

W. A. TEW.
Car-Coupling.

No. 200,359.

Patented Feb. 12, 1878.

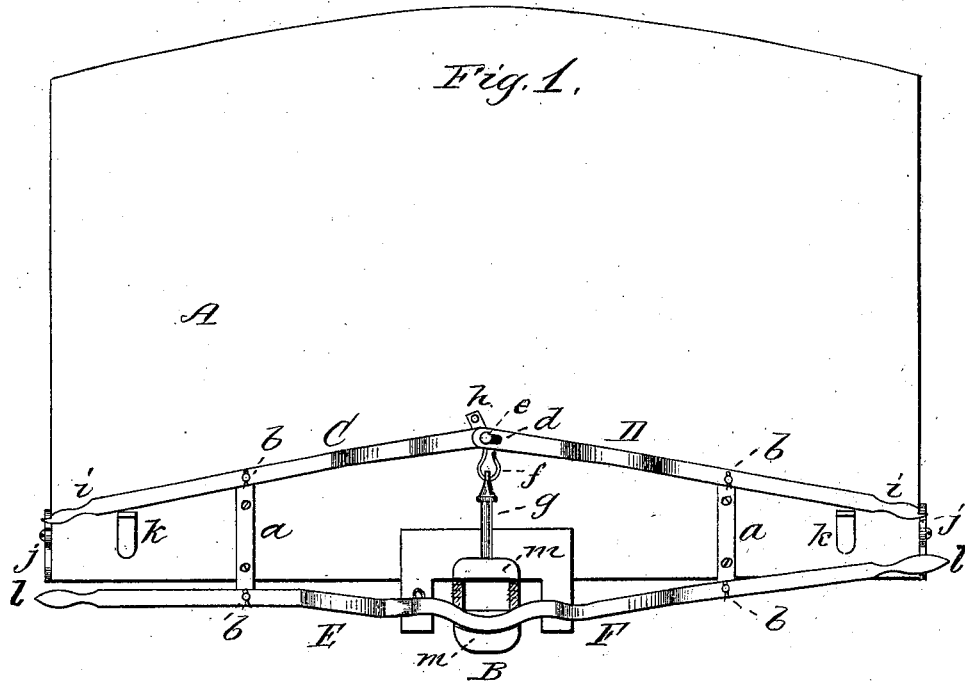


Fig. 2.

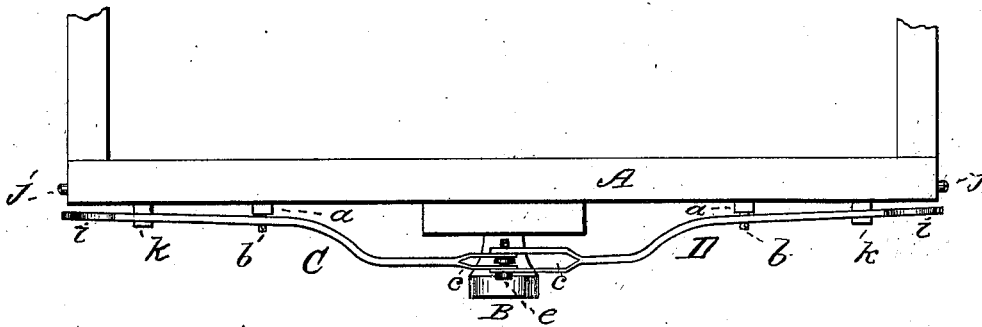
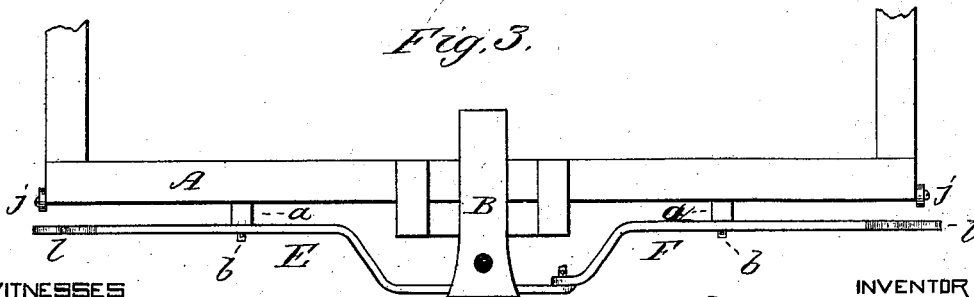


Fig. 3.



