

(No Model.)

J. STALLINGS.
CAR COUPLING.

No. 419,614.

Patented Jan. 14, 1890.

Fig. 1.

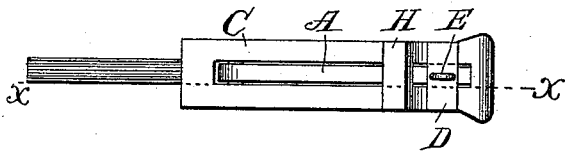


Fig. 2.

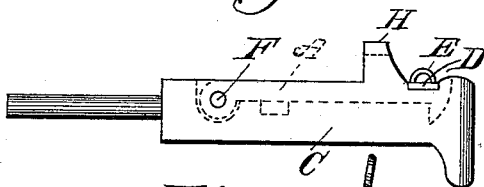
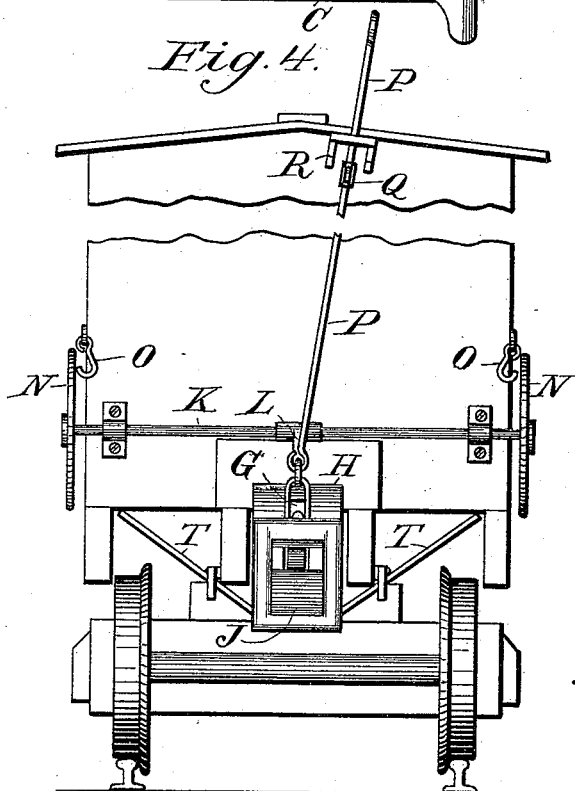


Fig. 4.



Witnesses:
Wm. Griffith
A. S. Felton

Fig. 3.

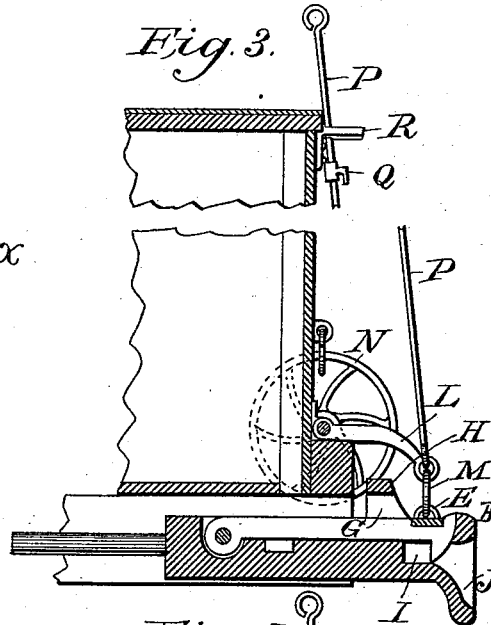
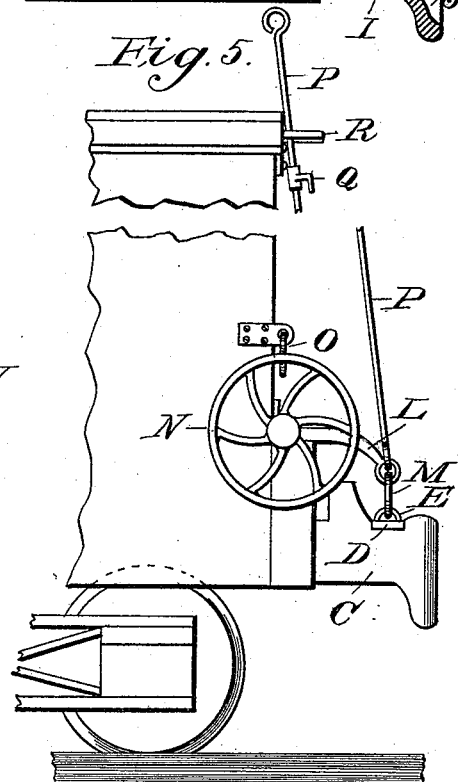


Fig. 5.



Inventor:
Joseph Stallings

UNITED STATES PATENT OFFICE.

JOSEPH STALLINGS, OF EFFINGHAM, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 419,614, dated January 14, 1890.

