F. M. ANDREWS.

CAR-COUPLING.

No. 183,246. Patented Oct. 17, 1876.

Fig. 1.

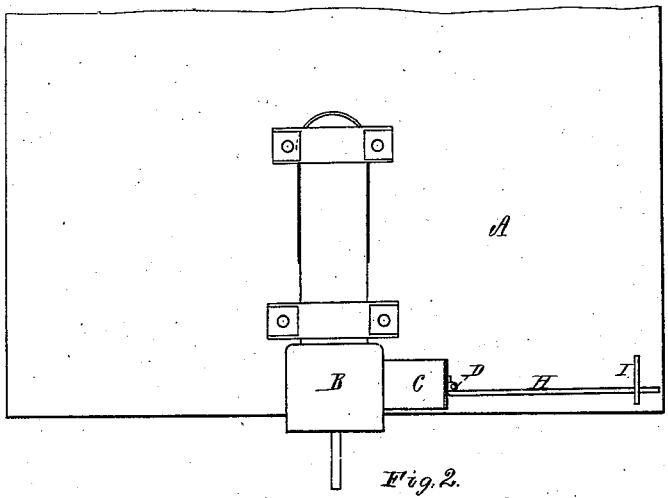


Fig. 2.

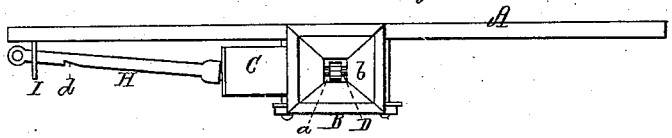


Fig. 3.

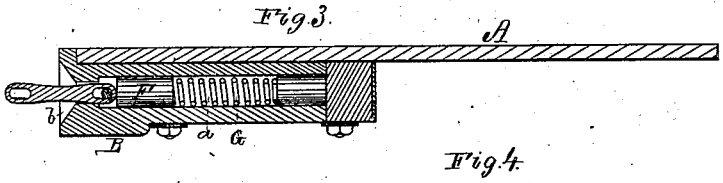


Fig. 4.

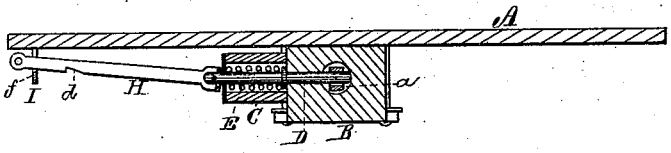


Fig. 5.

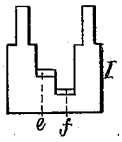


Fig. 6.

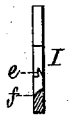
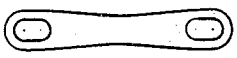


Fig. 7.



Witnesses.

S. N. Piper

L. N. Miller.

Francis M. Andrews.

by his attorney

R. H. Eddy

UNITED STATES PATENT OFFICE.

FRANCIS M. ANDREWS, OF NATICK, MASSACHUSETTS.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **183,246**, dated October 17, 1876; application filed September 11, 1876.

To all whom it may concern:

Be it known that I, FRANCIS M. ANDREWS, of Natick, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Railway Car-Couplings; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is an under-side view, Fig. 2 a front-end view, Fig. 3 a longitudinal section, and Fig. 4 a transverse section, of a car-coupling embodying my invention, and applied to the platform of a car. Fig. 5 is a side view, and Fig. 6 is a section, of the staple or bolt retractor supporter, to be hereinafter described. Fig. 7 is a side view of the coupling-link or coupler, which is furnished with two holes, *h h*, for reception of the bolt.

The said invention consists of the combination of a staple provided with a notch and latching-catch, as hereinafter explained, with the bolt-retractor, horizontal slide-bolt, and bolt-stopper, and their actuating springs, all being essentially as shown and explained.

With my improved car-coupling there is no necessity of a person going between the cars to effect either the coupling or uncoupling of them, and, consequently, there is no danger of such person being caught and crushed, or injured by them, as has frequently happened when some other kind of coupling has been employed.

In order to enable the car to unshackle from another or to couple with an approaching one provided with a link projecting out of its link-chamber, an attendant has only to pull backward the bolt-retractor so as to draw back the bolt sufficiently for the bolt-stopper to be shot forward across the end of it.

The bolt is provided with means for holding it retracted, in order that the cars may not couple when one may be used to push the other along, and after performance of the same, may be required to depart or separate from the other.

In my car-coupling the bolt does not stand vertically, and is not moved inward by the action of gravity, but it is arranged horizontally, and, of necessity, is provided with a spring for impelling it forward into the link.

In the drawings, A denotes the car-platform. B is the coupling-head, having within it longitudinally a long chamber, *a*, provided at its outer end with an open flaring mouth, *b*.

The bolt-case C projects from one side of the coupling-head and supports a slide-bolt, D, arranged within it, and furnished with an impelling-spring, E, as shown.

The bolt-stopper F is a piston, which is placed in the chamber *a*, and provided with a spring, G, for its advancement therein, all being as represented.

A bar, H, furnished with a latching-notch, *d*, arranged as shown, is fastened or jointed to the bolt at its outer end. This bar extends through a stationary staple, I, projecting down from the platform. Within this staple is a latching-catch, *e*, and a notch, *f*, the latter having its bottom inclined in manner as shown, that is, so as to prevent the bar H, while resting therein, from hooking or catching the staple in a manner to prevent such bar from moving forward.

On raising the bar out of the notch *f* and moving the bar laterally over the catch *e*, and suitably retracting such bar, it may be latched or held back by the catch *e* and the notch *d*.

I claim as my invention—

The combination of the staple I, provided with the notch *f* and the latching-catch *e*, as described, with the notched bolt-retractor H, horizontal slide-bolt D, spring E, bolt-stopper F, and its actuating-spring G, all being applied together and to the platform A, coupling-head B, and bolt-case C, substantially as set forth.

FRANCIS M. ANDREWS.

Witnesses:
R. H. EDDY,
J. R. SNOW.