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IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **200,359**, dated February 12, 1878; application filed January 23, 1878.

To all whom it may concern:

Be it known that I, WILLIAM A. TEW, of Lima, in the county of Allen and State of Ohio, have invented a new and valuable Improvement in Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of an end view of my invention. Fig. 2 is an upper-plan view of the coupling-levers; and Fig. 3 is an under-plan view of the levers for guiding the coupling-link.

This invention has relation to car-couplings; and the object and purpose thereof are to provide a simple and effective means whereby the cars can be readily coupled or uncoupled, as required, from either side of the car.

The invention therefore consists of the peculiar construction and arrangement of pivoted levers for operating the coupling-pin, in connection with hooks or catches for holding down the outer ends of the levers when the cars are uncoupled, as will be hereinafter described, and subsequently pointed out in the claim.

In the accompanying drawings, A represents a portion of a car, to which is secured in the usual way a draw-head, B. To the part A, or to any other convenient portion of the car where coupling devices are connected, are secured metal plates *a*, having upon their upper and lower ends pins *b*, for securing thereto levers C D E F, said pins acting as fulcrums for the levers. Although I have described and shown these means of securing the levers to the car, many other means may be devised, and the plates *a* may be dispensed with so long as the levers have a fulcrum or pivotal point to work on.

The inner ends of the levers are bifurcated, as shown at *c*, and have elongated slots *d*, through which a headed pin, *e*, passes. The pin *e* secures between the bifurcated ends of the levers a chain or link, *f*, having suspended therefrom the usual coupling-pin *g*. To the pin *e*, or to the ends of the levers, is secured a hook or link, *h*, or other suitable device, to

which a rope or chain may be connected when found necessary to operate the levers from the roof or top of the car.

The elongated slots in the bifurcated ends of the levers admit of said levers being readily raised or lowered in raising or lowering the coupling-pin. The coupling-pin may be readily disconnected from the hook *f* should the pin become broken, and replaced by a new one, and also the same with the pin *e*.

The outer ends of the levers are formed with handles *i*, by which they are operated, and the handles extend out at the sides of the car sufficiently to engage with catches or hooks *j*, to retain the inner ends of the levers in a raised position when the car is to remain uncoupled, which also raises the coupling-pin, as illustrated in Fig. 1 of the drawings.

After withdrawing the coupling-pin through the agency or by means of the lever at the side of the car, and securing the catch or hook *j* over the end of the lever, if the brakeman or other person assigned to that duty, being upon the other side of the train, should wish to couple on to the same car, instead of being required to return to the same side of the car to disengage the catch or hook from the outer end of the lever, all that is required is to press outward, or in a direction toward the car to be coupled, the handle or outer end of the lever at the side upon which the operator is standing, which will cause the inner ends of the levers to be pressed inward, throwing out of contact with the catch or hook the handle or outer end of the opposite lever, when the catch or hook will, by its own weight, take a vertical position, or, in other words, will be thrown out of the way, after which the coupling-pin will drop into place.

For readily and effectually accomplishing this purpose, the levers are not only pivoted, or have a fulcrum upon which to work, but are curved outward at their inner ends, to allow sufficient play or room for the inner ends of the levers to be pressed inward, or in a direction toward the opposite end of the car, as will be seen by reference to Fig. 2 of the drawings.

Stops *k* are secured to the car under the levers C D, to limit the movement of the levers, and thereby prevent the raising of the

coupling-pin entirely out of the draw-head. The lower levers E F are for the purpose of raising and guiding the coupling-link, said link being of any of the forms now in use. The levers, as previously stated, have their fulcrums or pivotal points at *b*, and have suitable handles *l* for operating the same upon either side of the car. The levers E F, at their inner ends, are curved in an outward direction similar to the levers C D, and are pivoted together in any suitable manner, the lever F being somewhat longer than the lever E, and passes between shoulders *m* formed on the draw-head, which serve as stops to limit the play of the levers, and also to prevent the draw-head upon the opposite car from striking the levers or otherwise injuring them.

It will be seen that a coupling device constructed according to my invention may be

readily operated from either side of the car without danger to the brakeman, and the simple construction of the device renders it less liable to get out of order.

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

The levers C D, pivoted as shown, and having their inner ends curved in an outward direction, in combination with the catches or hooks *j*, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM A. TEW.

Witnesses:

J. E. RICHIE,
JOHN N. HUTCHISON.