

(No Model.)

T. B. BROWER.
CAR COUPLING.

No. 487,694.

Patented Dec. 6, 1892.

Fig. 1.

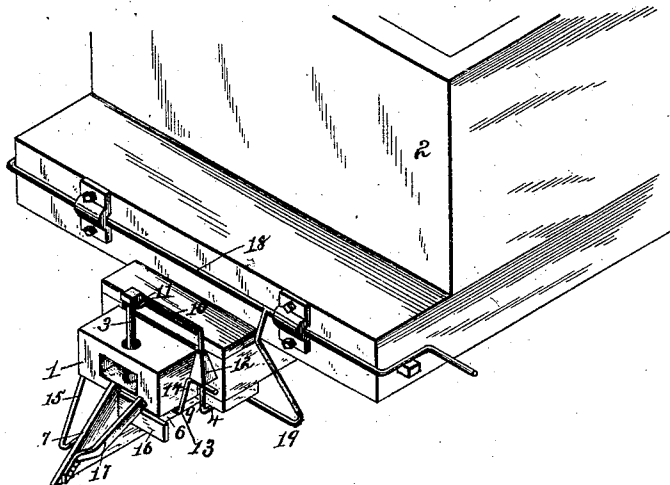


Fig. 2.

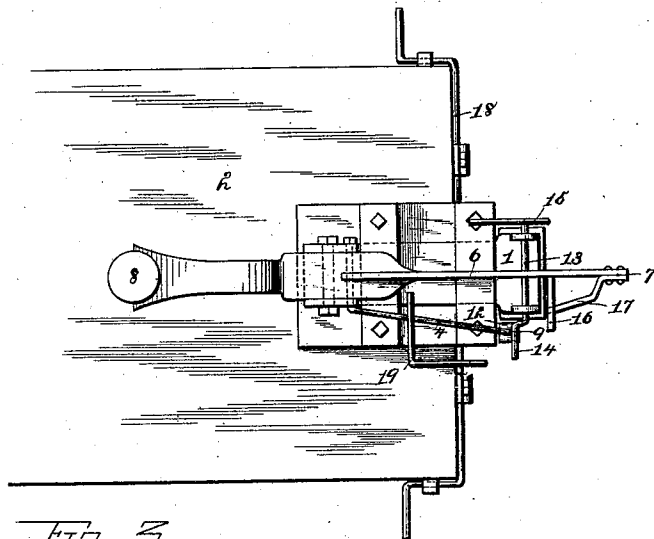
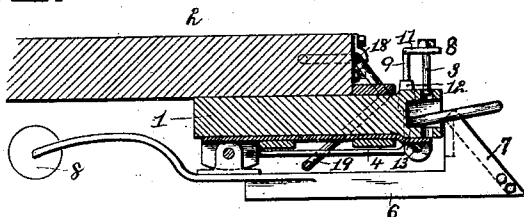


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

THADDEUS B. BROWER, OF TEMPLETON, ASSIGNOR OF ONE-HALF TO
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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 487,694, dated December 6, 1892.

Application filed April 19, 1892. Serial No. 429,776. (No model.)

To all whom it may concern:

Be it known that I, THADDEUS B. BROWER, a citizen of the United States, residing at Templeton, in the county of San Luis Obispo and State of California, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to improvements in car-couplings.

The object of the present invention is to provide an attachment to the ordinary pin-and-link car-coupling, whereby cars may be automatically coupled and uncoupled from the sides or tops without danger to the operator.

A further object of the invention is to enable cars having coupler-heads arranged at different heights to be automatically coupled.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with this invention. Fig. 2 is a reverse plan view. Fig. 3 is a longitudinal sectional view.

Like numerals of reference indicate corresponding parts in all the figures.

1 designates a draw-head arranged on a car 2 in the usual manner and having a longitudinal link-opening and provided with a vertical pin-opening adapted for the reception of a pin 3, connected with a pin-lifter 4. When cars come together for coupling, the link is guided to the proper elevation to suit the opening in the draw-head 1 by a link-carrier 6, which is pivotally mounted beneath the car 2, and has its front end 7 beveled and forming an inclined plane to engage the front of an adjacent car to lower the link to suit the opening of that car, and the rear end of the link-lifter is weighted at 8 to hold the front end elevated.

The pin-lifter has its rear end pivoted near the link-carrier, and it extends forward to the draw-head and is provided with a vertical portion 9 and a horizontal portion 10, which extends inward over the draw-head and is pro-

vided with a loop or an eye 11 to receive the pin. The vertical portion 9 of the pin-lifter is provided with a shoulder 12, which is engaged by a catch 13 to hold the pin elevated preparatory to coupling. The catch consists of a rock-shaft provided at one end with an L-shaped arm 14 to engage and support the pin-lifter, and it is provided at its opposite end with a depending V-shaped extension 15, arranged to be engaged by a lug 16, extending horizontally from the front beveled end of the link-carrier to cause the pin to drop at the proper time to engage the link, that time being when the cars come together. The depending extension 15 of one draw-head is engaged by the lug 16 of another draw-head when cars are coupled to cause the link of one to be engaged by the coupling-pin of the other. The front end of the link-carrier is provided with an inclined bar 17, which is arranged parallel with and on the same inclination as the beveled edge of the link-lifter, and it forms a guide for the link should the latter be thrown from the link-carrier. The depending V-shaped extension of the pin-lifter is adapted when swung back to limit the swing of the rock-shaft to prevent the L-shaped arm at the other end thereof from moving too far forward.

The pin-lifter is operated by a rock-shaft 18, journaled on the car and provided at its ends with crank-handles arranged at the sides of the car in convenient position for the operator, and the rock-shaft is provided intermediate its ends with an L-shaped arm 19, extending downward from the rock-shaft and inward under the pin-lifter to lift and carry the same in engagement with the catch.

Suitable means for operating the rock-shaft from the top of the car may be readily connected with the crank-handles or pin-lifter.

What I claim is—

1. In a car-coupling, the combination of a draw-head having an opening, a coupling-pin, a pin-lifter pivotally mounted and having its front end attached to the coupling-pin, means for raising the pin-lifter, a catch to hold the pin-lifter elevated, and a link-carrier having an inclined surface to engage and to direct the link and provided with a lug arranged to

engage the catch to release a coupling-pin, substantially as described.

2. In a car-coupling, the combination of a draw-head, a coupling-pin, a pivotally-mounted pin-lifter connected with the coupling-pin and provided with a shoulder, a catch consisting of a rock-shaft provided with an arm to engage the shoulder and having a depending extension, and a link-carrier having an inclined face to direct a link and provided with

a laterally-extending lug to engage the depending extension of the catch, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THADDEUS B. BROWER.

Witnesses:

W. H. HOOD,

R. W. PUTNAM.