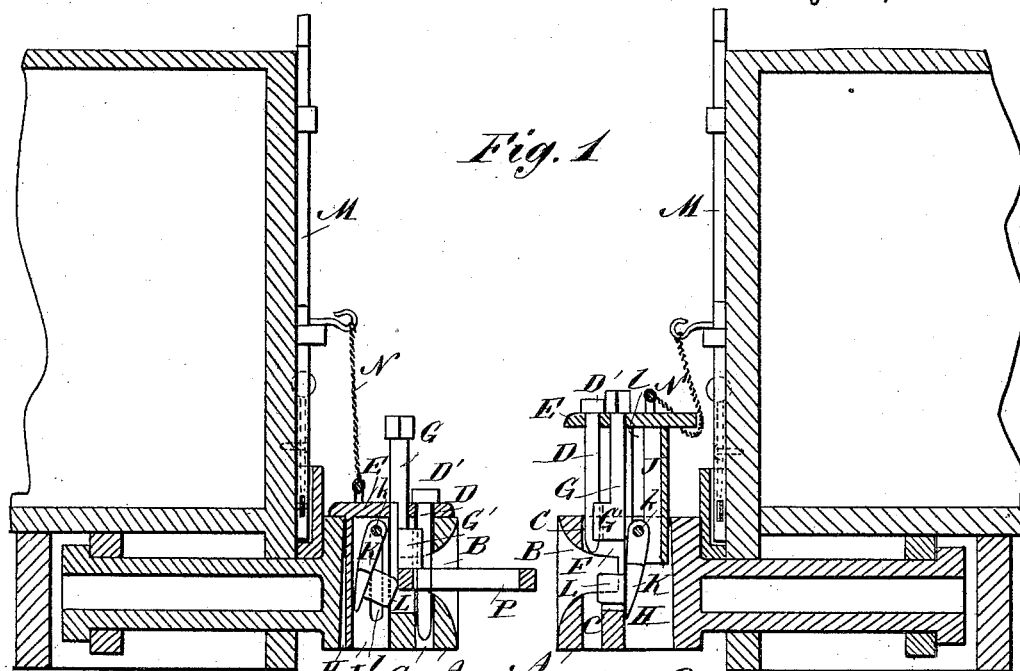
(No Model.)

G. W. HOOVER.

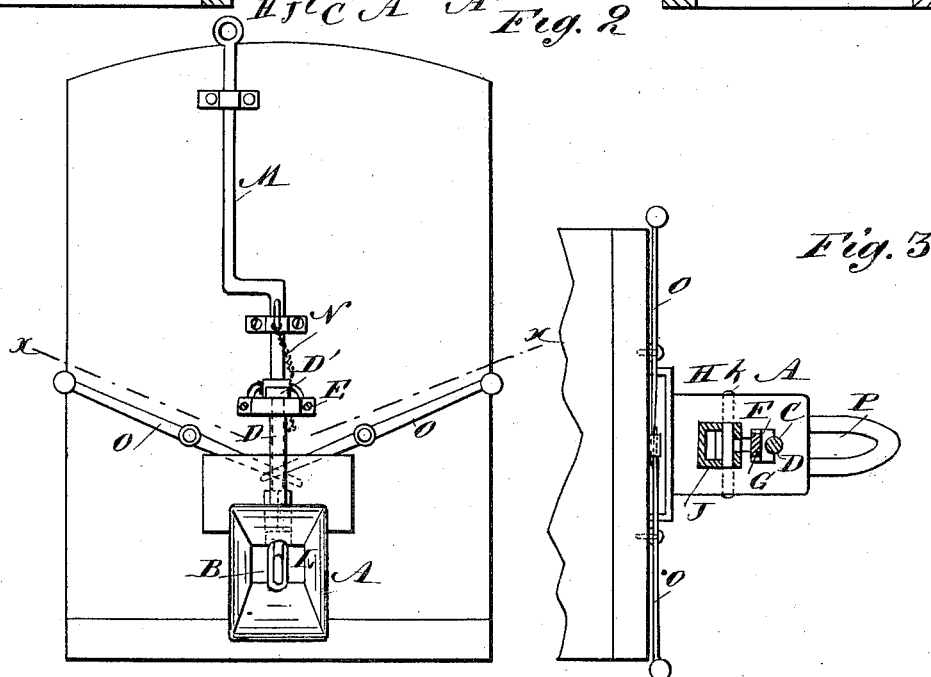
CAR COUPLING.

No. 302,730.

