(No Model.)

A. C. LÜBBERT, H.

CAR COUPLING.

No. 311,663. Patented Feb. 3, 1885.

Fig. 1.

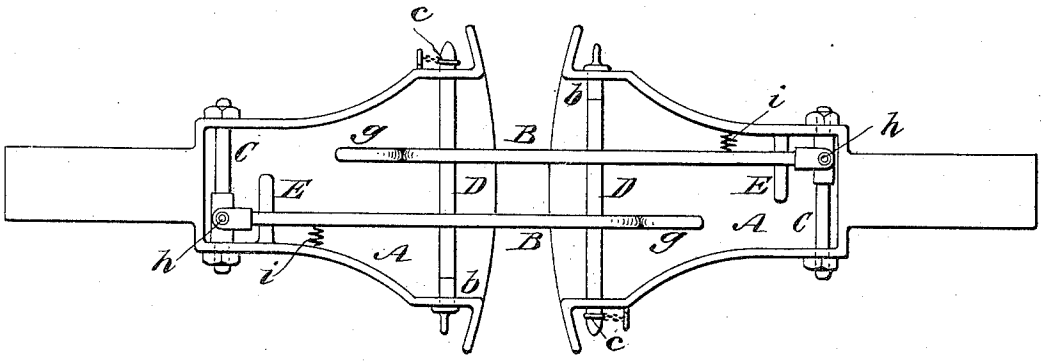


Fig. 2.

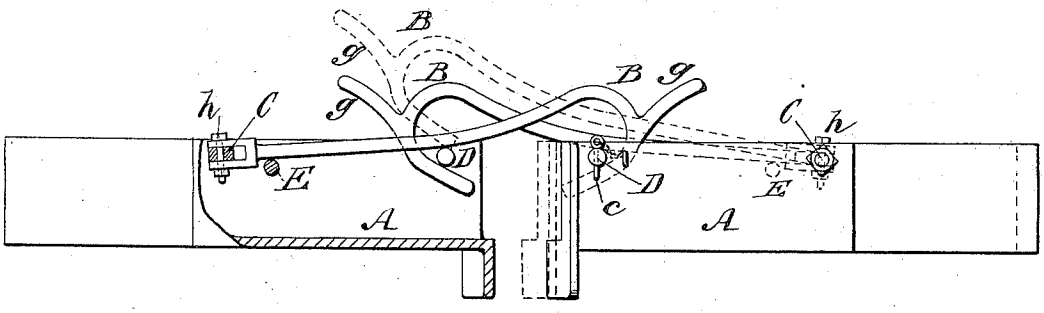
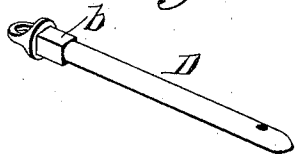


Fig. 3.



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ALEXANDER C. LÜBBERT, H., OF GUAYMAS, MEXICO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 311,663, dated February 3, 1885.

Application filed November 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER C. LÜBBERT, H., of Guaymas, Mexico, have invented a new and useful Improvement in Car-Couplers, of which the following is a full, clear, and exact description.

This invention consists in a car-coupler of novel construction in which pivoted hooks carried by suitable draw-heads, which may be in the form of boxes or be constructed to act as buffer-heads, are combined and arranged to engage by gravity with bars in the heads when running the cars together, said bars being drawn out or removed when it is desired to uncouple the cars, together with additional bars, one disposed in each draw-head back of the aforesaid bars, retaining the hooks in coupling position, substantially as hereinafter shown and described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a plan view of my improved car-coupler, showing the same engaged; Fig. 2, a partly broken and sectional view of the same, showing one of the hooks in dotted lines as it appears when in the act of engaging; and Fig. 3, a view in perspective of one of the rods of the coupling with which the hook of an adjacent car engages.

The coupler, as shown in the drawing, consists of a box-head, A, as applied to each car, provided with a hook, B, attached to a cross pivot or bar, C, having the bearings in which it turns in the rear end of the box or head A, the bent or engaging portion of the hook extending outward in front to make the required engagement. Said hook B is constructed with a guide-extension, *g*, to insure coupling in cars of different heights. The turning bar or pivot C may be held in place by screw-nuts on its outer ends, and which will provide for removal when necessary for repairs.

Arranged to extend across or near the front end of each box or head A is a bar, D, having a square shoulder, *b*, on its one end to fit a correspondingly-shaped aperture in the one side of the head to keep said bar from turning, but otherwise of a round construction to enter a round aperture in the opposite side of the head. Said bar, which, when uncoupling, is drawn out from the side of the head having the square aperture in it, is held in place by a locking-pin, *c*, attached by chain to the opposite side of the head.

Back of the bar D is another bar, E, which serves to keep the hook properly elevated when the bar D is withdrawn, and so that the bar D may be readily inserted again under the hook for engagement again with the hook of an adjacent car.

The bar D of each head being inserted and the several parts in proper position for coupling, the coupling is effected by simply running the cars together or the one car toward the other, when the bar D of the coupler of either car being pushed against any part of the forward end portion of the hook B of the coupler on the car to be coupled will cause the hook to rise or slide upward until its pointed extremity is sufficiently raised to cause the hook to fall down over said bar, and both hooks of the cars to be coupled will be similarly engaged with the bars D of the adjacent couplers at the same time, thus firmly hooking the cars together.

To uncouple the cars, the pins *c* are disengaged from the bars D, and said bars drawn out in both couplers, leaving the hooks as simply resting on the bars E, ready for engaging again when replacing the bars D, which, when removed, may be placed within the head A, if a box one, to prevent their being lost or misplaced.

This improved car-coupler is both simple and efficient, and will be found well adapted for freight-cars. To give it more perfect efficiency, however, the hooks B are connected with their cross carrying-pivots C by a joint and joint-pin, *h*, which will admit of the hooks moving laterally on their pivots C, in order that when the cars are turning a curve the hooks B will continue to pull at right angles on the rods D just as squarely or equally as when the cars are traveling in a straight line or course. This will avoid the breaking or twisting of the hooks.

To return the hooks to their places again after passing a curve, springs *i* are attached to the hooks and one side of their boxes A.

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

1. The combination, with either head A, of

the hook B, pivoted to rise and fall, as described, laterally-removable bar D, arranged for operation on and engagement with the pivoted hook of the coupler of an adjacent car, and an additional bar, E, projecting from the inner side of the draw-head in rear of the aforesaid bar B and retaining the hook in coupling position, substantially as specified.

2. The hooks B, pivotally embracing the pivots C to admit of them swinging laterally on their pivots, in combination with the heads A and laterally-removable bars D, essentially as described.

3. The combination of the springs *i*, the boxes or heads A, with their removable bars D, the cross-pivots C, and the hooks B, jointed to swing laterally on said pivots, substantially as and for the purposes herein set forth.

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Witnesses:

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