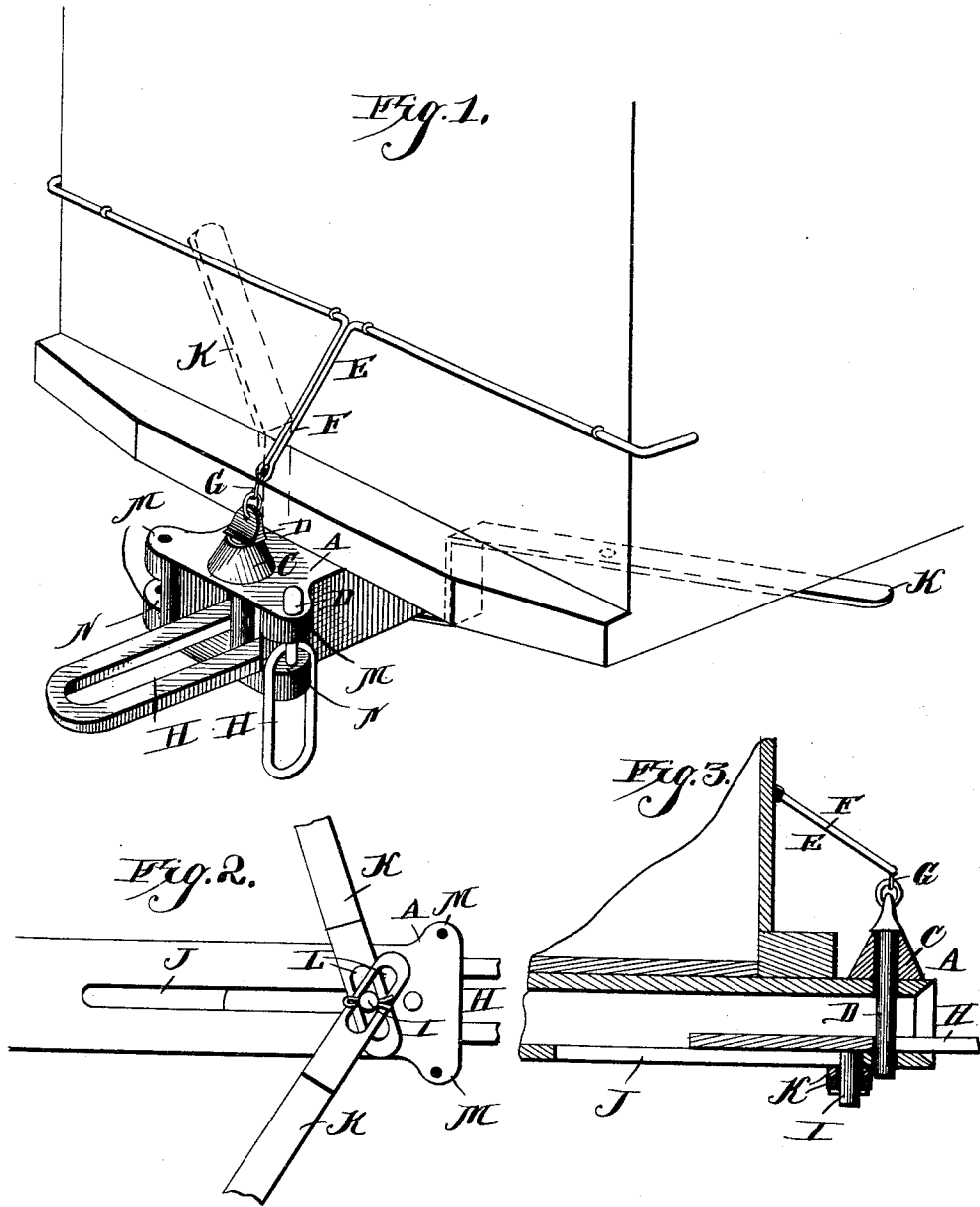


(No Model.)

J. S. MORGAN & E. M. BEANBLOSSOM.  
CAR COUPLING.

No. 406,933.

