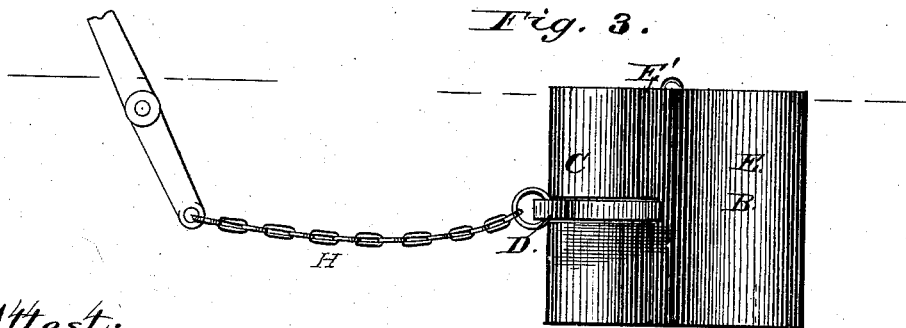
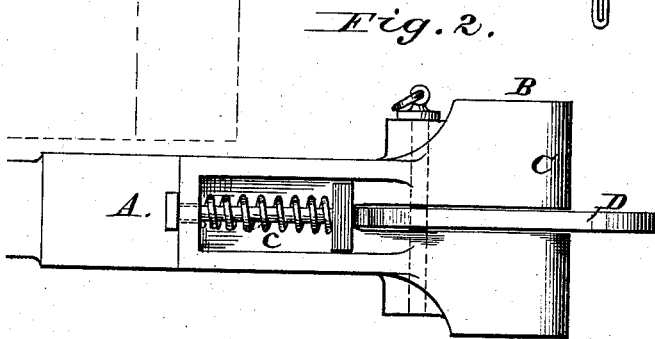
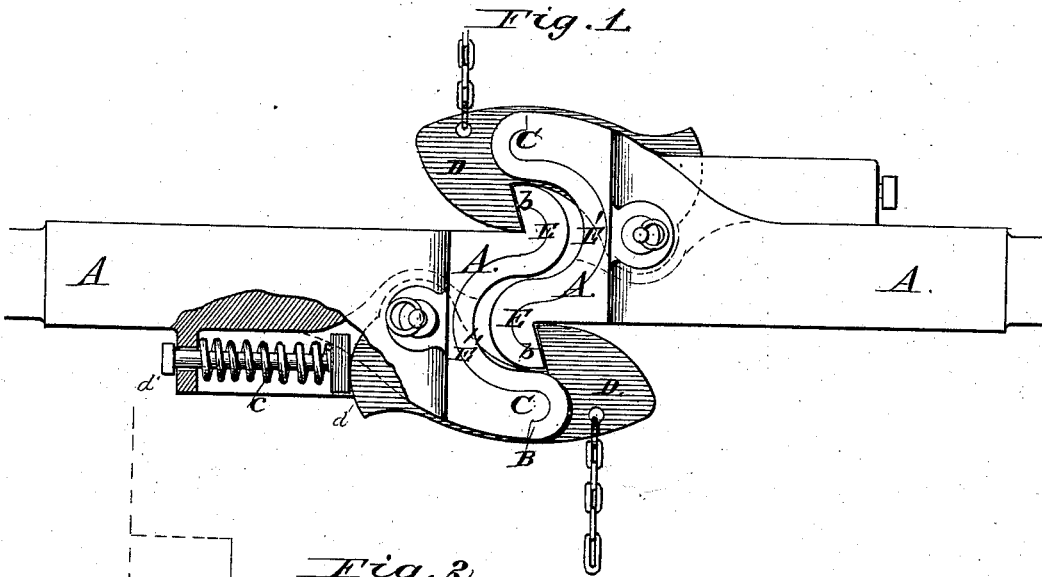


G. T. PETERS.  
CAR-COUPPLINGS.

No. 194,461.

Patented Aug. 21, 1877.



Attest:  
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# UNITED STATES PATENT OFFICE.

GEORGE T. PETERS, OF JERSEY CITY, NEW JERSEY.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 194,461, dated August 21, 1877; application filed June 26, 1877.

*To all whom it may concern:*

Be it known that I, GEORGE T. PETERS, of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Car-Coupling, of which the following is a specification:

This invention relates to certain improvements in car-couplers, its object being to provide a coupler of simple construction which will readily adapt itself to cars having platforms of different heights, and which will act with comparatively little friction or leverage, and couple the cars automatically when they come together, and at the same time allow them to become automatically uncoupled in case the train jumps the track.

My invention consists in a draw-head, formed in a single piece, divided into two wings by means of a slot, and provided with a semicircular lug and a semicircular recess, which form a knuckle-joint when two of the draw-heads are brought together, in combination with a draw-hook, pivoted in the slot between the two wings, and having a curved rear end, upon which bears a horizontal rod actuated by an independent spring, as more fully hereinafter set forth.

In the drawing, Figure 1 represents a top view of my improved coupler, showing the two draw-heads connected together; Fig. 2, a side view of a single coupler; and Fig. 3, a front view of a single coupler, showing the chain and lever for operating the same for the purpose of uncoupling.

The letter A represents the draw-bar, which is secured to the end of the car in the ordinary manner, and B the draw-head, formed in one piece at the front end of the draw-bar, with two wings, C C, and an intervening slot, in which is pivoted the draw-hook D, said hook being constructed with a curve, *d*, at its rear, against which bears the end of a rod, *d'*, surrounded and actuated by a spiral spring, *e*, to throw the draw-hook automatically into position for coupling, as more fully hereinafter specified.

The draw-head is provided with a semicircular lug, E, and a semicircular recess, E',

which form a knuckle-joint when two of said draw-heads are brought together. The draw-head is also provided with a square shoulder, *d*, at the rear of the lug E, which serves to engage the hook of the opposite draw-head when two of the same are brought together.

To the end of the draw-hook is secured one end of a chain, H, the other end of which is secured to a suitable lever, by means of which said hook may be disengaged to uncouple the cars.

The operation of my improved coupler will be readily understood in connection with the above description. When a train is to be made up, or two cars are to be coupled together, it is simply necessary to cause the cars to approach each other until they meet, when the respective draw-hooks are thrown backward by the curved sides of the draw-heads, and engage the shoulders at the rear of the same.

To uncouple the cars, it is only necessary to draw on the chain attached to the draw-hook by means of the lever until said hook is disengaged from the shoulders, when the cars may be drawn apart.

It will be perceived that the coupler as thus constructed is extremely simple in all its parts, and can, therefore, be constructed at comparatively little expense, while at the same time it operates automatically in coupling the cars, thus avoiding the danger attendant upon the use of the ordinary couplers, and, by reason of the semicircular lugs and recesses on the draw-heads and the knuckle-joint which they form when coupled, the coupling acts with the smallest possible amount of friction and leverage, and is readily adapted to cars of different heights, and at the same time permits of automatic uncoupling when influenced by any indirect strain, thus permitting the cars to become uncoupled in case one or more should jump the track.

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

The draw-head B, formed in a single piece, with two wings, C C, semicircular lug E, and semicircular recess E', forming a knuckle-

joint when two draw-heads are brought together, in combination with the draw-hook D, pivoted between the wings C C, and having a curved rear end, and a horizontal independent bolt actuated by means of a spring bearing against said curved rear end of the hook, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal in the presence of the subscribing witnesses.

GEORGE T. PETERS. [L. S.]

Witnesses:

JAS. F. FIELDER,  
E. H. CARPENTER.