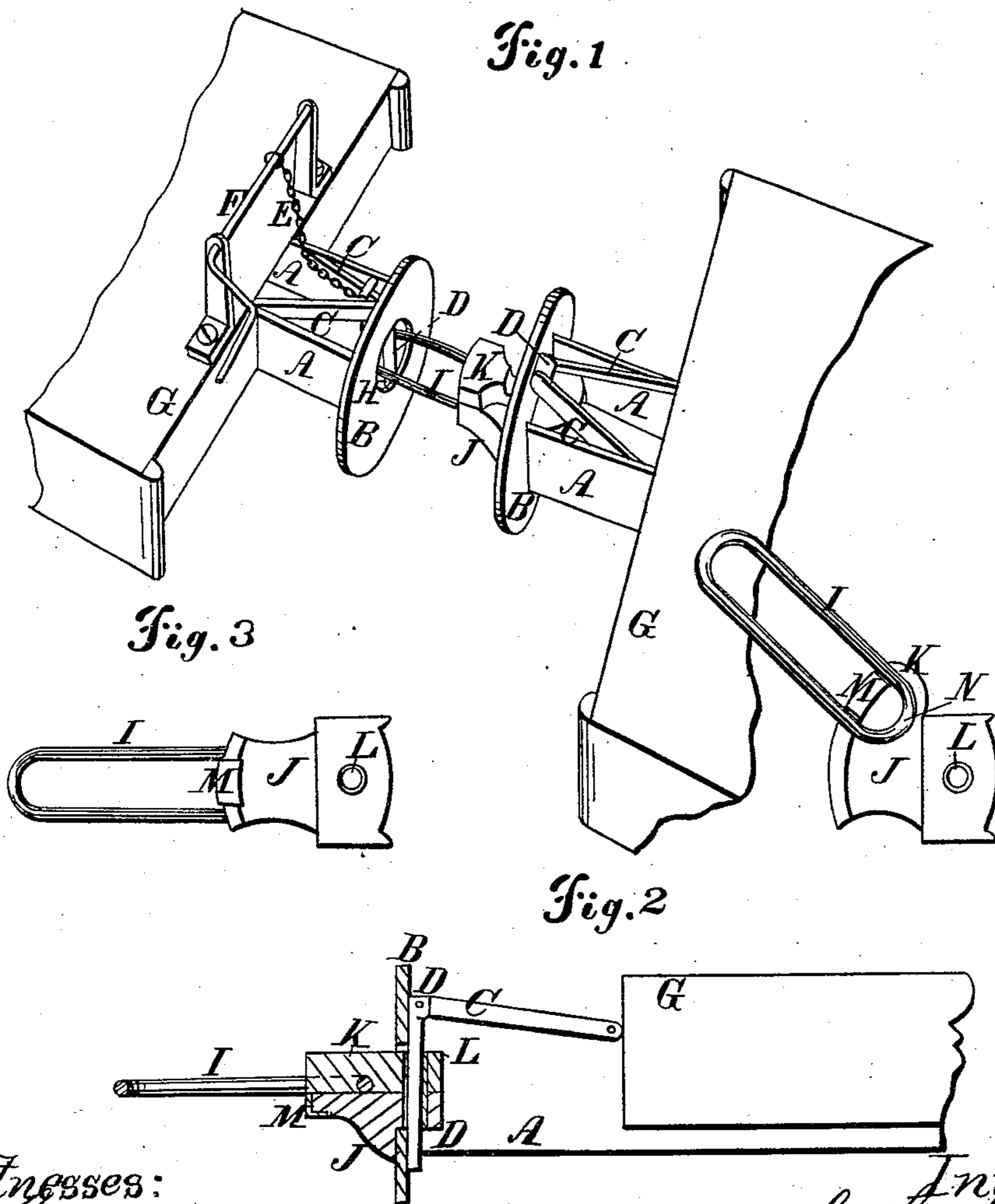


G. S. ACKER.  
Car Coupling.

No. 83,124.

Patented Oct. 20, 1868.



Witnesses:  
H. F. Oberb.  
Louis C. Hyde

Inventor:  
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Per Atty.  
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# United States Patent Office.