Patented July 16, 1889.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN SAMUEL MORGAN AND EMMETT MADISON BEANBLOSSOM, OF EMPORIA, KANSAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 406,933, dated July 16, 1889.

Application filed April 24, 1889. Serial No. 308,358. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN SAMUEL MORGAN and EMMETT MADISON BEANBLOSSOM, citizens of the United States, residing at Emporia, in the county of Lyon and State of Kansas, have invented a new and useful Car-Coupling, of which the following is a specification.

Our invention relates to improvements in car-couplings; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the end of a car, showing our improved coupling applied thereto. Fig. 2 is a bottom plan view of the coupling. Fig. 3 is a longitudinal section of the same.

The car is of the usual or any preferred construction, and the draw-head A is secured to the under side thereof at the end of the same in the usual manner, so that it can yield to the force of the contact between two opposing draw-heads. At its front end, on its upper side, the draw-head is provided with a barrel or pin-guide C, in which the coupling-pin D is mounted, and the said coupling-pin is raised and lowered by means of a rock-shaft E, mounted on the end of the car and having a forwardly-extending crank-arm F, which is connected with the coupling-pin by a chain or cable G, as clearly shown. This rock-shaft is provided at its ends with suitable handles, so that it may be rotated to raise or lower the coupling-pin.

The coupling-link is mounted in the draw-head, and consists of an elongated plate having a longitudinal slot H in its front portion and provided in rear of said slot with the depending stud or pin I, which projects downward through a longitudinal slot J in the bottom of the draw-head. On the bottom of the car we pivot the horizontal vibrating levers K, the inner ends of which project under the draw-head, and are provided with longitudinal slots L, which engage the stud or pin I, projecting from the bottom of the link. The draw-head is further provided on its sides at its front end with the lateral projections M, which are provided with vertical perforations and the horizontal recesses N, so that

when, through accident or any other cause, the pin D and link H are inoperative, an ordinary coupling-pin can be inserted through the said projection and engage an ordinary coupling-link having its end engaging the recess N.

The construction and arrangement of the several parts of our device being thus made known, the operation and advantages of the same will, it is thought, be readily understood. When it is desired to couple two cars together, the horizontal levers are operated so as to project the link in one draw-head forward from the same, and the two draw-heads are then brought together. As the draw-heads approach, the link will enter the opposing draw-head, and the pin is then lowered so as to engage the link, thereby effecting the coupling. When it is desired to uncouple the cars, the rock-shaft on the end of the car is rotated so as to raise the coupling-pin out of engagement with the link, as will be readily understood.

It will be observed that in our device the coupling-link will be always held within the draw-head, so that it cannot be lost, and will be protected from injury. The slotted construction of the draw-head and the inner ends of the horizontal levers permits the coupling-link to move freely in the operation of the device, and at the same time guides it forward in a straight line, so that it will enter the opposing draw-head with certainty. The barrel or pin-guide on the upper side of the draw-head serves to maintain the coupling-pin in a vertical position, so that it will not be liable to bend while moving through the draw-head. The device is very simple and efficient, and can be operated from either side of the car, so that there is no necessity for the operator to pass between the cars.

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

1. The combination, with the draw-head, of the coupling-link mounted therein and the horizontal lever pivoted to the bottom of the car and having its inner end connected to the link, as set forth.

2. The combination, with the draw-head

having a longitudinal slot in its bottom, of the coupling-link having a depending stud passing through the said longitudinal slot, and the horizontal lever having its inner end provided with a longitudinal slot engaging said stud, as set forth.

3. The combination of the draw-head having the barrel C on its upper side, the coupling-pin mounted in the draw-head and passing through said barrel, the rock-shaft mounted on the end of the car and connected with the coupling-pin, the link mounted in

the draw-head, and the horizontal lever having its inner end connected with the link, as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

JOHN SAMUEL MORGAN,  
EMMETT MADISON BEANBLOSSOM.

Witnesses:

WALTER BIRDSALL,  
W. S. WOLLEY.