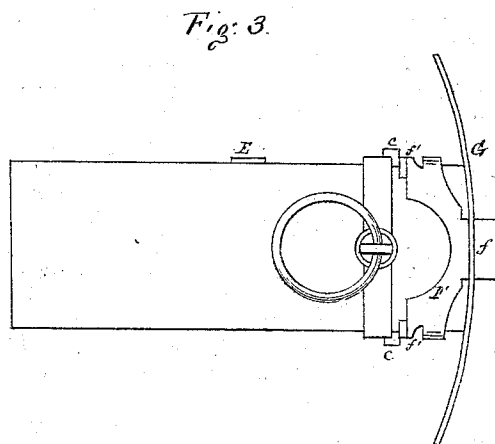
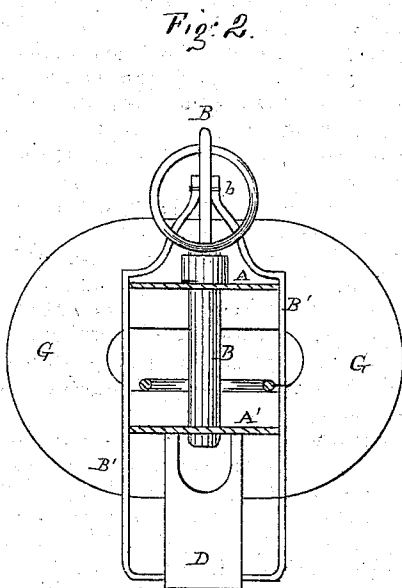
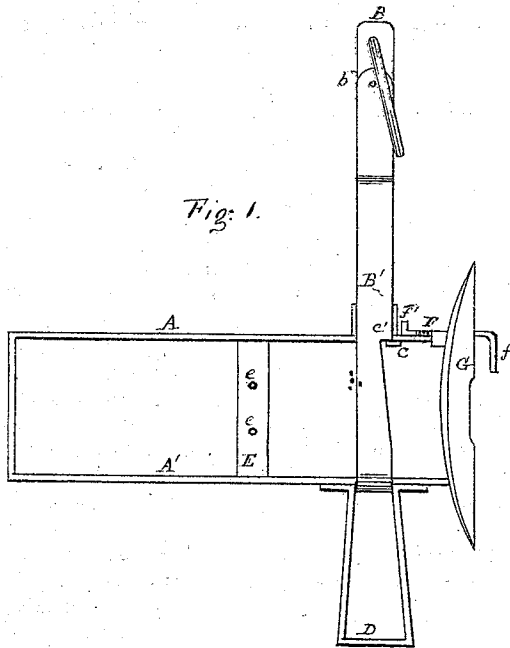


J. TEMPLE.
Car-Couplings.

No. 135,948.

Patented Feb. 18, 1873.



Witnesses.
Joseph L. Coombs,
T. M. Coombs,

Inventor.
James Temple,
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Attorney.

UNITED STATES PATENT OFFICE.

JAMES TEMPLE, OF DANVILLE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO ROBERT P. BARBER, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 135,948, dated February 18, 1873.

To all whom it may concern:

Be it known that I, JAMES TEMPLE, of Danville, in the county of Montour and State of Pennsylvania, have invented certain Improvements in Railroad-Car Couplings, of which the following is a specification:

The object of this invention is to provide a cheap and effective automatic coupling mechanism for railroad cars, not liable to get out of order, and which may be readily and cheaply applied to the draw-heads now in common use on railroads.

In the accompanying drawing, Figure 1 is a side view of a draw-head of the ordinary construction with my improvements attached, the coupling-pin being raised and ready to fall and engage with the coupling-link when the cars come in contact. Fig. 2 is a cross-section of the same. Fig. 3 is a top view of the upper plate of the draw-head, the coupling-pin and its attached stirrup being represented as cut off above the upper surface of said plate.

A is the upper plate of the draw-head, and A' the lower plate of the same. B is the coupling-pin, and B' a stirrup riveted thereto at *b*, and embracing the draw-head. Projecting laterally from the lower side of the plate A are two small studs, *c c*, to support the coupling-pin and its attached stirrup when raised, as shown in Fig. 1, and, when the saw-tooth catches *c'* in the sides of said stirrup, engage with said studs. D is a guide-stirrup suspended from the lower side of the bottom plate A' of the draw-head, the inclined sides of which so guide the stirrup B' that when the coupling-pin is raised the saw-tooth catches will engage with said studs *c c* and hold the pin in its raised position. E E are two upright struts attached to the plates A and A' on opposite sides of the draw-head, which support two cross-bars, *e e*, for sustaining the coupling-link in a horizontal position. The lower cross-bar *e* should be on a level with the lower part of the mouth in the face-plate of the draw-head, and the ends of the coupling-link may be bent upward a little, the better to secure its entering the draw-head of the

car with which it is to connect. When cars are to be coupled whose draw-heads are not on the same level, a bent link, such as is usual in such cases, must be used. F is a sliding plate, lying flat on the upper side of plate A of the draw-head, with its forward part protruding through a mortise in the face-plate G of the draw-head, and bent down, as shown in the drawing, Fig. 1, at *f*. The two points *f'*, which come in contact with the stirrup B', are bent upward, forming vertical flanges, as shown in Fig. 1.

The operation is as follows: In the draw-head of one of the cars the coupling-link is so placed that it will protrude far enough to enter the draw-head of the opposite car and penetrate it far enough to pass the coupling-pin. As soon as the draw-heads come in contact the plate F is driven back against the stirrup B', and the backlash releases the catches of the same from the studs *c c*, and the pin and stirrup fall by their own weight, locking the cars together. The raising of the pin and stirrup will push forward the backlash-plate F.

It will be seen that my improvements may be applied to the draw-heads now in common use on all railroads at a very slight expense, and without discarding any of the parts thereof as now in use.

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

1. In combination with a draw-head of the form and construction now in common use on railroad cars, the stirrup B', attached to the coupling-pin, with its saw-tooth catches *c'*, the projecting studs *c c*, and the sliding backlash-plate F, all constructed and arranged to operate substantially as described.

2. In combination with the said stirrup B', backlash-plate F, and studs *c c*, the guide-stirrup D, substantially as described.

3. In combination with said stirrup B', backlash-plate F, and studs *c c*, the cross-bars *e e* to support the link, substantially as described.

JAMES TEMPLE.

Witnesses:

J. J. COOMBS,
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