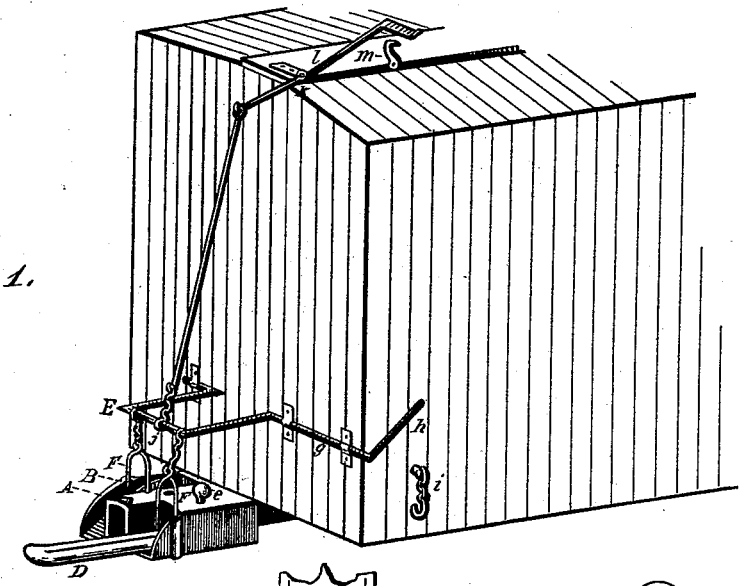
(No Model.)

J. HARRISON, O. HUNTRESS & A. S. LEWIS.

CAR COUPLING.

No. 347,035. Patented Aug. 10, 1886.

Fig. 1.



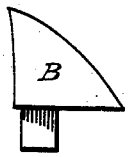


Fig. 4.

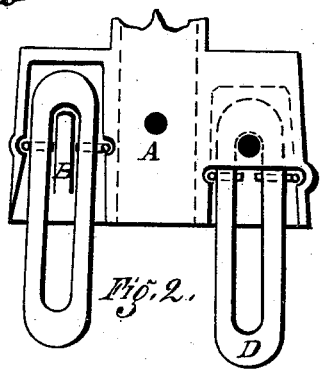


Fig. 2.

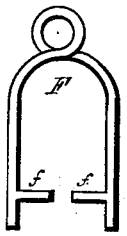


Fig. 5.

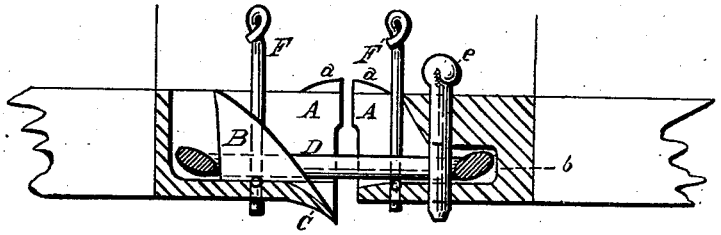


Fig. 3.

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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 347,035, dated August 10, 1886.

Application filed March 22, 1886. Serial No. 196,119. (No model.)

To all whom it may concern:

Be it known that we, JEREMIAH HARRISON, ORVILLE HUNTRESS, and AUGUSTUS S. LEWIS, citizens of the United States, residing at Manhattan, in the county of Riley and State of Kansas, have invented certain new and useful Improvements in Car-Couplings; and we do hereby 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 the letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in car-couplings, by which each draw-head is provided with a coupling-link and incline lug or standard on opposite sides of the draw-head, whereby the cars may be coupled automatically, and a suitable device for uncoupling the same from the top or side of either car, thereby avoiding the danger incident to going between the cars for those purposes.

In the accompanying drawings, Figure 1 is a perspective view of one end of a car with our device attached. Fig. 2 is a horizontal top view of the draw-head, and Fig. 3 is a perpendicular sectional view of the same. Fig. 4 is a view of a detached lug or standard. Fig. 5 is a view of a detached link-lifter.

In all the figures similar parts are similarly lettered.

