

D. McCURDY.
Car-Couplings.

No. 158,724.

Patented Jan. 12, 1875.

Fig. 1.

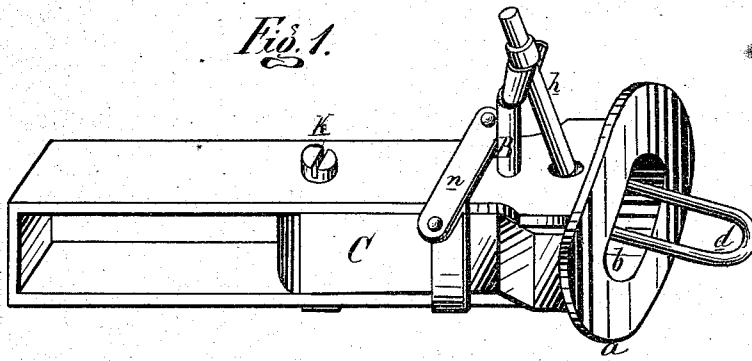


Fig. 2.

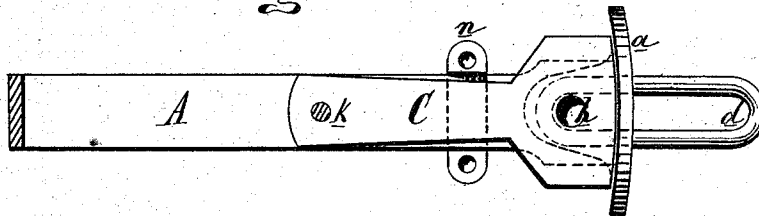
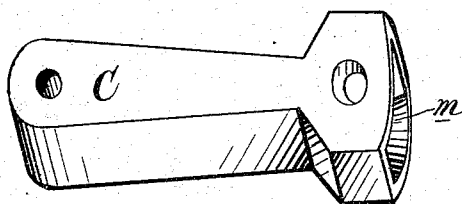


Fig. 3.



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DAVID McCURDY, OF OTTAWA, OHIO.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **158,724**, dated January 12, 1875; application filed October 1, 1874.

To all whom it may concern:

Be it known that I, DAVID McCURDY, of Ottawa, in the county of Putnam and State of Ohio, have invented an Improvement in Car-Couplings, of which the following is a specification:

The nature of my invention relates to certain improved attachments to be applied to the draw-bars of railway-cars, such as are in ordinary use, and by means of which the coupling together of said cars in a train may be certainly and automatically made without the necessity of guiding either the link or pin by hand, thereby avoiding any liability to accident, endangering life or limb, as is the case wherever the brakeman or other person is obliged to stand between the cars to enter the link into the draw-head, or guide the pin to place after the link is entered.

Figure 1 is a perspective view of my improved attachments as applied to what is ordinarily termed as a wrought-iron draw bar and head. Fig. 2 is a top plan, with the upper plate of said draw-bar removed. Fig. 3 is a detached perspective view of the vibrating guide.

Like letters refer to like parts in each figure.

In the annexed drawings, A represents a wrought-iron draw-bar, of the usual construction, provided with the buffer-head *a*, which, in turn, is provided with the usual opening *b* to receive the coupling-link *d*. B is a stud, secured in any suitable manner to the top plate of the draw-bar, its top end inclined toward the vertical plane of the pin-hole through said draw-bar, into which the pin *h* is inserted when the cars are coupled together. This stud should be of sufficient length to sustain the pin in nearly a vertical position, as shown in Fig. 1, without entirely withdrawing said pin. The upper end of this stud is grooved, as shown.

The pin is withdrawn when the cars are uncoupled, and the head thereof rested upon the top of the stud, the groove in which steadies the pin its place. When draw-bars provided with cast-iron buffer-heads, with large flaring openings, are used to receive and guide the link into the draw-bar, this stud is all the attachment required.

The pin, suspended from the stud, as de-

scribed, and with its point inserted in the pin-hole, is dislodged from its position by the concussion of the draw-bars of two cars which are run together to be coupled, and the coupling is completed without accident or danger to any one.

C is a false mouth-piece or guide, which is only designed to be used when a small opening is formed in the draw-head. This guide is pivoted between the upper and under plates of the draw-bar by means of the dead pin *k*, which passes through said plates and the rear end of the guide. The free end of the guide is enlarged and provided with a large flaring mouth, *m*, which, when in place, is immediately in the rear of the small opening *b* in the draw-head.

The link being entered is guided into a longitudinal recess in said guide, and in rear of the mouth. This recess receives the end of the link, allowing the same to be guided therein by the flaring mouth, sufficiently far to pass the vertical plane of the pin-hole, when the draw-heads coming together, the concussion releases the pin from the stud, and the coupling is complete. The link, being inserted and secured by the pin, is held in nearly a horizontal plane, so that it will readily enter the draw-bar head of the next car when it is desired to couple. A strap or clamp, *n*, secured around the draw-bar, holds the guide in place.

I am aware that a spring mouth-piece has been used before for the purpose of holding the pin elevated, and dropping the same when pushed back by the link of an approaching car, and do not claim the same as my invention; but

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

1. In combination with the draw-bar of a railway-car, the grooved stud B, substantially as and for the purposes set forth.

2. In combination with a draw-head having the mouth *b*, the false mouth-piece C, having the flaring mouth *m*, and pivoted within the draw-bar by the pin *k*, for the purpose set forth.

DAVID McCURDY.

Witnesses:

C. E. HUSTIS,
H. S. SPRAGUE.