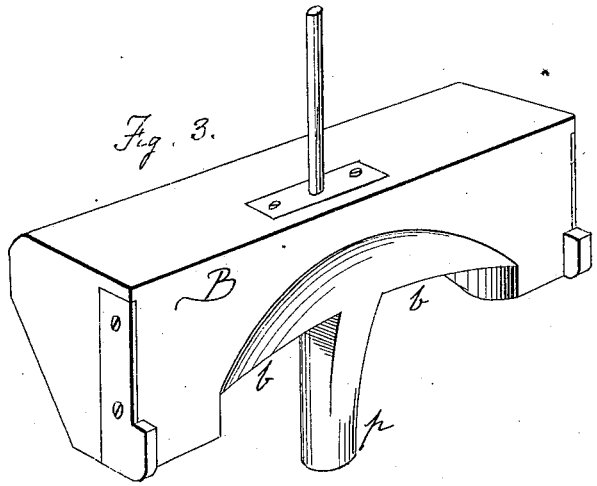
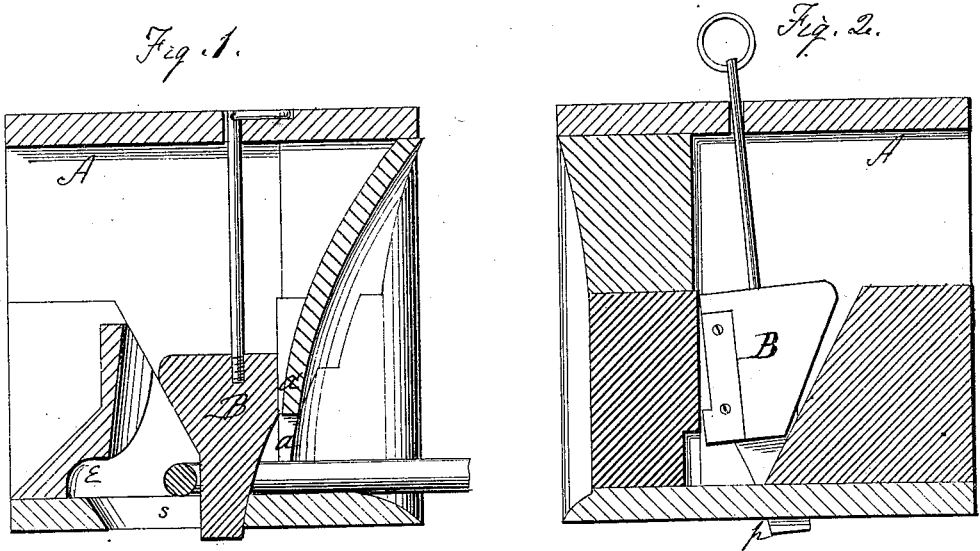


J. MILLER.  
Automatic Car-Coupling.

No. 164,020.

Patented June 1, 1875.



WITNESSES  
Gronville Lewis  
F. M. Kenny

By

INVENTOR  
Joel Miller  
By Hill & Ellsworth

Attorney

# UNITED STATES PATENT OFFICE.

JOEL MILLER, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN AUTOMATIC CAR-COUPINGS.

Specification forming part of Letters Patent No. **164,020**, dated June 1, 1875; application filed May 1, 1875.

*To all whom it may concern:*

Be it known that I, JOEL MILLER, of Baltimore, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Automatic Car-Couplings; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section in line with the center of the draw-head. Fig. 2 is a similar section, showing the end of the sliding block; and Fig. 3 is a perspective view of the sliding block.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention is an improvement upon the automatic car-coupling patented to William H. Gruver, December 22, 1874, No. 158,064, and has for its object to adapt the principles of said invention to the link-and-pin coupling. To this end my present improvement consists in combining a pin with the sliding block of the Gruver patent, and adapting the parts connected therewith to the use of a link for coupling with the pin, substantially as I will now proceed to set forth.

In the drawings, A is the draw-head, constructed in any suitable form, and provided with a flaring mouth to receive the end of the link and properly direct it toward the opening *a*. B is the sliding block, guided and locked

as clearly set forth in the Gruver patent, but cut away or arched at *b b*, and provided with a pin, *p*. When the block is down, as represented in Fig. 1, its upper front edge bears against the front plate *a'* of the draw-head, and the pin projects down through a slot, *s*, and bears against the front end of said slot, so that the pin is supported at both its upper and its lower end against the draft of the link. The slot *s* is sufficiently elongated to enable the pin to swing back to a certain extent when struck by the entering link, the pin and block then sliding up till the link passes under it, when they drop and couple with the link, as shown in Fig. 1.

Behind the block the chamber may be provided with a recess, *e*, to hold the link horizontal when presenting it to the opposite car, the floor of the draw-head being made substantially horizontal to assist in accomplishing the same result.

The front of the block B and pin may be made concave, if preferred.

I claim as my invention—

The combination of the sliding and locking block B, having the pin *p*, and the draw-head, substantially in the manner and for the purposes set forth.

JOEL MILLER.

Witnesses:

J. TYLER POWELL,  
M. CHURCH.