GEORGE S. ACKER, OF KALAMAZOO, ASSIGNOR TO HIMSELF AND  
H. A. LACEY, OF DETROIT, MICHIGAN.

*Letters Patent No. 83,124, dated October 20, 1868.*

## IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

### *To whom it may concern:*

Be it known that I, GEORGE S. ACKER, of Kalamazoo, in the county of Kalamazoo, 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 view in perspective of my apparatus attached to platforms of railway-cars which are in section.

Figure 2 is a sectional view, longitudinal, of my device, on the line *x x*, fig. 1.

Figure 3 is a bottom view of my uncoupling-device closed and holding the link.

Figure 4 is a bottom view of the same open, showing the position of the link ready to uncouple.

Like letters indicate like parts in each figure.

The object of this invention is to construct a device for coupling railway-cars together by which a saving of life may be had, by preventing the necessity of the operator standing between the cars to couple them, that will so hold one end of the link that, in case of accident, and in certain positions, the connection of the cars would be instantly severed, thereby preventing one car off the track from drawing off those connected with it.

In order to accomplish this end, I construct the draw-bar A, provided with draw-bar head B, of any suitable form to suit the attachments hereinafter described.

To the sides of the draw-bar A, and between the sides thereof, I pivot the levers C, the opposite ends of which are connected by a short rod or bolt, which passes through the eye of the link-pin D, which swings freely upon said rod or bolt.

To the head of the pin D, or to the ends of the levers C, near the head of the pin, I attach the chain E, which I lead to a winch, F, which may be placed upon the platform G, or attached to any convenient part of a car; or the winch may even be done away with entirely; and the chain be attached to any convenient part of the car, where it may be easily reached by the operator.

The link-pin D should be long enough to project both above and below the opening, H, in the draw-bar head B, through which the connecting-link I passes.

By raising the pin, by means of the chain, with or without the windlass, the levers C are raised to a vertical position, with the link-pin suspended vertically between them, and the link, being by this movement disengaged from the pin, passes freely from the draw-bar, through the opening H. Then, by releasing the chain, the levers fall to a nearly horizontal position,

against any proper stop, which may be attached to the draw-bar, while the pin hangs suspended vertically, immediately in the rear of the opening H, in such a manner that its ends project above and below said opening, and obtain a resistance against the inner side of the draw-bar head.

The link I, entering the opening H in the head B, forces back the lower end of the pin, which is suspended, as hereinbefore described, until the end thereof will pass the end of the link, when the pin falls to place, and the coupling is complete.

To uncouple the cars, when one or more of them have left the railroad-track, and have deflected therefrom at an angle of about forty-five degrees, I construct two plates, J and K, held and fastened together by the thimble L, which, being hollow, allows the pin D to pass through it, and hold the plates in their place within the end of the draw-bar head.

The plate J is smooth upon its upper face, and turns freely upon the thimble L, which, in turn, also turns upon the link-pin.

The plate K is provided with hasp M, rigidly attached thereto, which projects downwards, and engages with the under side of plate J, to prevent spreading of the two plates. Plate K is also smooth upon its under side, and is provided with a proper channel, of sufficient depth to contain the end of the link, as shown at N, in fig. 4, which represents a bottom view of the device open, so that the link, by its own weight, will drop out of the channel, thereby uncoupling the cars.

When this device is in position, it resembles figs. 1, 2, and 3, and acts as a coupler for one end of the link, while the device first hereinbefore described performs the same duty for the opposite end of the link.

Should any car assume a position, relative to an adjoining car, of an angle of about forty-five degrees, the link being confined in the channel in the plate K, partially turns the same upon the thimble L, until the entire link and channel no longer rest upon the plate J, when the link drops out of the channel, thereby uncoupling the cars.

This device will be found very useful to prevent one car of a train, which may accidentally leave the track, from dragging off those remaining upon the track.

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

The plates J and K, thimble L, hasp M, and channel N, in connection with the link I, and pin D, and draw-bar A, when arranged and operating substantially as and for the purposes set forth.

GEORGE S. ACKER.

Witnesses:

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H. F. EBERTS.