J. WAY & A. S. HOFFMAN.

Car-Couplings.

No. 156,514. Patented Nov. 3, 1874.

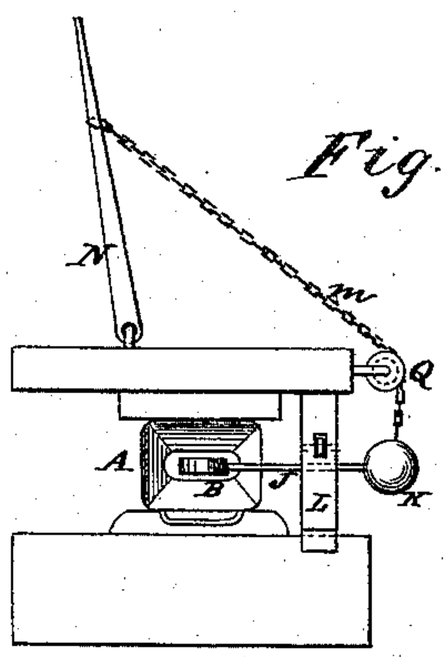
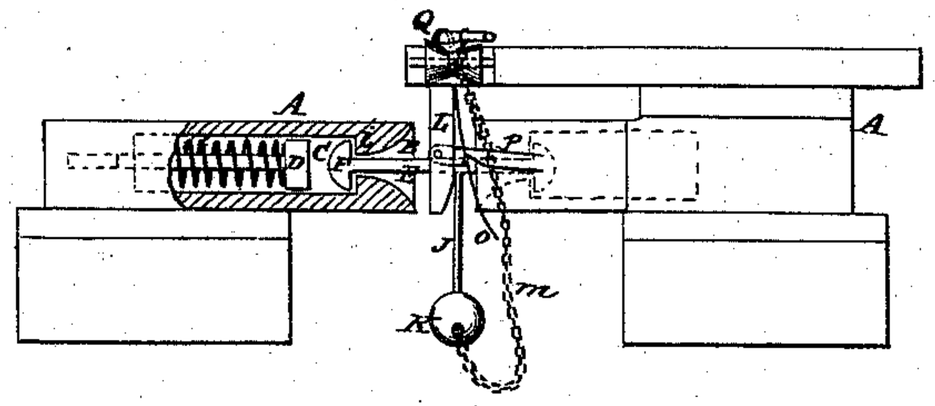


Fig. 1

Fig. 2



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UNITED STATES PATENT OFFICE.

JOHN WAY AND ALVAN S. HOFFMAN, OF NAPANOCK, NEW YORK.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **156,514**, dated November 3, 1874; application filed June 27, 1874.

To all whom it may concern:

Be it known that we, JOHN WAY and ALVAN S. HOFFMAN, of Napanock, in the county of Ulster and State of New York, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification:

The object of this invention is to furnish an improved coupling for railroad-cars—one that will not require the attendant to go between the cars for the purpose of supporting the coupling-link; and it consists mainly of a weight attached, by an arm, to the coupling-rod, and in the mode of supporting the weight before coupling.

In the accompanying drawing, Figure 1 is a front-end view, showing the coupling-rod set as for coupling the cars together. Fig. 2 is a side view, showing the rod as when the cars are coupled.

Similar letters of reference indicate corresponding parts.

A represents the draw-head. B is the mouth of the draw-head. C is the draw-head chamber. D is the spring-bumper. E is the coupling-rod. Instead of a link I use a rod having a head, F, at each end, which, when the cars are coupled, engage with the shoulders *i* of the draw-heads, as seen in Fig. 2. J is an arm attached to middle of this rod, which arm stands parallel with face of the heads F, as seen in Fig. 1. K is a ball or weight on the end of the arm J. When the ball is in the position seen in Fig. 1, (with the arm J horizontal,) the ball is supported by a spring, O, on the hanger L, being raised to that position by means of the chain *m* and lever N.

As the weight K is lifted the arm J enters between the hanger L and spring O, ascending until it strikes and unloosens the notched and pivoted catch P from the spring. The latter then clamps the arm J, and holds it in a horizontal position until the spring is again moved out after coupling, thus allowing the cars to separate without hindrance, and to be ready for recoupling.

When the cars are come together the head of the rod (being horizontal) slips into the mouth of the opposing draw-head, and the arm J, being released by the concussion, drops, and the weight of the ball turns the rod one-fourth of a revolution, or so that the heads F are vertical instead of horizontal, and engage with the shoulders *i*, as seen in Fig. 2.

The chain passes over the pulley Q, which is attached to the edge of the platform.

The arm is held up by the friction produced by the spring; but when the ball is raised, and the coupling-rod is set for coupling, the pressure of the spring on the arm J is reduced by the catch P, which holds the spring out from the hanger, so that a slight concussion releases it, and allows the ball to drop and turn the coupling-rod.

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

The combination of the hanger L, spring O, and catch P, to enable the rod to be uncoupled and held ready for leaving or entering a draw-head, as set forth.

JOHN WAY.
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Witnesses:
JACOB CANTINE,
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