

(No Model.)

R. PYLE.  
CAR COUPLING.

No. 349,261.

Patented Sept. 14, 1886.

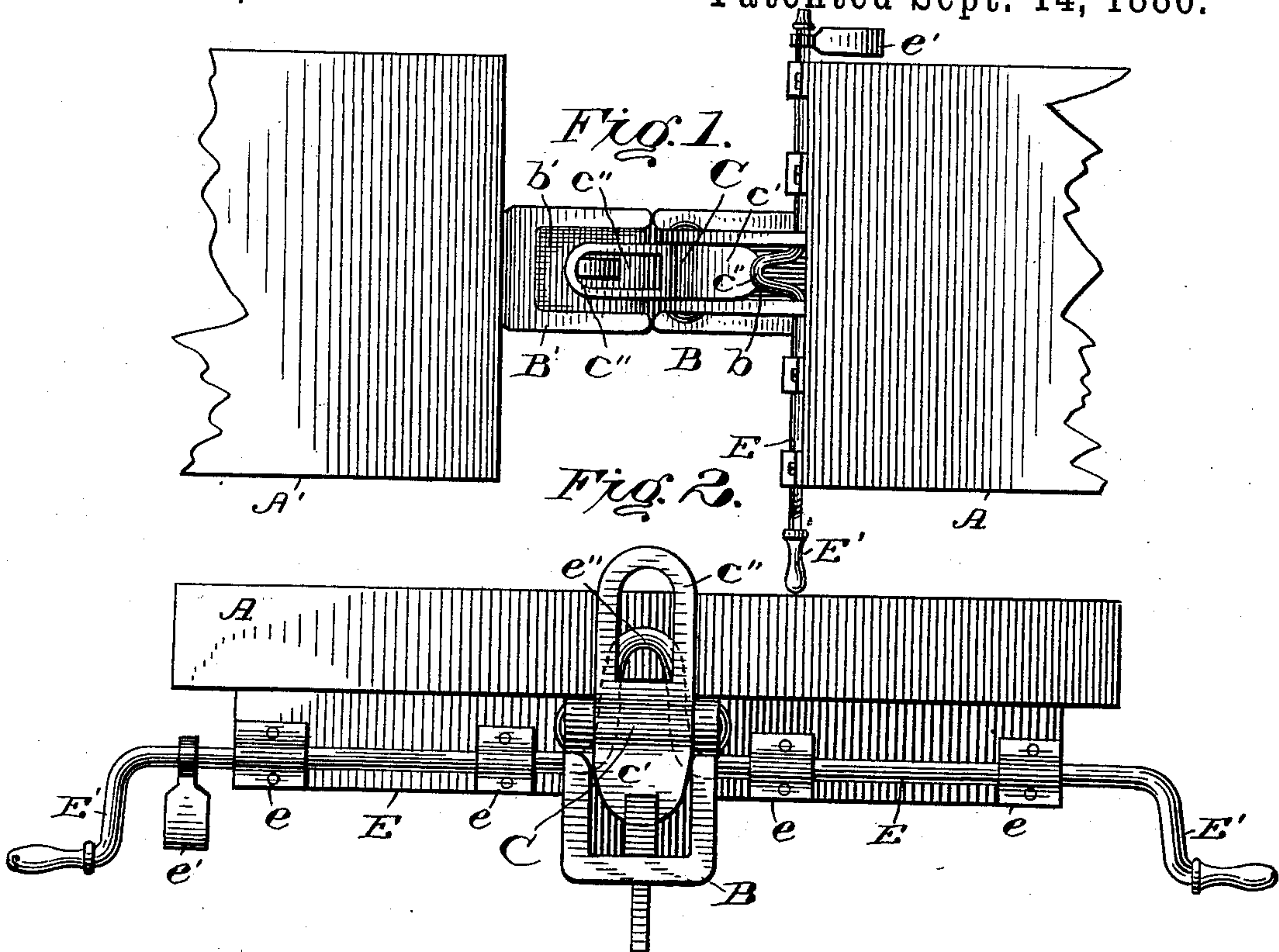


