

(No Model.)

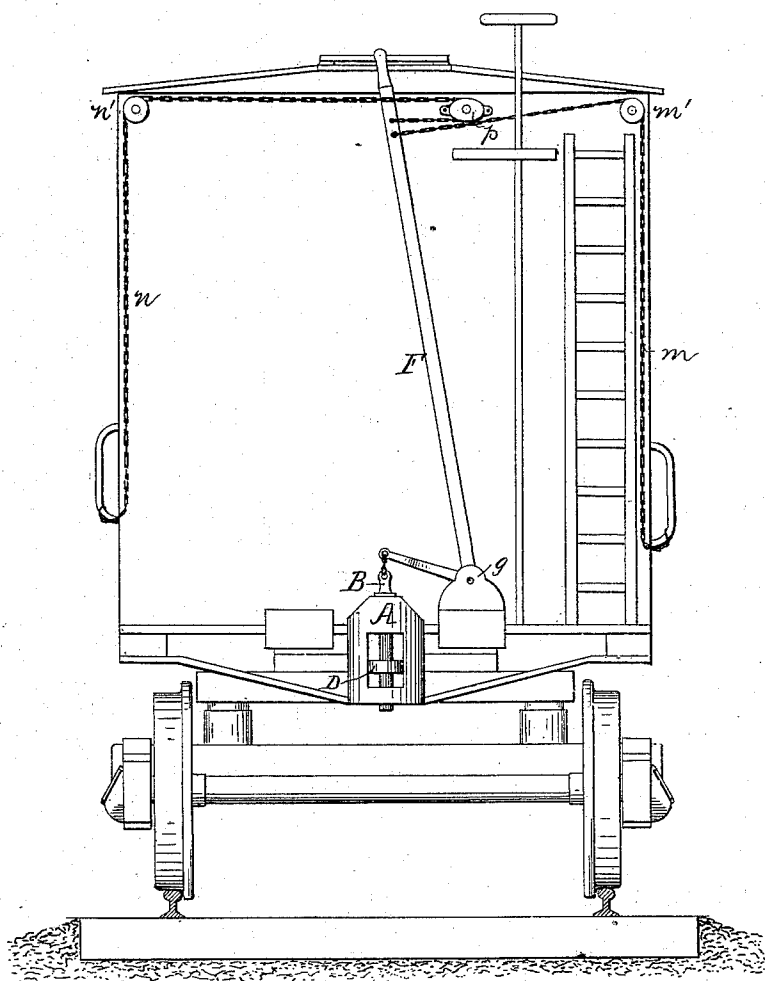
2 Sheets—Sheet 2:

G. V. GREER.
CAR COUPLING.

No. 268,660.

Patented Dec. 5, 1882.

FIG. 4.



Witnesses:
James F. Johns
Harry Drury

Inventor:
G. V. Greer
by his attorneys
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UNITED STATES PATENT OFFICE.

GREXSHON V. GREER, OF WILMINGTON, DELAWARE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 268,660, dated December 5, 1882.

Application filed September 7, 1882. (No model.)

To all whom it may concern:

Be it known that I, GREXSHON V. GREER, a citizen of the United States, residing in Wilmington, New Castle county, Delaware, have invented certain Improvements in Car-Couplings, of which the following is a specification.

The main object of my invention is to so construct a link-and-pin coupling that the operation of coupling will be effected automatically, a further object being to provide means whereby the coupling-pin can be lifted either from the top or from either side of the car to uncouple. These objects I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1, Sheet 1, is a longitudinal section of a pair of draw-heads with coupling devices in accordance with my invention; Fig. 2, a similar view, showing the heads coupled; Fig. 3, a sectional plan on the line 1 2, Fig. 1; and Fig. 4, Sheet 2, a view of the end of a car, showing my improved devices for lifting the coupling-pin.

A A' represent the opposite draw-heads, each of which has a vertical coupling-pin, B, as usual.

In the opposite sides of each draw-head are slots *a*, partly horizontal and partly vertical, and to these slots are adapted the opposite projecting pivot-pins *b* of the links D D', each of the latter having adjacent to the pivot a projection, *d*. When the links are adjusted for coupling, as shown in Fig. 1, the pins of both links are adapted to the vertical portions of the slots *a*. The link D projects from the draw-head A, and is held in a horizontal position by the preponderance of weight in the rear of the pivot-pin. The opposite link, D', is adapted to a slot, *f*, in the bottom of the draw-head, and the projection of the link forms a support for the coupling-pin. When the cars approach each other the projecting link D strikes the projection of the link D' and causes the latter to swing on its pivot-pins so as to release the pin B, which drops and engages with the link D, thus completing the coupling, as shown in Fig. 2. The links may

be readily changed from one position to the other by lifting them until their pins are in line with the horizontal portions of the slots, and then moving them rearward until the link is free to drop into or to be lifted from the slot *f*. Instead of using the slots *a*, however, the links D D' may be hung to the draw-heads by transversely-removable pivot-pins.

My improved coupling presents the same facilities as an ordinary link-and-pin coupling for connecting cars of different heights or for coupling or uncoupling when the cars are on a curve.

In order to provide for the withdrawal of the pin B of the coupling without the necessity of going between the cars for this purpose, I hang a lever, F, to a stud, *g*, on one of the bumpers, or at some other convenient point on the end of the car, the short arm of this lever being bent for connection to the coupling-pin B, and the long arm of the lever being connected to two chains, *m* and *n*, the former passing round a pulley, *m'*, and thence to the hand-rail at one side of the car, and the chain *n* passing first round a snatch-block, *p*, then around a pulley, *n'*, and thence to the hand-rail on the opposite side of the car. By this means a downward pull upon the chain at either side of the car will cause the elevation of the pin B, and the same result may be effected by a direct operation of the lever from the top of the car. Owing to the bending of the short arm of the lever, the long arm of the same may be arranged close to the end of the car and may be moved in a plane parallel therewith, so that it does not occupy an undue amount of space between the cars.

I claim as my invention—

1. The combination of a draw-head and coupling-pin with a link pivoted to the draw-head, and having a projection serving as a support for the pin, as set forth.

2. The combination of the draw-heads, having right-angled slots *a*, with the links furnished with pin-supporting projections *d* and having pins *b*, adapted to said slots *a*, as set forth.

3. The combination of the draw-head, having slots *a* and *f*, with the links furnished with

pin-supporting projections *d* and having pins *b*, adapted to the slots *a*, as set forth.

4. The combination of the pin B of the coupling with a lever, F, hung so as to swing in a plane parallel with the end of the car, the chains *m* and *n*, the pulleys *m'* *n'*, and the block *p*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GREXSHON V. GREER.

Witnesses:

HARRY DRURY,
JAMES F. TOBIN.