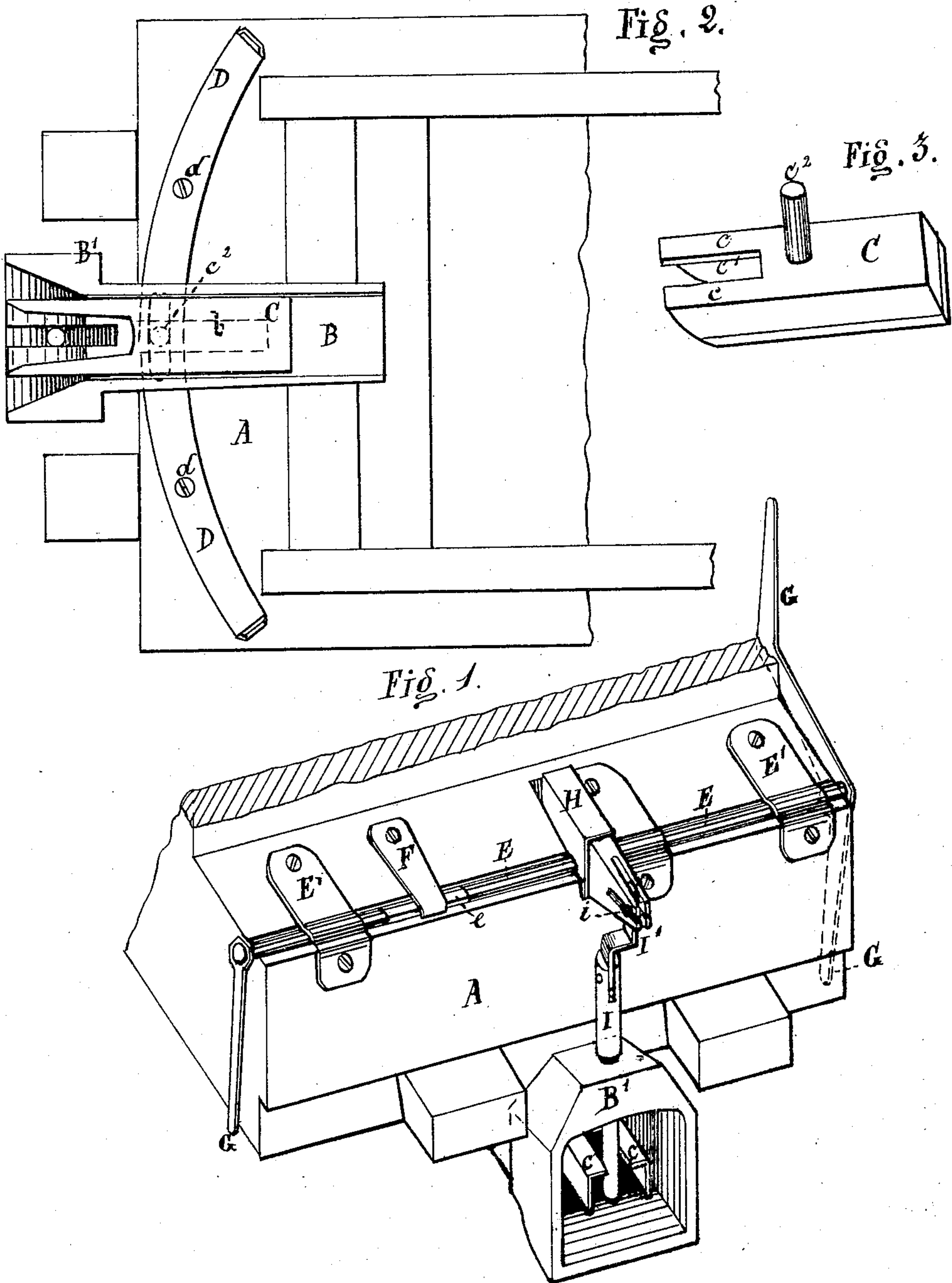


J. CURRAN.  
Car-Couplings.

No. 152,941.

Patented July 14, 1874.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JAMES CURRAN, OF BINGHAMTON, NEW YORK.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **152,941**, dated July 14, 1874; application filed August 18, 1873.

*To all whom it may concern:*

Be it known that I, JAMES CURRAN, of Binghamton, New York, have invented a Car-Coupling, of which the following is a specification:

Figure 1 is a perspective view of a platform of a railroad-car having my improvements affixed. Fig. 2 is a bottom view of the same with the lower portion of the draw-bar removed, and Fig. 3 is a detached view of the sliding block employed to hold the coupling-link in proper position to enter the opposing draw-head.

In the drawings, A represents the platform or end of the car. B is the draw-bar, provided with a flaring-mouthed draw-head, B', as is plainly shown in Fig. 2. C is a sliding block, arranged within the draw head and bar B B'. Block C is chambered upon the under side, so as to form flanges or lips *c c*, for the purpose of receiving and holding one end of the link, as will be explained. This block is also slotted, as at *c*<sup>1</sup>, (see Fig. 3,) to receive the draw-pin. D D are levers pivoted to the lower side of the platform at D, Fig. 2. The inner ends of these levers are slotted and engage with a stud, *c*<sup>2</sup>, rising from block C through a slot, *b*, in the draw-bar B, as shown in dotted lines in Fig. 2. Thus, it will be seen that by means of levers D D, the block C can be thrust forward into the mouth of the draw-head, or can be withdrawn toward the rear of the same. E is a rock-shaft mounted on the front of the platform by means of straps E' or other suitable bearings. F is a spring pressing upon shaft E, and serving as a friction-stop to retain the shaft in such position as it is placed by means of the lever G at either end. I usually prefer to square or flatten that part of the shaft upon which the spring F rests, as at *e*, Fig. 1. H is an arm secured to rock-shaft E at a point a little one side of the center. Arm H is slotted both vertically and horizontally, as shown in Fig. 1. I is the draw-pin, and I'

is a link pivoted to the pin, and also connected with the arm H by means of a pivot, *i*, which is confined in the horizontal slot. In practice, I would make one or both of the levers G to extend to the top of the car, so that a brakeman can operate it from the roof.

In operating my improvement, I thrust the block C forward, and place the coupling-link under the lips *c*, so as to prevent the outer end of the link from dropping too low to enter the opposing draw-head, and then, by means of lever G, let the pin I down through said link. The two cars are now brought together, and when the link has entered the opposite draw-head a sufficient distance it is secured by the second pin in the same manner.

The employment of the friction-stop insures that the pin I shall not be displaced by the concussion of the cars, which would otherwise be liable to cause the lever G to vibrate, and thus move said pin.

As the front end of arm H is slotted, and thus made elastic, it will permit pin *i* and link I' to escape without deranging the arm and its actuating devices in case the draw-bar should be torn from the platform, carrying with it the coupling-pin I.

Having thus described my invention, what I claim is—

1. In combination with the rock-shaft E, levers G, arm H, pin I, and link I', the friction-stop F, substantially as set forth.

2. In combination with the rock-shaft E, pin I, and link I', the arm H, slotted to receive the link-pivot *i*, substantially as set forth.

3. The combination of the draw-bar B, having a narrow throat and a mouth with inclined sides, with the sliding block C and levers D D, substantially as set forth.

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Witnesses:

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