Fig. 3

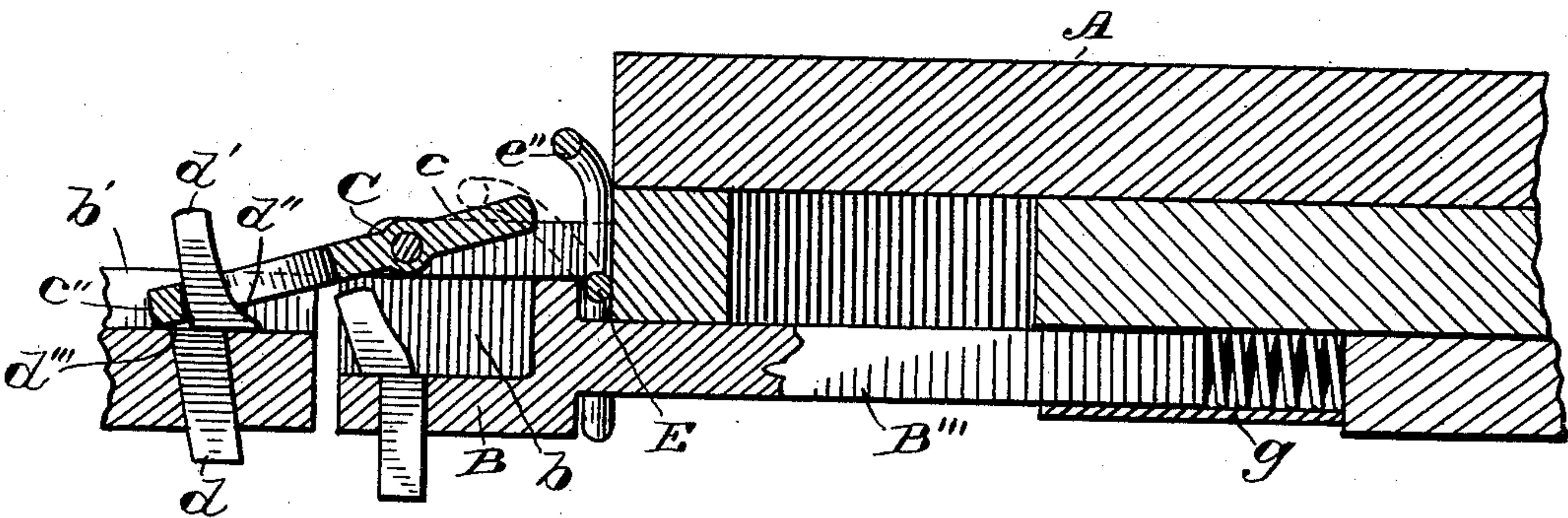


Fig. 4.

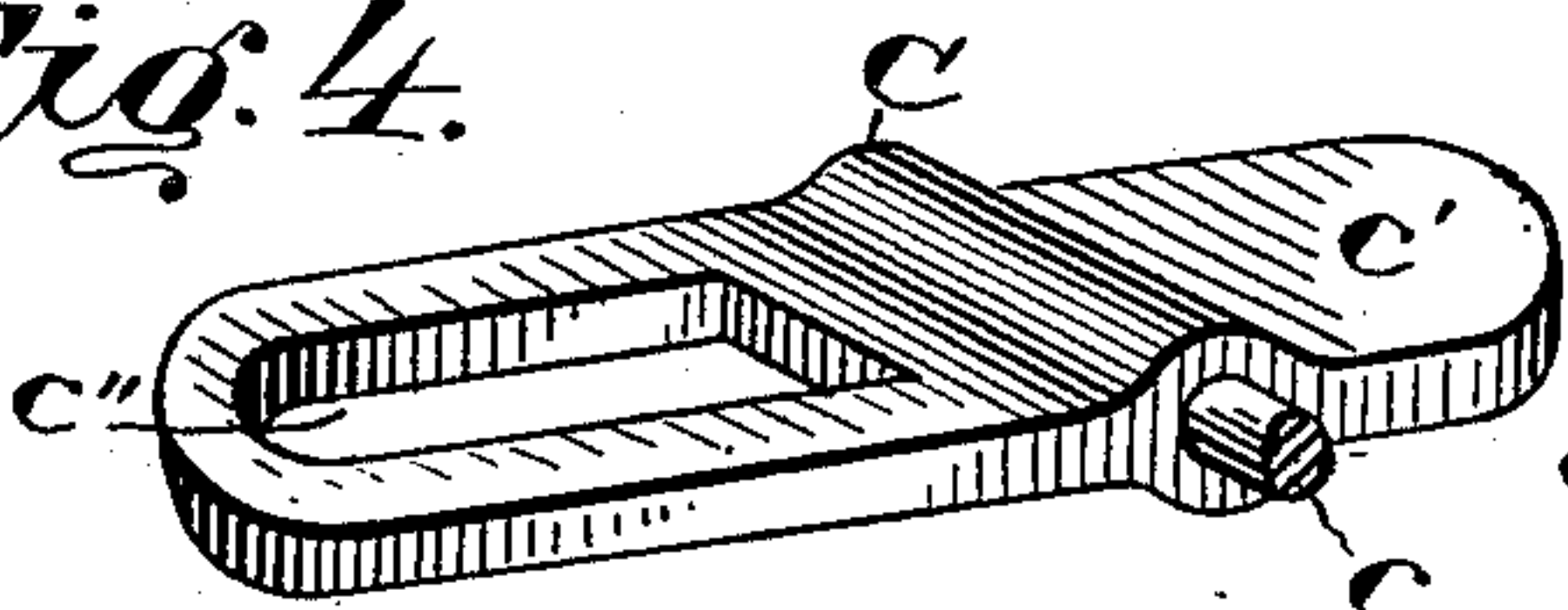


Fig. 5.

