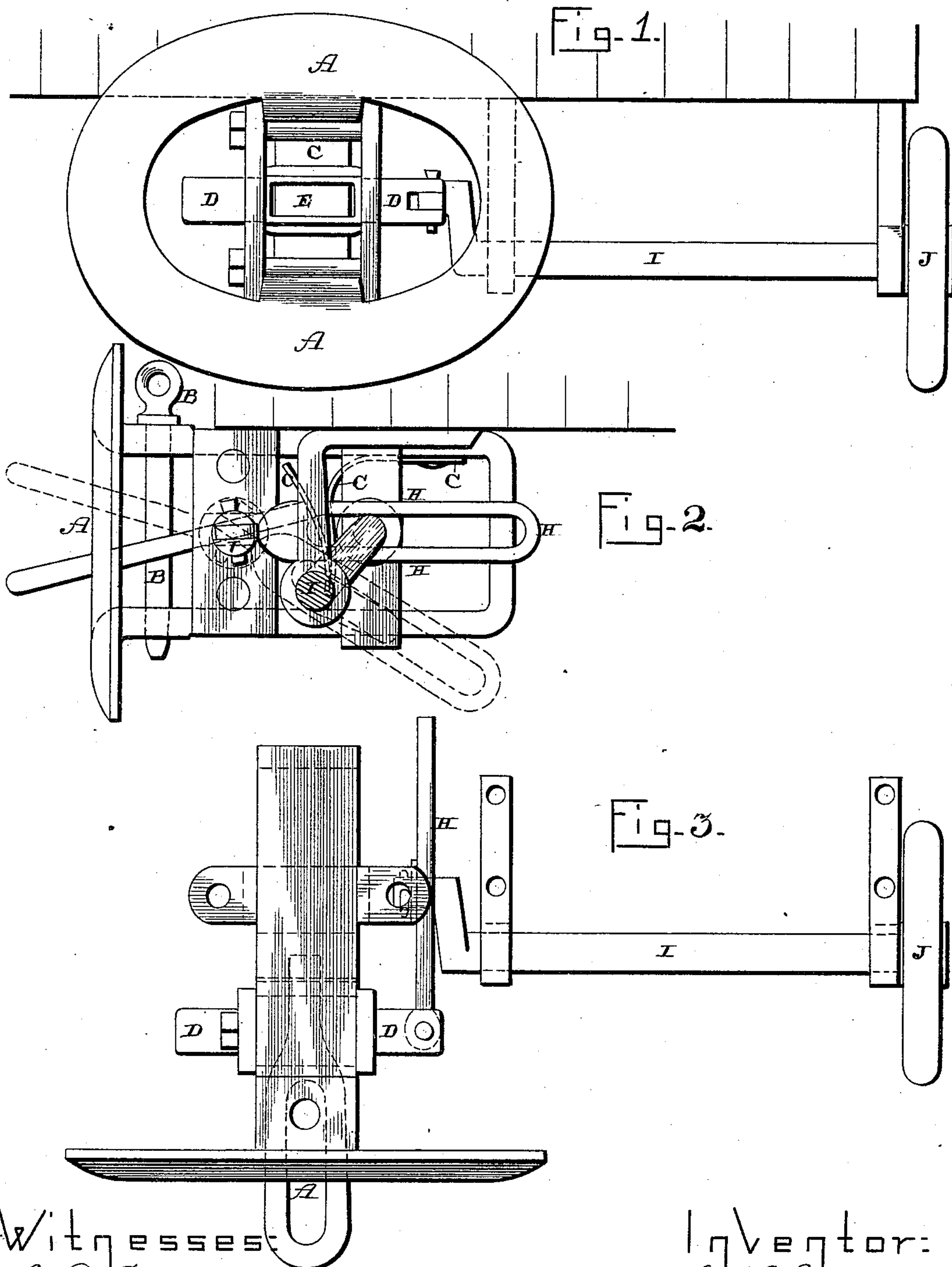


(No Model.)

H. H. EMERY.  
CAR COUPLING.

No. 426,929.

Patented Apr. 29, 1890.



Witnesses:

*E. P. Ellis,*  
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Inventor:

*H. H. Emery,*  
per  
*J. A. Lehmann,*  
att'y.



# UNITED STATES PATENT OFFICE.

HERNANDO H. EMERY, OF MERLIN, PENNSYLVANIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 426,929, dated April 29, 1890.

Application filed December 7, 1889. Serial No. 332,876. (No model.)

*To all whom it may concern:*

Be it known that I, HERNANDO H. EMERY, of Merlin P. O., in the county of Chester and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in car-couplings; and it consists in the combination of a link having a solid end, a partially-revolving slotted shaft or roller placed inside of the draw-head, a spring for assisting to retain the link in position, a slotted arm or crank connected to the partially-revolving shaft or roller, and a cranked operating-rod, as will be more fully described hereinafter.

The object of my invention is to place inside of the draw-head a partially-revolving shaft, through which one end of the link is passed, and by means of which the outer end of the link can be raised and lowered, so as to adapt it to couple with cars of different heights.

Figure 1 is a front view. Fig. 2 is a side elevation. Fig. 3 is a plan view.

A represents the draw-head, which may be of any desired shape, size, or construction that may be preferred, and through which the pin B is passed in the usual manner. Placed in this draw-head is a spring C, either of the shape here shown or any other that may be preferred, and against which the inner solid end of the link is made to strike. This spring is intended to keep the link in place while coupling. Passing horizontally through the draw-head is a partially-revolving roller or shaft D, which has a slot E made through it sufficiently large to allow the inner solid end of the link to pass freely through it. This roller or shaft serves as a support for the link, and at the same time to raise and lower the outer end of the link, so as to adapt it to couple with high or low cars, as may be desired. The inner end of the link is made solid and long enough to pass back through the slot after the coupling-pin has been dropped through the link, and thus the link is held in position whether it comes in contact with the spring or not. When the

cars run together, the rear solid end of the link strikes against the spring, and this spring prevents the link from being forced so far back that the cars are prevented from coupling when they run together. Secured to or formed as a part of this slotted roller or shaft at one or both ends is a slotted arm or crank H, and journaled upon the end of the car, so as to engage with this slotted arm or crank, is a cranked shaft I. This shaft is made long enough to reach out to the side of the car, so that the brakeman can operate the link at will without having to venture between the cars, and thus endanger life and limb. The length of the slotted arm and the crank upon the shaft is such that the link can be raised and lowered as far as the opening in the draw-head will permit.

By means of the construction here shown the brakeman, standing by the side of the car, by a turn of the operating-wheel J on the outer end of the shaft I, can raise or lower the link, so as to adapt it to couple with any adjoining car, no matter whether the draw-head is placed high or low.

Having thus described my invention, I claim—

1. In a car-coupling, the combination of the draw-head, a slotted partially-revolving shaft or roller, a longitudinally-slotted arm connected to the shaft, an operating-shaft having its inner end formed into a crank which engages the said slotted arm, and a link having a rearwardly-extending portion which engages the slotted partially-revolving shaft, substantially as shown.

2. In a car-coupling, the combination of a slotted roller or shaft, a mechanism for causing the shaft to partially revolve, a coupling-link, and a spring placed back of the coupling-link, substantially as described.

3. The combination of the draw-head, a partially-revolving slotted roller or shaft extending therethrough, a slotted arm connected to the roller, a cranked operating-shaft, a coupling-link having a solid end, and a spring which is placed back of the roller, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

HERNANDO H. EMERY.

Witnesses:

JOHN R. PEIRCE,  
THOMAS TALBOT.