(No Model.)

J. ROWE & T. B. JACK.

CAR COUPLING.

No. 457,672. Patented Aug. 11, 1891.

Fig. 1.

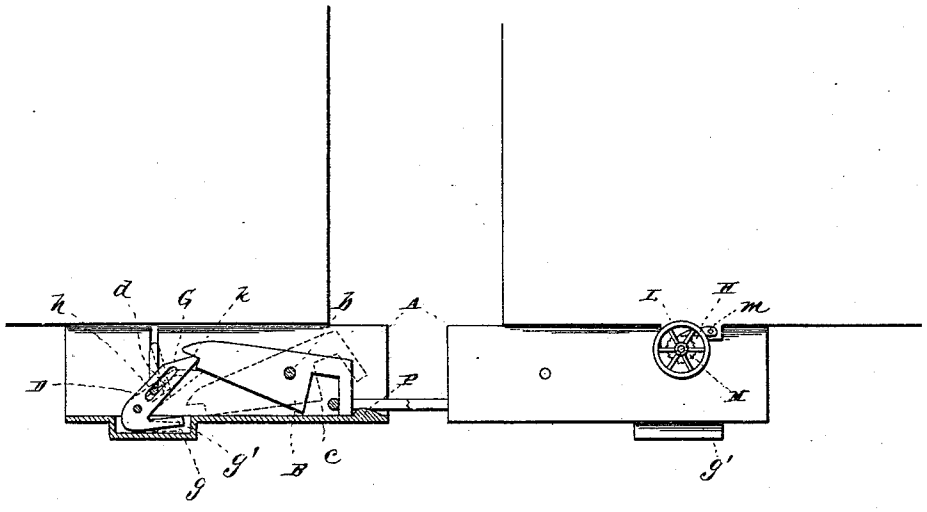
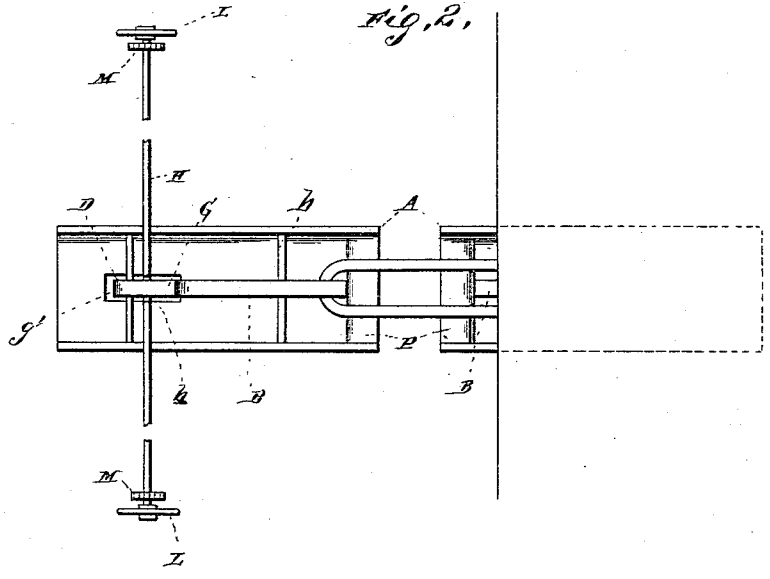


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN ROWE, OF BRAIDWOOD, AND THOMAS B. JACK, OF BRACEVILLE, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 457,672, dated August 11, 1891.

Application filed April 22, 1891. Serial No. 389,956. (No model.)

To all whom it may concern:

Be it known that we, JOHN ROWE, a resident of Braidwood, county of Will, and State of Illinois, and THOMAS B. JACK, a resident of Braceville, in the county of Grundy and State of Illinois, both citizens of the United States, have invented certain new and useful Improvements in Car-Couplings; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical longitudinal sectional view of one draw-head and a side view of the other. Fig. 2 is a top plan view.

This invention relates to certain improvements in car-couplings; and it consists in the novel construction and combination of parts, as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter A designates the hollow draw-head extending back under the car.

B designates the link-holding lever, hung in the draw-head forward of its center upon the transverse pivot-rod *b*, having bearings in the side walls. The forward end of this lever *b* is recessed vertically, as at *c*, to receive the link. The weight of that portion of the lever at the rear of its pivot-rod is sufficient to normally hold the front portion in an elevated position to receive the link.

D designates the angular lock or catch pivoted at its angle in the rear bottom portion of the draw-head chamber. The longer arm G of the angle-catch is provided with the cam-slot *d*, which is engaged by a bail *h* of a transverse shaft H. The upper end of this arm normally rests on the rear end portion of the link-retaining lever B. The shorter arm *g* of the catch normally rests in a recess *g'* in the bottom of the chamber.

The link of the approaching car entering beneath the raised forward end of the lever, strikes against the rear wall of the recess *c*, throwing the rear end of the lever upwardly and causing the forward end to drop through and engage the link. When in this position, the angular catch D will drop into engagement with a shoulder *k* on the rear end of the lever, holding it in its locking position.

When it is desired to effect the uncoupling, the transverse shaft H is operated by means of a hand wheel or lever L on either side of the car, which by means of its bail-engagement with the cam-slot of the catch will raise said catch from engagement with the shoulder of the lever, which by its own gravity will drop, elevating the forward end and releasing the link. The weight of the lower arm of the angle-catch will cause its upper arm to fall into position upon the link-retaining lever to again engage the shoulder *k*, when a coupling is effected. A ratchet M is also carried by the shaft H and adapted to be engaged by a pawl *m* on the car for the purpose of holding the angular catch in case it is desired to bring one car into contact with another for the purpose of pushing the car onto a side track without effecting a coupling, or for any other purpose.

When in coupling position, the lower forward end of the lever B bears against the recessed shoulder P at the front portion of the bottom of the draw-head chamber, which receives the strain of the coupling.

It will be seen that the action of coupling is entirely automatic and that the uncoupling may also be effected without the necessity of entering between the cars.

The parts are few in number and not liable to become broken or out of order.

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

1. In a car-coupling, the combination, with the draw-head, of the link-holding lever pivotally hung in said draw-head and normally held in position to receive the link by gravity, said lever having the link-retaining recess and the catch having the cam-slot and adapted to engage a shoulder on said lever, and means for operating said catch, substantially as specified.

2. The combination, with the lever pivotally hung in the draw-head and having its forward end normally held in position to re-

ceive the link by the weight of the rear end, of the pivoted catch adapted to engage a shoulder on said lever when it is in coupled position, and the transverse shaft having a bail engaging a cam-slot in said catch, substantially as and for the purpose specified.

3. The combination, with the draw-head extending under the car, of the link-retaining lever pivoted therein, the catch for locking said lever, the transverse shaft having a bail engaging a slot in the catch, means for operating said shaft, and a ratchet-and-pawl connection therewith, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN ROWE.
THOMAS B. JACK.

Witnesses:
E. D. SCOTT,
WM. PHILLIPS.