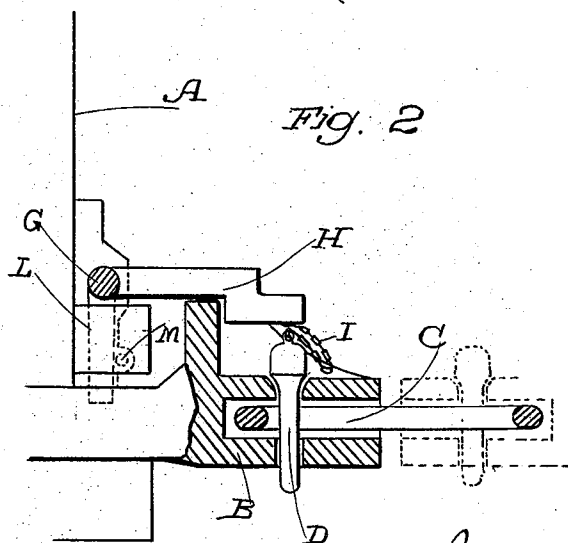
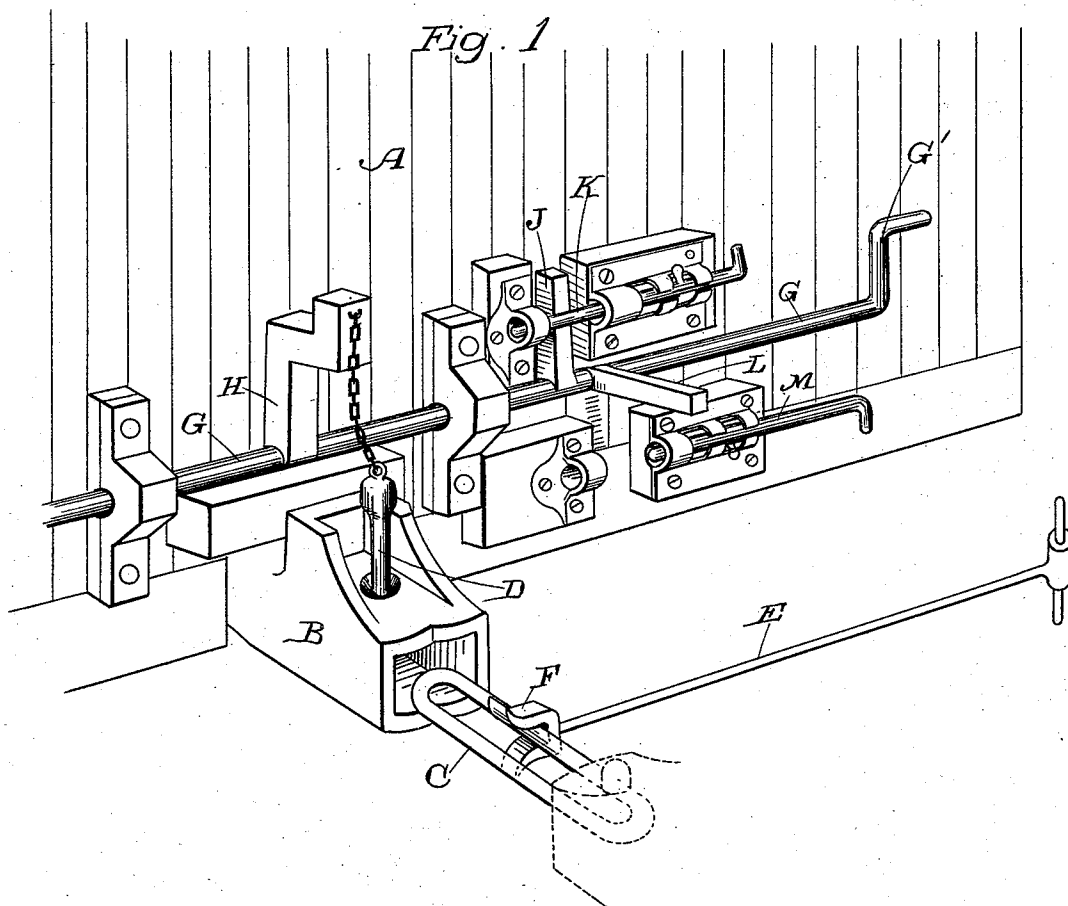


(No Model.)

J. McDONOGH.
CAR COUPLING.

No. 506,528.

Patented Oct. 10, 1893.



