

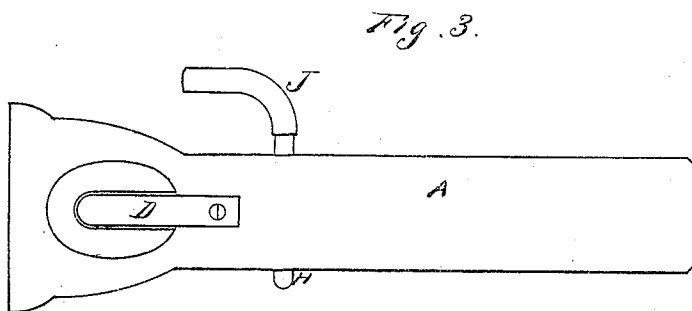
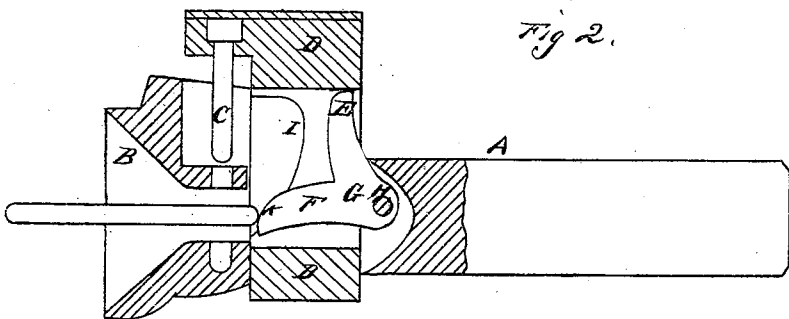
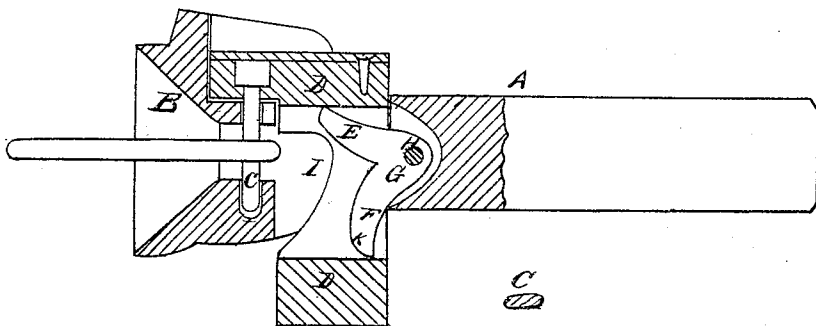
M. DISNEY.

Improvement in Car-Couplings.

No. 133,085.

Fig. 1.

Patented Nov. 19, 1872.



Witnesses  
Geo. S. Lacey  
Saml. G. Browne

Inventor  
Mordecai Disney  
By G. N. M. Smith atty.

# UNITED STATES PATENT OFFICE.

MORDECAI DISNEY, OF OAKLAND, CALIFORNIA.

## IMPROVEMENT IN CAR-COUPINGS.

Specification forming part of Letters Patent No. 133,085, dated November 19, 1872.

*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 Improved Car-Coupling; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to an improved car-coupling; and it consists in the combination of a bumper having a vertically-moving slide, carrying the coupling-pin in its front end, with a triangular piece of metal, which is pivoted in the bumper so as to be operated from the side. Whenever this operating piece is turned up it retains the slide locked in that position, to be released only by the entering of the link, which unlocks it by striking against a peculiarly-curved face on the lower part. When the slide is down and the pin through the link, the lower part of the angular piece locks it in that position. The pin is made of an elongated section so as to have greater strength.

Referring to the accompanying drawing for a more complete explanation of my invention, Figure 1 is a longitudinal vertical section of my bumper with the link in place and the slide locked down. Fig. 2 is a section with the slide up. Fig. 3 is a plan or top view.

A is a car-bumper, with the usual flaring mouth B. From the rear end of this opening a narrow passage extends back to receive the link, and the coupling-pin C passes down through the front of this narrow opening. A slide, D, moves up and down in a vertical slot in the bumper in the rear of the coupling-pin, and at the top it is extended forward so as to receive and hold the head of the pin, which thus moves with it. A slot is made through the slide D, as shown, and within this slot the ends E and F of a triangular piece of metal, G, move up and down, turning about the shaft H, which extends through the sides of the bumper and is turned up at one end to form an operating-handle, J. The slide D is recessed at I so that the link can enter the recess when it passes into the opening in coupling the cars.

The operation will be as follows: The slide D is raised by turning the arm J, and the arm

E elevates the slide carrying the pin C up clear of the link-opening. The peculiar form of the piece G and the relation of the arms to their operating-arm causes the arm E to stand with its end squarely under the upper part of the slot in the slide and thus prevent it from dropping, as in Fig. 2. At the same time the arm F is brought up so as to stand with its curved face K just opposite the link-opening, and when the link enters it strikes this curved face, depressing the arms F and E, which releases the slide and allows it to fall. This carries the pin through the link, and the coupling is complete. At the same time the arm F has assumed a position against the lower face similar to that before occupied by the arm E on the upper face of the slot, and it is thus locked down so that the pin cannot be withdrawn without turning the arm J. The pin C is made of an oval or elongated section, as shown, to give it greater strength edgewise, and prevent bending so easily, as it otherwise would if constructed of round metal.

By this construction I am enabled to make a simple, compact, and convenient coupling, not easy to get out of order, and always operative.

When the bumpers are on a plane, or nearly so, the coupling will work automatically, and without the necessity of going between the cars; and in uncoupling a cord or chain may be connected to the arm J and the cars disconnected from the platform or top.

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

1. The combination of the bumper, slotted as shown, and having the slide D with its projection carrying the pin C and moving in unison with it, with the triangular piece G, substantially as and for the purpose described.

2. The triangular piece G, mounted as shown, and having the peculiarly-shaped arms E and F for operating and locking the slide and pin, substantially as described.

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

MORDECAI DISNEY. [L. S.]

Witnesses:

PHILIP MAHLER,  
C. W. M. SMITH.