J. H. GASSAWAY.

Car-Coupling.

No. 205,628. Patented July 2, 1878.

Fig. 1.

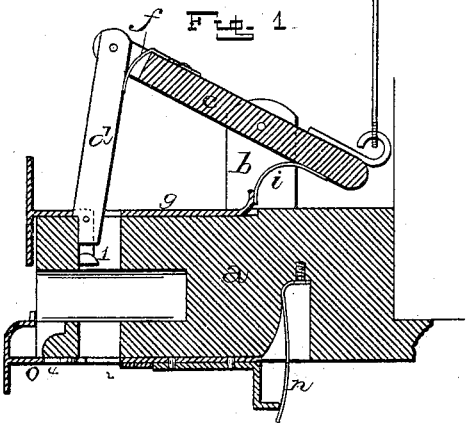


Fig. 2.

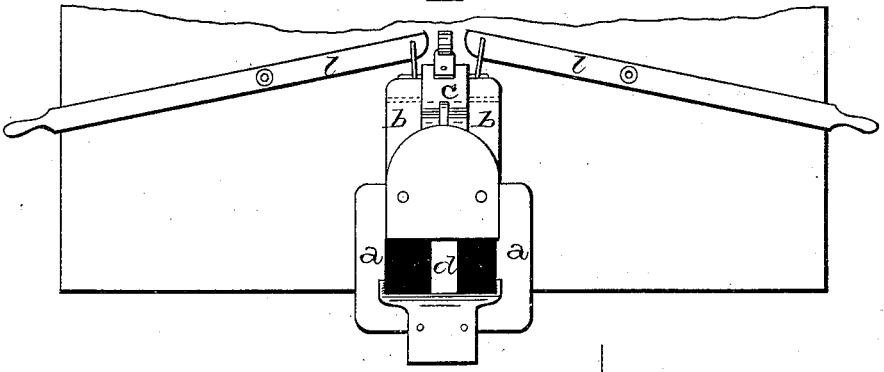
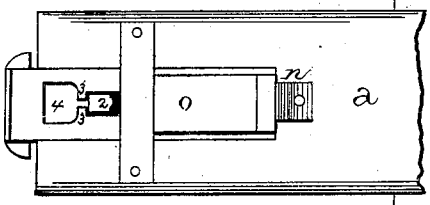


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN H. GASSAWAY, OF GRAPE VINE, TEXAS.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **205,628**, dated July 2, 1878; application filed May 24, 1878.

To all whom it may concern:

Be it known that I, JOHN H. GASSAWAY, of Grape Vine, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in car-couplings; and it consists in the arrangement and combination of devices whereby the pin is supported in a raised condition; also, in a spring-slide for holding up the link ready for coupling with another car, all of which will be more fully described hereinafter.

The accompanying drawings represent my invention.

a represents the draw-head, upon the top of which is formed the two ears *b*. Pivoted in between these ears is the lever *c*, the longer and outer end of which is slotted, so as to receive the upper end of the coupling-pin *d*. Secured to the top of this lever, and bearing against the rear side of the coupling-pin, is the spring *f*, which serves to keep the pin constantly forced forward, and to cause it to snap forward when it is raised to its full height over the top of the draw-head.

The plate *g* is recessed in the top of the draw-head, and has its rear end turned upward, and against this turned-up end the spring *i*, secured to the under side of the lever, bears, for the purpose of causing the rear end of the lever to fly upward as soon as the sliding plate pushes the coupling-pin backward far enough to release it from its hold upon the top of the draw-head, and for the purpose of forcing the plate forward when the rear end of the lever is forced downward for the purpose of setting the pin ready for coupling. When the cars run together this sliding plate *g* is forced backward, so as to dislodge the pin, which immediately falls through the link and binds the cars together. The very act of raising the pin into position again, again forces the plate *g* forward, so that its front end will project beyond the outer end of the draw-head *a*.

To the rear end of the lever *c* may be fastened either the hand-levers *l*, which project out beyond each side of the car, or a rod which reaches up to the top of the car, thus enabling the cars to be coupled or uncoupled without exposing the brakemen to any risk or danger.

Recessed in the under side of the draw-head *a* is the plate *o*, which has its front end so formed as to hold up the link ready for coupling when the cars are run together, and has its rear end to project downward, as shown, for a suitable spring, *n*, to bear against. This spring *n* keeps the front end of the link-holder always pressed outward beyond the end of the draw-head *a* until the cars run together, when it moves back out of the way.

Pivoted in the lower end of the coupling-pin, or formed thereon, is a headed projection, 1, which is heavier on one side, so as to swing backward, and which, when the pin is down through the link, projects through the opening 2 in the link-holder. As long as this link-holder is pressed outward beyond the front end of the draw-head this projection passes down through the hole and can play freely up and down at will. When, however, the link-holder is forced backward to its full extent, the lower end of the pin passes through the large hole 4, catching in front of the two points 3, and thus prevents the link-holder from moving backward. As soon as the pin is raised upward a slight distance the link-holder instantly slips forward, the projection 1 passing between the two points 3.

When the pin is raised sufficiently high the link-holder at once slips forward, so as to support the link properly, ready to couple again, and when the pin is again lowered the headed projection 1 rests upon the link-holder. In this position the car is ready to couple again, and as soon as the link-holder is pressed backward by another draw-head the pin drops through the large hole 4.

By means of a link-holder thus constructed not only can the link be held ready for coupling, so that the brakemen need never go between the cars, but the coupling-pin can be

prevented from being drawn out of the link; and when it is desired that the link-holder shall not be in the way, it can be moved back, so as not to project beyond the front end of the draw-head *a*, by simply forcing the lower end of the pin down through the large hole in its front end.

Having thus described my invention, I claim—

1. The combination of the lever *c*, bolt or coupling-pin *d*, having a notch in the front side of its lower end, so as to snap over the top of the draw-head, and spring *f*, substantially as shown.

2. The combination of the lever *c*, pin *d*, spring *f*, sliding plate *g*, and spring *i* upon the under side of the lever, substantially as described.

3. The link-holder *o*, having the hole 2, points 3, and large hole 4, in combination with the coupling-pin, having the projection 1 upon its lower end, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of March, 1878.

JOHN HENRY GASSAWAY.

Witnesses:
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A. M. HOPE.