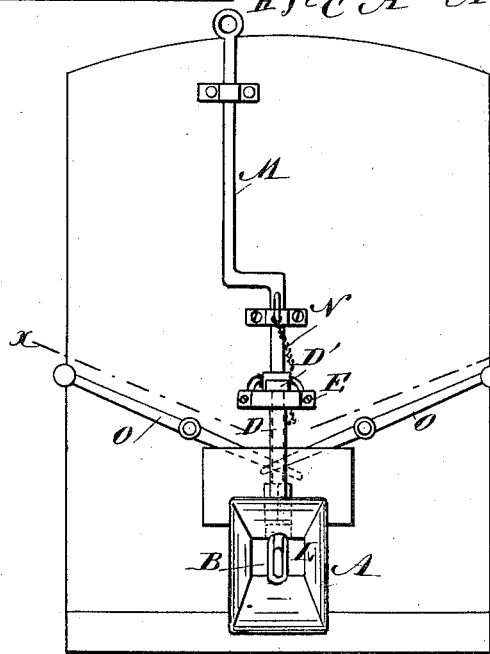
Patented July 29, 1884.



*Fig. 1*



*Fig. 2*



*Fig. 3*

WITNESSES:

*C. Newell*  
*C. Sedgwick*



*Fig. 4*

INVENTOR:

*G. W. Hoover*

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# UNITED STATES PATENT OFFICE.

GEORGE W. HOOVER, OF KEITHSBURG, ILLINOIS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 302,730, dated July 29, 1884.

Application filed May 23, 1884. (No model.)

*To all-whom it may concern:*

Be it known that I, GEORGE W. HOOVER, of Keithsburg, in the county of Mercer and State of Illinois, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The invention consists in the combination, with a draw-head, of a plate held above the same and combined with devices for moving it vertically, from which plate a pin or bar for holding the link horizontally and a guide project downward into suitable apertures in the draw-head. In the draw-head a latch is pivoted, which is provided with an outwardly-projecting tongue, which holds the above-mentioned plate raised, and permits it to drop when the latch is tripped by the incoming link.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of my improved car-coupling, showing it in two different positions. Fig. 2 is an end view of the same. Fig. 3 is a sectional plan view of the same on the line *xx*, Fig. 2. Fig. 4 is a perspective view of the latch.

The draw-head A has a beveled mouth, B, in its outer end. Near the outer end of the draw-head the vertical pin-aperture C is formed, for receiving the coupling-pin D, which is passed through an aperture in plate E on the top of the draw-head, and which pin is provided with a head, D', at its top, which prevents it from dropping through the aperture in the said plate E.

Behind the pin-aperture C an aperture, F, is formed in the top of the draw-head, for receiving a downwardly-projecting bar, G, having an enlargement, G', at its lower end, the upper parts of the apertures C and F being united.

Behind the aperture F a vertical aperture, H, is formed, which extends from top to bottom, and contains a hollow slide, J, projecting downward from the plate E, to which it is fastened. A latch, K, is pivoted on a transverse pin, *k*, with aperture H, which pin passes through vertical slots *l* in the sides of the slide J.

The latch K is provided with an outwardly-projecting tongue, L. A vertically-sliding rod, M, is held by suitable clips on the end of the car, and is connected by a chain, N, with the plate E. The inner ends of two levers, O, pivoted in the ends of the car, pass through a vertical slot in the rod M, which rods extend to the sides of the car.

The operation is as follows: If a car is to be coupled, the plate E of that draw-head that is to receive the link is raised by pulling up the rod M from the top of the car, or by pressing down the outer end of one of the levers O. If the plate E is moved, the latch K swings outward and the tongue L passes into a slot connecting the apertures C and H, and thus holds the plate E, the slide J, the bar G, and the pin D raised. When the link P enters, it strikes the tongue L and swings the latch K inward or backward, and thus permitting the bolt D, the bar G, and the slide J to drop, the coupling-pin D passing through the link, and thus coupling the cars. The bar G rests on the inner end of the link P, and is of sufficient weight to hold the outer end of the link P raised, so that the link will be in a horizontal position. To uncouple the cars, the bar E is raised by pulling upward the rod M, or by lifting the rod M by means of one of the levers O.

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

1. The combination, with a draw-head, of a vertically-moving plate above the same, a slide projecting downward from the plate into an aperture in the draw-head, a coupling-pin held on the said plate, and a bar held on the said plate and projecting downward from the said plate, substantially as herein shown and described.

2. The combination, with a draw-head, of a plate above the same, means for raising the plate, a slide projecting from the plate into an aperture in the draw-head, a bar projecting from the said plate into an aperture in the draw-head, and a coupling-pin held in the said plate and projecting downward, substantially as herein shown and described.

3. The combination, with the draw-head A, of the plate E, the coupling-pin D, the bar G,

and the slide J, provided with vertical slots *i*,  
the latch K, provided with a tongue, L, and  
of the pin *k*, on which the latch K is pivoted,  
substantially as herein shown and described.

- 5 4. The combination, with the draw-head A,  
of the plate E, slide J for guiding it to move  
vertically, a coupling-pin held in the said plate,

and the latch K, pivoted in the draw-head, and  
provided with an inwardly-projecting tongue,  
L, substantially as herein shown and described. 10  
GEORGE W. HOOVER.

Witnesses:

H. W. HUMPHREYS,  
WILL. S. CABEEN.