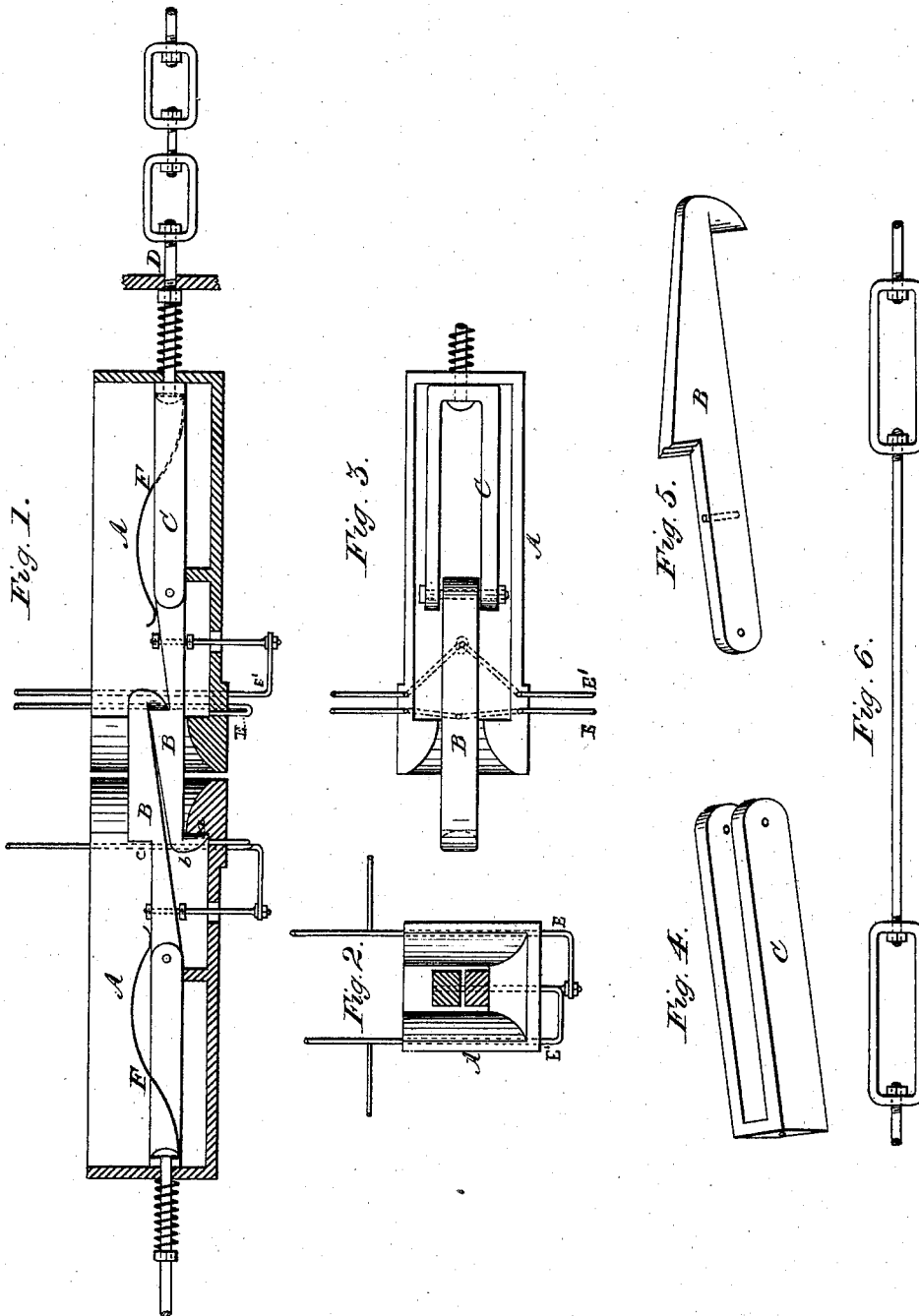


J. DINSMORE.  
Car-Coupling.

No. 165,484.

Patented July 13, 1875.



Witnesses:

*C. W. Jacobs*  
*Thomas George.*

Inventor:

*John Dinsmore*

# UNITED STATES PATENT OFFICE.

JOHN DINSMORE, OF DENVER, COLORADO TERRITORY.

## IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 165,484, dated July 13, 1875; application filed March 2, 1875.

*To all whom it may concern:*

Be it known that I, JOHN DINSMORE, of Denver, county of Arapahoe, Colorado Territory, have invented an Improvement in Car-Couplings, of which the following is a specification:

The object of my invention is to furnish a safe and reliable automatic coupling device for railroad-cars, reference being had to the accompanying drawings forming a part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved coupling, and Figs. 2, 3, 4, 5, and 6 detached portions of the same.

A represent the draw-head; B, the double-catch latch; C, the clevis to which the latch is secured; D, the draw-bar; E, the rod for lifting the latch and uncoupling the car; E', the rod for setting and fastening the latch; F, a spring which holds the latch down on the lower side of the opening of the draw-bar and prevents the latches from displacement. The opening to the interior of the draw-bar is inclined, so that the lower catch will be raised and carried over the catch *a*, where it is held securely by the pressure of the spring F. The use of this spring F can be obviated by the use of the rod E'. The double-catched latches have a catch or shoulder, *b*, on the under side of one end, and another catch, *c*, about midway on the upper side. The one on the end engages with the catch *a* on the draw-head, or in the catch *c* on the upper side of the adjacent double latch. It will be seen that it does not matter which of the latches engages or enters the draw-head first, the other latch will ride over it and engage with the catch *c*, thus forming a sure and safe coupling. The double latches B are secured to a square link or clevis, C, which in turn is secured to the draw-bar D.

The rod E extends down from the top of the car or from the platform below the draw-head, the lower end of which is bent at a right angle, and to the end of which is secured a short rod which enters the draw-head below the double latches, and when the rod is pulled up the latch is raised and the cars disconnected. The rod E' is of a similar construction, except that the short rod passes through the latch, and is used for setting the latch, and the end of which is provided with a screw-thread, on which is placed nuts both above and below the latch. As the latch is raised it describes the arc of a circle. The lifting-rod, still remaining in a vertical position, infringes on the sides of the opening in the latch through which it passes, thus holding the latch in an elevated position until forced down by the operator.

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

1. The double-catch latches B, pivoted to the square link or clevis C, in combination with the catches *a* of the draw-head, substantially as and for the purpose specified.
2. In combination with the double-catch latches B, the rods E and E', substantially as and for the purpose specified.
3. In combination with the double-catch latches, the strap-spring F, substantially as and for the purpose specified.
4. In a car-coupling the double-catch latches B, draw-head A, draw-head catches *a*, link or clevis C, draw-bar D, spring F, rods E and E', all arranged to operate in the manner set forth, and for the purpose specified.

JOHN DINSMORE.

Witnesses:

THOMAS GEORGE,  
HUNTER GUNNELL.