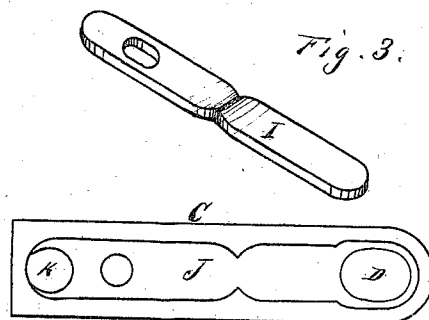
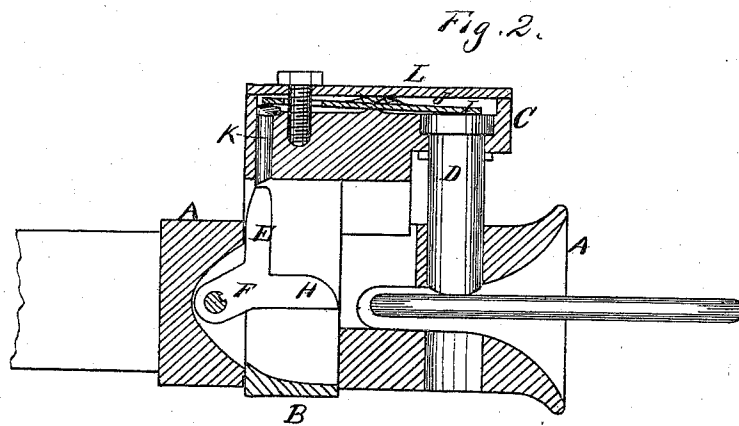
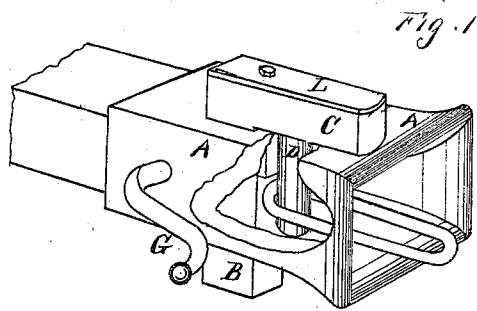


M. DISNEY.
Car-Couplings.

No. 140,124.

Patented June 24, 1873.



Witnesses.

John W. Marquis.
[Signature]

Mordecai Disney.
Assignor to himself, Henry C. Kibbe,
and John D. Heilath. By
L. M. M. Smith, atty.

UNITED STATES PATENT OFFICE.

MORDECAI DISNEY, OF OAKLAND, CALIFORNIA, ASSIGNOR TO HIMSELF,
HENRY C. KIBBE, AND JOHN D. HILDRETH.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **140,124**, dated June 24, 1873; application filed
January 9, 1873.

To all whom it may concern:

Be it known that I, MORDECAI DISNEY, of Oakland, in the county of Alameda and State of California, have invented an Improvement on Railway Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters marked thereon.

My invention relates to certain improvements upon a car-coupling, for which Letters Patent were granted to me, and dated December 3, 1872; and it consists mainly in a novel construction and arrangement of a plate which is placed in the top of the pin-holder, and so balanced that when the link enters the opening in the bumper-head it will slightly raise the head of the pin, and this will act upon the plate and depress the rear end of it. A short pin moves vertically beneath the rear end of this plate, and this pin is depressed by the action of the plate. The lower end of this pin is beveled so that the angular part will act upon the upper end of the forked lever which serves to operate the pin-holder and the pin, and thus insure the coupling of the cars under any circumstances, whether the cars are crowded together or not.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my coupling. Fig. 2 is a longitudinal section, showing my improvement. Fig. 3 is an enlarged view of the plate and the opening in the head of the pin-holder in which it lies.

A is the bumper-head slotted vertically to admit the sliding-bar B, which is provided with a horizontal head or projection, C, to serve as a holder for the pin D, as described in my former specification. The bar B is elevated and held in place with the pin, ready for coupling by the arm E, of the forked lever F; and this lever is moved by the crank-shaft or arm, G, as shown.

In my former patent the entering link was caused to strike the rounded end of the arm H of the lever F, and thus disengage the arm E, and allow the bar and pin to fall; but I now employ an oscillating plate, I, for this purpose.

This plate is placed in a depression, J, in the top of the horizontal arm C, as shown, and has its center so balanced, by being curved upward or made thicker in the center than at the ends, that it can tip in either direction in the cavity. One end of this plate lies over the head of the pin D, while the rear end is just above another small pin, K. This small pin extends downward into the cavity in which the forked arm E moves, and when the bar and pin are raised the arm F stands just under the pin K.

The operation will be as follows: When the link is entered to the bumper-head for the purpose of coupling the cars, it will pass under the rounded end of the coupling-pin D, and thus raise it slightly. This action tilts the movable plate I in its cavity, and the rear end of the plate pressed down upon the small pin K, and forces it down against the end of the arm E, of the forked lever. The lower end of the pin K is beveled off, as shown, so that when pressed down it acts to throw the arm E forward, and thus release the bar B, and allow it to fall and carry the coupling-pin through the link.

This device insures the coupling of the cars under all circumstances, and when the cars are in such relative position that my other device might sometimes fail of its object.

A plate, L, is secured over the opening J, and serves to protect and retain in place the pins D and K, and also the plate I.

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

1. The pin K, with its beveled lower end constructed to operate upon the arm E of the lever, substantially as and for the purpose set forth.

2. The oscillating plate I and the pin K, in combination with the pin D, constructed to operate substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

MORDECAI DISNEY. [L. s.]

Witnesses:

C. W. M. SMITH,
PHILIP MAHLER.