

(Model.)

T. NOBLE.  
Car Coupling.

No. 238,425.

Patented March 1, 1881.

Fig: 1.

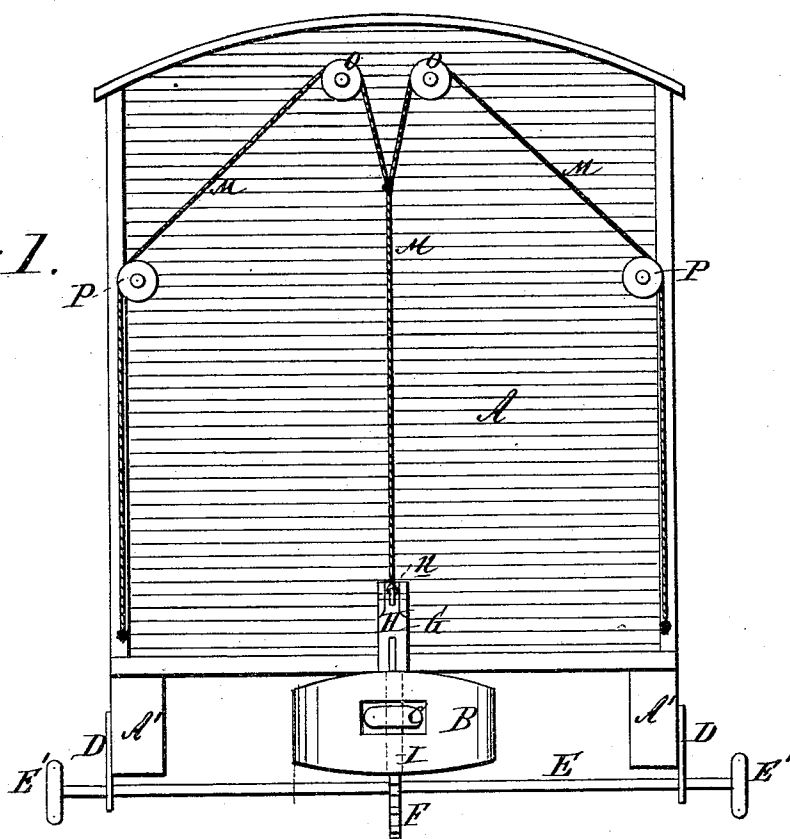


Fig: 2.

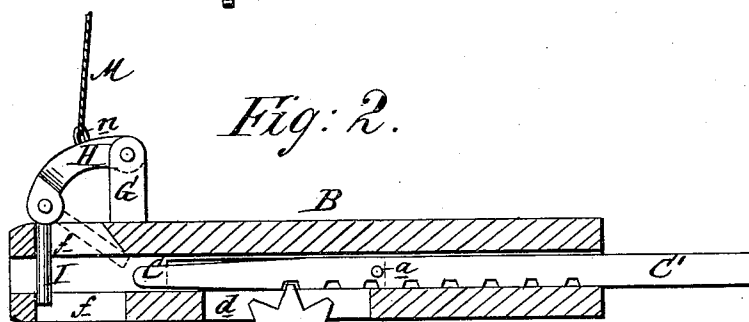
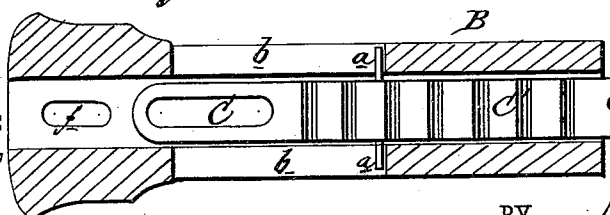


Fig: 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS NOBLE, OF TODD'S POINT, ILLINOIS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 238,425, dated March 1, 1881.

Application filed August 25, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, THOMAS NOBLE, of Todd's Point, Shelby county, Illinois, have invented a new and Improved Car-Coupling, of which the following is a specification.

This invention relates to that class of couplers that are self-couplers; and it consists of a coupling-link having a rack prolongation which is entered into the draw-head and operated by a pinion, and of a swinging coupling-pin operated in a vertical plane by a lever, wheel, or other suitable device.

Figure 1 is a front elevation of the device attached to a car. Fig. 2 is a sectional side elevation of the device, and Fig. 3 is a plan of the same with the top of the draw-head removed.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a car to which the draw-bar B is attached in a suitable manner. Within the draw-bar B is the coupling-link C, provided with a rear prolongation, C', toothed on its lower face, and provided with lateral pins *a a*, which extend through the slots *b b* in the sides of the said draw-bar B, whereby the said link C is restricted in its movement back and forth.

D D represent suitable hangers attached to the sills A' A' of the car A, and supporting the rod E, that passes transversely beneath the bottom of said car A, and has keyed upon it a pinion, F, that projects up through a slot, *d*, in the bottom of the draw-bar B, and engages in the teeth of the coupling-link prolongation C', so that by turning said rod E by means of the hand-wheels E' E' on its ends, the pinion F is made to move the coupling-link C forward to couple with another car, or to retract it so that a link from an opposite car may enter the draw-bar B and be coupled.

On the top of the draw-bar B is a standard, G, in the forked top of which is pivoted a curved lever, H, which, projecting forward, has the straight coupling-pin I pivoted in its free end.

When the lever H is lowered, as shown in Figs. 1 and 2, the coupling-pin I is thereby

entered vertically through the vertical apertures *f f* in the draw-bar B, while the elevation of the lever H withdraws the said coupling-pin I from the draw-bar B and effects the uncoupling of the car.

The coupling-pin I can be operated for coupling or uncoupling from the top or sides of a car by means of the cords M M, that are attached to the staple or eye *n* in the top of the lever H, and are passed upward over the pulleys O O on the front of the car A, near its top, and are then, one on each side, passed over the side pulleys or sheaves, P P, within reach of an operator standing at the side of the car.

When the coupling-link C is drawn back in the position shown in Fig. 2, being withdrawn by the pinion F into the rear of the draw-bar B, an opposite coupling-link may enter the draw-bar B; and the coupling-pin I being also in the position shown in Fig. 2, an entering coupling-link will strike said coupling-pin I, and, pushing said pin I up to the position shown in dotted lines, Fig. 2, will pass beyond it so far that the said pin I will drop into said link and hold the cars coupled. The device avoids the necessity of going between cars to couple and uncouple, at the risk of life and limb.

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

1. A car-coupler constructed substantially as herein shown and described, consisting of a draw-bar, B, coupling-link C, provided with rack prolongation C', rod and pinion E F, and swinging coupling-pin I, as set forth.

2. In a car-coupler, the combination, with the draw-bar B, provided with slots *b b*, of the coupling-link C, provided with rack prolongation C' and pinion F, substantially as and for the purpose set forth.

3. In a car-coupler, the coupling-link C, provided with rack prolongation C', substantially as herein shown and described.

THOMAS NOBLE.

Witnesses:

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