Witnesses  
Wm. J. Dannel  
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By his Attorney O. E. Duff



# UNITED STATES PATENT OFFICE.

RICHARD PYLE, OF PLYMOUTH, PENNSYLVANIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 349,261, dated September 14, 1886.

Application filed July 10, 1886. Serial No. 207,695. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD PYLE, of Plymouth, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to couplings for railway-cars, and is designed for use on all classes thereof, but is especially designed for use on freight-cars, the object being to furnish a coupling which shall automatically connect adjacent cars without any manipulation whatever, and which may be uncoupled from the side of the car without any risk or danger on the part of the operator.

With these objects in view my invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described, and afterward specifically pointed out in the claims.

In the drawings, Figure 1 is a top plan view showing the ends of two adjacent cars with my improved coupling attached, the cars being coupled together. Fig. 2 is a partial end elevation of a car having one member of my coupling attached. Fig. 3 is a central vertical longitudinal section through the parts shown in Fig. 2 and the draw-head and pin of the other car. Fig. 4 is a perspective view of my improved coupling-link; and Fig. 5 is a perspective view of my improved coupling-pin, over which said link engages.

Like letters of reference mark the same parts in all the figures of the drawings.

Referring to the drawings by letters, A and A' are the ends of two adjacent cars of ordinary construction. B B' are the draw-heads, and B'' the draw-bar of the car A. Each of the draw-heads B B' are hollowed out on top, as at b b'.

In the hollow of the draw-head B, near the top, is pivoted on bars or trunnions c a link, C, which is provided with an open end, c', and a solid end, c'', the trunnions c being located slightly nearer the end c'' than the end c'.

In the bottom of the hollow of the draw-head B' is a perforation made rectangular in section and in a line inclining downward and toward the other car. In this perforation the coupling-pin D is placed. This pin is of a peculiar construction, having a main body, d, which is rectangular in section to fit in the inclined perforation, and an upper portion, d', projecting above the bottom of the draw-head, and a shoulder, d'', resting on the surface of the draw-head.

On the end of the car A is pivoted, by means of clips e, a bar, E, having a handle, E', on each end, a weight, e', at one end, and a projection, e'', in the center, formed by bending out the bar at that point.

In the bottom of the hollow of the draw-head B is another pin, F, which at its upper end projects beyond the front of the draw-head.

The operation of my invention may be described as follows: The cars being coupled, as in Fig. 3, and it being desired to uncouple them, the operator, standing at either side of the car, turns the bar E by means of one of the handles, E', and causes the central projection, e'', of said bar to impinge upon the solid end of the coupling-link, as shown by dotted lines in Fig. 3, and pressing down thereon raises the open end off the pin D until the open end is raised to the position shown in Fig. 2. To couple up the cars, they are brought together with the link raised, and when the projecting end of pin F strikes the solid end of the link the open end will be thrown forward, falling over the pin D without manipulation. The draw-bar B'' is backed by a spring, g, to receive the shock when the cars come together, said bar being allowed to play longitudinally for that purpose. In case of accident to the link C or its operating mechanism, the pin might be reversed and an ordinary link used to couple the cars. When the cars are coupled by link C, its forward end rests on a shoulder, d'', as shown in Fig. 3, tending thereby to hold said pin down. Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The improved coupling-link herein described, provided with an open end, c', a solid end, c'', and trunnions c, as and for the purpose set forth.

2. The draw-head B, hollowed out as described, in combination with the centrally-pivoted link C, having solid end  $c''$ , open end  $c'$ , and trunnions  $c$ , as set forth.

5 3. In combination, the car A, having hollowed-out draw-head B, with bar E, having handles  $E'$ , and central projection  $e''$ ; and the pivoted link C, having a solid end,  $c''$ , open end  $c'$ , and trunnions  $c$ , as set forth.

10 4. In combination, the cars A A', having hollowed-out draw-heads B B', the pivoted

link C in draw-head B, the pin D in draw-head B', and the pivoted, weighted, and handled bar E, for operating said link, as and for the purpose set forth.

15 In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

RICHARD PYLE.

Witnesses:

O. E. DUFFY,

M. P. CALLAN.