

(No Model.)

W. D. WOODWARD.

CAR COUPLING.

No. 347,547.

Patented Aug. 17, 1886.

Fig. 1.

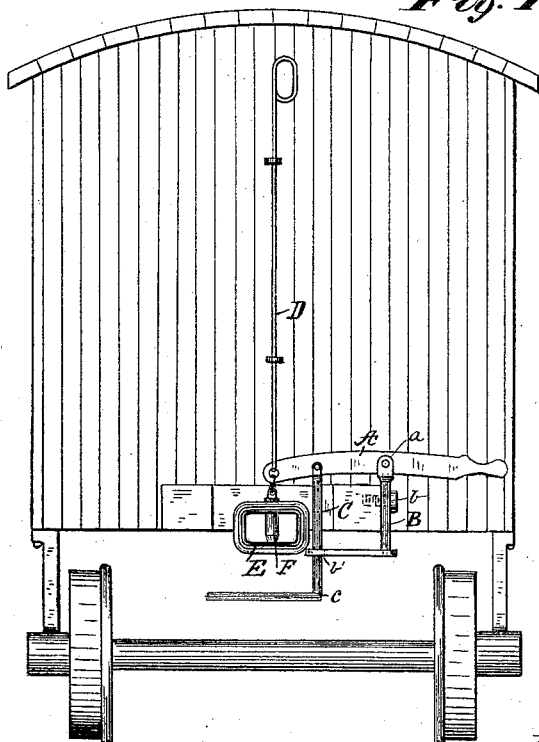


Fig. 2.

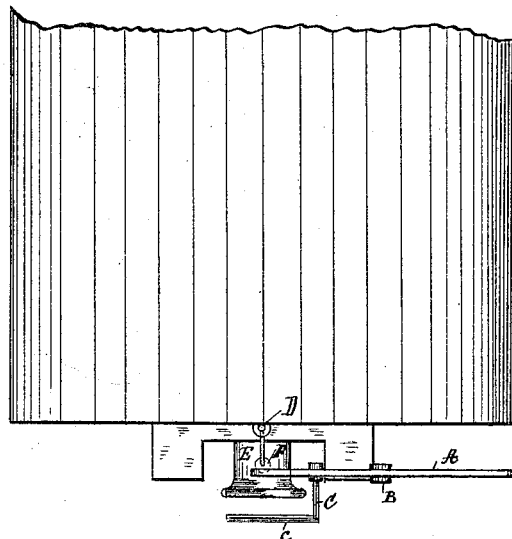


Fig. 3, a

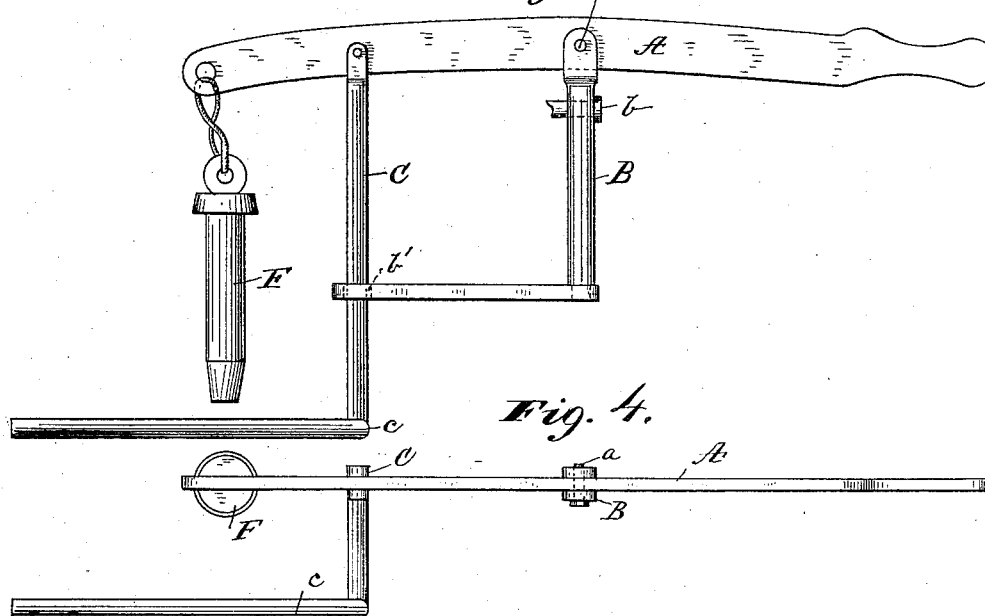


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM DOUGLASS WOODWARD, OF PLATTSBURG, NEW YORK, ASSIGNOR
OF TWO-THIRDS TO ABNER L. ROBERTS AND MARTIN H. O'BRIEN, BOTH
OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 347,547, dated August 17, 1886.