A is a draw-head having three compartments, the middle one of which is similar to the draw-head now in general use, with openings for the insertion of a coupling link and pin, so that the cars may be coupled in the ordinary way, if desired, and as would be necessary should the adjoining car not have our device attached. In the construction of the draw-head this middle compartment may be dispensed with, if desired.

On the bottom of the compartment, on one side of the draw-head, is a lug or standard, B, projecting upward, with an incline surface from its front base to its rear terminus, as shown in Fig. 4.

In the compartment on the opposite side of the draw-head are openings for the insertion of the coupling-link D and pin *e*, the opening for the coupling-link decreasing in size toward the rear end, where it is but little larger than the link itself, as shown at *b* in Fig. 3, so that said link will be held in a nearly-horizontal position. It is thought desirable to slightly incline the ends of the coupling-links upward, the better to insure their striking the incline surface of the lug or standard B.

It will readily be seen that with our device on each car, when the cars are run together, the coupling-link on each will traverse the incline on the lug or standard opposite and drop over the same, thereby making a double coupling.

To insure coupling where one car is lower than the other, we extend the incline lug or standard B down the end of the bed, or incline the bed itself on that side of the draw-head, as shown at C in Fig. 3, which bed may be much thicker at this point, and extend below the other parts of the draw-head as far as necessary to insure the striking of the incline by the coupling-link on a much lower car. Buffers *a a* extend out from the middle of the draw-head, as in the old style.

To insure strength it is deemed advisable to make the lug or standard B of a separate piece, which may be bolted or otherwise firmly secured to the draw-head.

The coupling-links, being alike, are interchangeable, or may be used to couple the cars in the ordinary way.

The link-lifters F F are in the form of a clevis, with the inward projections or bent ends *f f* resting on the bed of the draw-head and under the coupling-links when the cars are coupled. These link-lifters are connected at the top by chains to the outer end or cross-bar of the crank-shaped lever E, both arms of which are strapped to the body of the car in such a manner as to admit of their being easily turned as desired. To operate the same from the side of the car, one or both of these arms may be extended, as *g*, to the side of the car, and bent to form the lever *h*, which, when pulled down, raises the link-lifters F F, thereby raising the coupling-links above the tops of the lugs or standards and allowing the cars to separate. The link-lifters may be kept raised by catching the hook *i* over the lever

h. If desired, said lever *h*, instead of being formed by bending the arm *g*, may be made of a separate piece.

The cross-bar *j* is connected by a chain or rod, or chain and rod, with the lever *l*, which is pivoted to the roof of the car at *k*.

To uncouple from the roof of the car, press down on the rear end of the lever *l*, (which, if desired, may be caught under the hook *m*,) thereby raising the link-lifters and coupling-links, as before mentioned.

With this device on each car, the cars may be uncoupled from either.

We are aware of the invention by others of car-couplings having two links and incline standards, also of devices for coupling cars automatically. These we do not broadly claim; but

What we do claim as new, and desire to secure by Letters Patent, is—

1. The draw-head A, having a central compartment, a side compartment formed with the upwardly and rearwardly inclined lug B, between which and the side and rear walls of the compartment is a space for a link to lie in, and a second side compartment decreasing in size from front to rear, substantially as and for the purposes described.

2. In combination with the draw-head having the central and two side compartments, the clevis link-lifters F, fitting within the side compartments and formed with inwardly-extending projections *f f*, adapted to lie horizontally within the side compartments under the links, substantially as and for the purposes described.

3. The combination of the draw-head formed with the central and two side compartments, the clevis link-lifters F, fitting within the side compartments and formed with inwardly-extending projections adapted to lie horizontally within the side compartments under the links, the crank-lever fulcrumed to the end of the car and extending to the side thereof, and connected with the clevis-lifters, and the lever fulcrumed at the top of the car and connected with the crank-lever, substantially as and for the purposes set forth.

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

JEREMIAH HARRISON.
ORVILLE HUNTRESS.
AUGUSTUS S. LEWIS.

Witnesses:
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THOS. H. FERRIS.