

N. NORRIS.
Car Coupling.

No. 107,950.

Patented Oct. 4, 1870.

Fig. 1

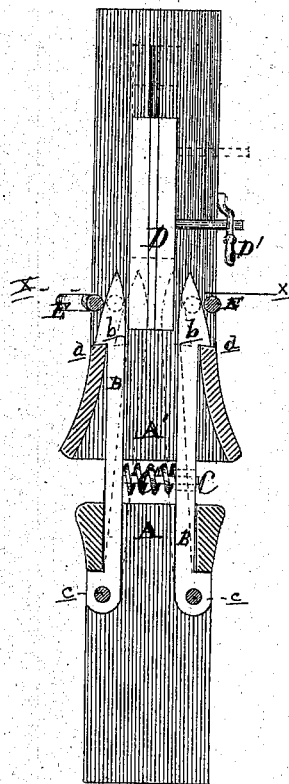
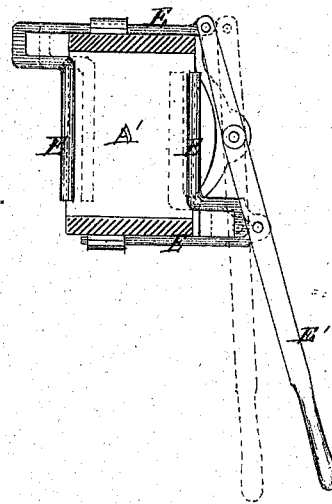


Fig. 2.



Witnesses:

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NATHAN NORRIS, OF BUCHANAN, MICHIGAN.

IMPROVEMENT IN RAILWAY-CAR COUPLINGS.

Specification forming part of Letters Patent No. **107,950**, dated October 4, 1870.

To all whom it may concern:

Be it known that I, NATHAN NORRIS, of the town of Buchanan, in the county of Berrien and State of Michigan, have invented a new and useful Improvement in Car-Couplings; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification.

Figure 1 is a horizontal section of my invention. Fig. 2 is a cross-section on the line *x x* in Fig. 1.

The nature of this invention relates to an improvement in car-couplings; and it consists in constructing them with two coupling-bars attached to the draw-head, these bars each being provided at the connecting end with a claw, which clutches into the opposite draw-head, as shown in Fig. 1. Between these coupling-bars is placed a spring, which holds them in place. In connection with these, and on the opposite draw-head, are bars of the proper shape, operated by a lever from the platform of the car, by which the clutch of the coupling-bars may be released and the cars uncoupled. When coupled the coupling-bars are further secured by means of a block forced between them by a lever operated from the platform of the car.

In the drawings, A and A' are the draw-heads. The draw-head A' should be made of greater length vertically than A, so as to receive the coupling-bars in case one of the cars to be coupled should be higher than the other; B, the coupling-bars, having the claw *b* at the connecting end clutched into the draw-head A' at *a* and attached by pins *c* to the draw-head A.

C is the spring holding the coupling-bars in position, and D the block to aid the same purpose, operated by the lever D'.

E are bars operated from the platform by the lever E' for the purpose of uncoupling the cars. When the draw-heads are brought together this coupling connects automatically, the dart-shaped claws of the coupling-bars sliding on the incline of the opposite draw-head till they pass the point *a*, when the spring C forces them into position. The block D is then forced between the bars and holds them stiff in place.

When it is desired to uncouple the cars by moving the lever E' the bars E force the coupling-bars together, releasing the clutch of the claw *b* from the draw-head and disconnecting the cars.

The advantages of this invention are that it draws the cars closely together and can be entirely operated from the platforms of the cars, thus relieving from the danger attending the use of a coupling which can only be operated by hand between them.

The coupling-bars B, block D, bars E, and levers can at any time be removed and the ordinary link and pin used with these draw-heads.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The coupling-bars B, provided each with the claw *b*, and connected and operated by the spring C, in connection with the draw-heads A and A', when constructed as described, and for the purpose set forth.

2. The combination of the draw-heads A A', the coupling-bars B, spring C, block D, lever D', bars E, and lever E', substantially as and for the purposes set forth.

NATHAN NORRIS.

In presence of—

P. M. WEAVER,
CHARLES SNYDER.