Witnesses,
J. A. Boyless

Inventor,
James McDonogh.
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attys

UNITED STATES PATENT OFFICE.

JAMES McDONOGH, OF SAN FRANCISCO, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 506,528, dated October 10, 1893.

Application filed February 28, 1893. Serial No. 464,036. (No model.)

To all whom it may concern:

Be it known that I, JAMES McDONOGH, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Car-Couplings; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to car couplings.

It consists in a novel device for introducing or removing the coupling pin and link whereby the operation may be performed without going between the cars or exposing the person to danger.

Referring to the accompanying drawings for a more complete explanation of my invention,—Figure 1 is a perspective view of a part of the end of a car showing my device. Fig. 2 is a vertical section through the coupling head showing the position of the parts when coupled.

A represents the end of a car, and B the draw-head through which the coupling is made.

C is the coupling link, and D a coupling pin.

E is a rod made of tubular or solid metal, as may be desired, and of sufficient length to extend from the outside of a car to the center. The inner end has a fork F made upon it, the opening of which is equal in width to the thickness of a coupling link so that this fork will clasp the link from above and below, and by means of a handle upon the outer end of the rod, the end of the link may be straightened so as to be in a central line, if it happened to be turned to one side, and raised or depressed so as to properly enter the coupling head in case its connection with the opposite coupler does not hold it in the proper position. By this device a fruitful source of danger is avoided, as the link can be properly entered without exposing the person to any danger by going between the cars.

G is a horizontal shaft suitably journaled in boxes upon the end of the car, and in position above the coupling head as shown. This shaft is sufficiently long to extend outside the car, where it is operated by means of a short crank or arm G' by which it can be turned in its boxes. H is an arm projecting from the center of this bar and having upon it the means for attaching a short chain I

which connects with the top of the coupling pin as shown. When the shaft is turned so as to turn this arm up against the side of the car, the arm pulls upon the chain and thus withdraws the pin from the coupling link and allows the latter to be withdrawn from the draw-head whenever the cars are separated. In order to hold the pin in this position and in readiness for either coupling or uncoupling, I have shown an arm J projecting at right angles from the shaft near the side of the car, and a bolt K sliding in suitable keepers, is adapted to move across the line of travel of this arm, and thus hold it up and prevent the shaft from turning, while the bolt is in position to intercept the arm.

L is another arm, approximately at right angles with the arm J and rotating with the shaft, so that when the arm J is locked in position against the end of the car, the arm L projects at right angles.

When the bolt K is withdrawn to allow the coupling pin to fall into place in the draw-head, the arm L turns down against the end of the car, and may be held in that position by means of a bolt M which slides in keepers, and is movable so as to lock the arm L and prevent the shaft from being turned to withdraw the coupling pin.

When the coupling pin is in position, the arm H by which it is raised projects out above the head of the coupling pin, and when the arm L has been locked by its bolt M, it will be impossible to remove the coupling pin until the arm L is released and the shaft turned so as to withdraw the coupling pin, as before described.

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

1. In a device for coupling cars, the draw-head, link, and coupling pin, a horizontal shaft journaled across the end of the car above the draw-head, with means by which it may be rotated from the outer end, an arm extending at right angles from the shaft in line with the center of the draw-head, a chain connecting said arm with the coupling pin whereby the latter may be raised by turning the shaft so as to lift the arm and allow it to drop through the link by turning the shaft in the opposite direction, an arm projecting from

the outer end of the shaft at right angles with the link actuating arm whereby the outer arm drops against the end of the car when the pin actuating arm is turned to allow the pin to drop, and a bolt whereby the first named arm is locked and the shaft prevented from turning, substantially as herein described.

2. In a car coupling, a horizontal shaft journaled across the end of the car above the draw-head, an arm projecting from said shaft in line with the center of the draw-head and having a chain connecting it with the vertically moving coupling pin, said arm being of such length as to extend above the head of the pin when turned down into a horizontal position, a second arm projecting from the shaft and adapted to lie against the end of

the car, and a bolt by which it is secured whereby the coupling pin is locked in place by its actuating arm, an arm projecting from the end of the shaft parallel with the pin actuating arm, and adapted to lie against the end of the car when the pin actuating arm is raised to withdraw the pin, and a bolt whereby this arm is locked in position and the shaft prevented from rotating to drop the coupling pin, substantially as herein described.

In witness whereof I have hereunto set my hand.

JAMES McDONOGH.

Witnesses:

J. JOHN SMITH,

J. A. COLLINS.