Application filed April 6, 1889. Serial No. 306,273. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH STALLINGS, of Effingham, county of Effingham, State of Illinois, United States of America, have invented a new and useful Improvement in Automatic Car-Couplers, of which the following is a specification.

The object of my invention is to provide railway freight-cars with an attachment whereby such cars may be automatically coupled together and conveniently uncoupled from the top or side of car, thus lessening the chances of accident to the railway employé as compared with conditions that exist where the ordinary draw-head is employed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference designate corresponding parts in all the figures.

Figure 1 is a top view of a detached draw-head having the latch-bar A, the bumper-lug H, the cross-plate D, and the eye E of my invention. Fig. 2 is a side view of same draw-head C, in which the position of the latch-bar A at rest is shown by dotted lines. Fig. 3 is a vertical section of the draw-head C on line X X of Fig. 1. The section also passes through and shows such parts of my invention and of the freight-car as lie in a vertical plane above said line. Fig. 4 is an end view of freight-car with my invention attached. Fig. 5 is a side view of same car having my coupler.

The construction and operation of my invention are as follows, to wit: A metal bar A, about twelve inches long and one and one-half inch square, having at one end the downwardly-projecting beveled coupling-pawl B, and the cross-plate D, bearing the eye E, is let into the top of the draw-head C, as shown in Figs. 1 and 3, and is pivoted at F with a pin one inch and a fourth in diameter, thus allowing the free end of the latch-bar A to swing upwardly until it comes into contact with the top of the recess G in the bumper-lug H. When the coupler is in gear and at rest, the downwardly-projecting point of the coupling-pawl B rests upon the bottom of the throat I of the draw-head.

When it is desired to couple a car to the one having my invention, an ordinary coupling-link is placed in the mouth of the draw-head of the car which it is desired to have coupled to the said car having my coupler. Then as the cars approach each other the free end of the projecting link will strike the lower lip J of the draw-head C, having my coupler. The movement of the approaching car will force the free end of the link up the bevel of the lip J until it strikes the opposite bevel of the coupling-pawl B, which will be forced up to allow the closed end of the link to pass under and into the throat I. When the closed end of the link has thus passed under, the pawl B will of its own weight drop back into the loop of the coupling-link. By this means the cars are automatically coupled together.

To uncouple the cars, the operator standing on the ground, a metal bar or rod K is placed across and journaled to the end of the freight-car. Near its center the rod K has a crank-arm L fixed upon it, and connected with the eye E by means of a rod or link M. A wheel or lever N N is placed upon and fixed to each end of the rod K for the purpose of rotating it, and hooks O O are attached to the end of freight-car for the purpose of securing the spoke of the wheel or the lever N when it is brought sufficiently near to be capable of being caught by said hooks O O.

When it is desired to uncouple the car, the operator, standing at the side of said car, turns the wheel N upwardly and backwardly, thus rotating the rod K and carrying the swinging end of the crank-arm L upwardly and backwardly and lifting the coupling-pawl B out of the throat I, thus freeing the coupling-link. When the wheel N is turned back far enough to raise the coupling-pawl B from the throat I, it may be secured in that position by catching the hook O over the spoke of the wheel N. By this means the coupler is thrown out of gear and held in that state. In that condition it may be bumped about without causing it to couple to the bumping car. When the rod K has been rotated far enough to raise the pawl B from the throat I, the top of the bar A is in contact with the bottom of the recess G in the bumper-lug H, and any further turn of the wheel N will be to lift the free end of the

draw-head C. By this means the mouth of the draw-head C may be raised to a level with any other draw-head.

To uncouple the car, the operator being on the top thereof, a rod P, having the hook Q, is attached to the eye E, or to the swinging end of the crank-arm L, and when it is desired to raise the coupling-pawl B the operator on top of the car pulls the rod P upwardly. If it is then and there desired to throw and hold the coupler out of gear, the hook Q is dropped over the front of the rim of the bracket R. The hook Q may be released from the bracket R when the operator is upon the ground by the said operator throwing the wheel or lever N far enough back to raise the said hook Q from its engagement with the bracket R. The inclination of the rod P will cause it to fall back against the top edge of the car, and thus the rod is made free.

For raising the draw-head to meet higher draw-heads, I also provide two levers T T, fulcrumed near the side of the draw-head C,

having their weight ends in contact with under side of said draw-head, and their power ends extending toward and nearly to side of car.

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

The bar A, pivoted at F and having the pawl B, the cross-plate D, and the eye E, the rod K, journaled to the end of the freight-car and having the wheels N N or equivalents, the crank-arm L, connected with the eye E by means of the rod or equivalent M, the rod P, having the hook Q and the bracket R, the hooks O O, and the levers T T, in combination with a freight-car draw-head C, adapted to receive the bar A and pin F, and having the bumper-lug H, with the recess G, substantially as described, and for the purposes set forth.

JOSEPH STALLINGS.

Witnesses:

W. L. FUNKHAUSER,
G. K. FARNSWORTH.