Application filed March 4, 1886. Serial No. 194,002. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DOUGLASS WOODWARD, of Plattsburg, in the county of Clinton and State of New York, have invented
5 a new and useful Improvement in Car-Couplings; and I hereby declare the following to be a full and clear description thereof.

This invention relates to certain new and useful devices for lifting or manipulating the
10 link of a car-coupling so as to more readily cause it to engage with the draw-head, and, in combination with such link-lifter, there are certain other mechanisms, among which is a device for raising and lowering the coupling-
15 pin, all of which said devices are hereinafter more fully explained, and which are fully illustrated by the accompanying drawings, of which—

Figure 1 is an end elevation of a car provided with my said improved coupling devices. Fig. 2 is a general plan of the same. Fig. 3 is an enlarged detail side elevation of the improved mechanisms. Fig. 4 is an enlarged detail plan of the same.

25 The principal parts of this improved mechanism are the lever A, the link-shifter B, the link-lifter C, and the lifting-rod D. The lever A is pivoted by pin *a* to the upper end of the link-shifter B, so as to allow the said lever an
30 up-and-down movement on said pivot-pin. The position of this lever is in a horizontal plane, and it is placed with its operating end or handle at or near the side of the car. The link-shifter B is an L-shaped piece of metal,
35 which is pivoted by a pivot-pin, *b*, to some attachment of the car, so as to permit it a pendulous movement thereon, which said movement is in the direction of the length of the car. The arm of this piece which is pierced
40 for the pin *b* is placed in a vertical position, and its other arm is placed in a horizontal position, and it is pierced near its end with an aperture, *b'*, through which the vertical arm of the link-lifter C passes loosely. The lower
45 end of the link-lifter C terminates in a lateral arm, *c*, which is made long enough to extend out under the draw-head, and forms a lifter for the link, by means of which the link may
50 be lifted up to an alignment with the aperture in the end of the draw-head, so that a link may be raised up and entered into the draw-head without the necessity of a person going

between the cars. The lever A, the link-shifter B, and the link-lifter C are combined together, and all of them together allowed a
55 swinging movement on the assembling-pivot *b*, so that by this combination and the combined movement of these parts, by means of a lateral pressure or swing given to the operating lever A, the link-lifter bar *c* may be
60 moved from or toward the draw-head E, so as to shift the link forward or backward, as required, so as to present it fairly for entrance into the said draw-head. At the same time
65 that this movement or shifting of the link occurs the lever A may be made to raise or lower the lifter C, as required, for it to properly enter the draw-head. The lever A at its inner end is also attached to the coupling-pin
70 F, so as to lift it out of or lower it into the draw-head, as required. A lifting-rod, D, is mounted in bearings attached to the end of the car, and allowed a vertical motion therein, and its lower end is attached to the inner
75 end of the lever A, and also to the top end of the coupling-pin, so that a person on the top of the car may seize the handle with which its upper end is provided, and thereby raise or lower the said rod, and with it the coupling-pin and link-lifter, as desired. 80

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

1. The lever A, the link-shifter B, and the link-lifter C, combined and arranged substantially as described. 85

2. The link-shifter B, pivoted at *b* to a stationary part of the car, so as to allow it a swinging motion in the direction of the length of the car, and its operating-lever A, attached
90 to its upper end, so as to give it, when required, a swinging movement on its said pivot, and its lower end engaged with a laterally-projecting link-lifter, so that by the operation of the actuating-lever the said link-shifter may
95 be moved forward or backward, as desired, substantially as described and set forth.

In witness whereof I hereunto set my hand in presence of two witnesses.

WILLIAM DOUGLASS WOODWARD.

Witnesses:
JOHN ROUSE,
GEORGE S. LADUC.