

C. S. SERVOSS.

Improvement in Car-Coupling.

No. 126,494.

Patented May 7, 1872.

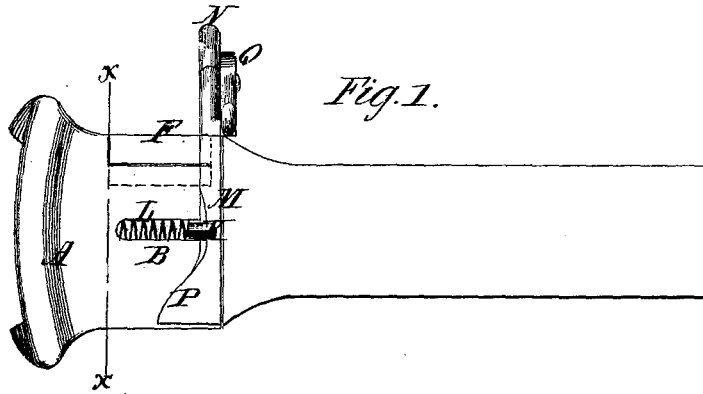


Fig. 1.

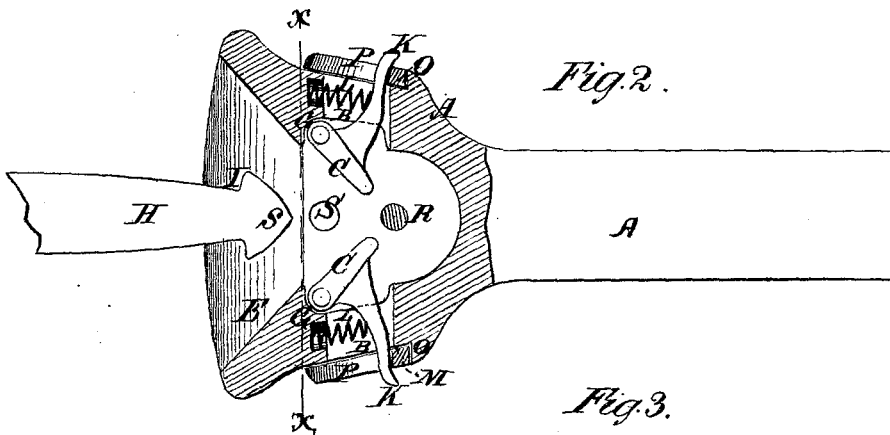


Fig. 2.

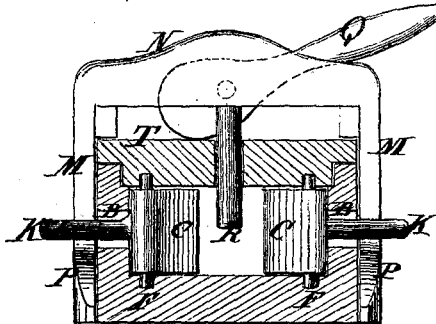


Fig. 3.

Witnesses:

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# UNITED STATES PATENT OFFICE.

COURTNEY S. SERVOSS, OF WILMINGTON, NORTH CAROLINA.

## IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 126,494, dated May 7, 1872.

Specification describing a new and Improved Car-Coupling, invented by COURTNEY S. SERVOSS, of Wilmington, in the county of New Hanover and State of North Carolina.

My invention consists of a pair of jaws within the draw-head, closing together or nearly so behind their pivots by the action of springs to engage behind the shoulders of the coupling-bar, which couples with them self-actingly when the head and shoulders are forced in beyond the ends of said jaws. These jaws are so pivoted in cavities in the draw-head that the drawing force is expended on said cavities and not on the pivots of the jaws, and they are provided with arms projecting through slots in the sides of the draw-head which are acted on to open the jaws, and uncouple the car by inclines on vertical bars hanging one on each side of the draw-head from a cross-bar, to which a lever is attached extending toward the side of the car, where it can be reached without entering between the cars, and this cross-head rests by a vertical rod on the end of the coupler to hold it level to enter the draw-head of another car; also, to cause the uncoupling of the cars self-actingly in case one runs off, all as hereinafter described.

Figure 1 is a side elevation of a draw-head with my improved coupling apparatus attached. Fig. 2 is a horizontal section and plan view of part of the coupling-bar; and Fig. 3 is a section on the line *xx* of Figs. 1 and 2.

Similar letters of reference indicate corresponding parts.

A is a draw-head, of the ordinary kind, with a slot, B, through each side, and with a pair of coupling-jaws, C, pivoted at the base of the flaring mouth E, one on each side, on vertical pivots F in the concave slats G, and with the free ends closing behind the pivots, so as to engage the coupling-bar H behind the shoulders I self-actingly, when the latter goes in between said jaws and forces them open. These jaws have arms, K, projecting through their respective slots, B, and behind each arm is a spring, L, having a constant tendency to close the jaws.

M represents a vertical bar hanging by each side of the draw-head from a cross-bar, N, in front of a shoulder, O; and each of said bars has an incline, P, so arranged relatively to the arms K of the jaws C that when said cross-bar is raised the jaws will be opened and disengage the coupler H, and the cross-bar is provided with a lever, Q, for so raising it, said lever being arranged transversely of the draw-head and extending toward the side of the car, so that the uncoupling can be effected by one standing at one side of the car. This cross-bar also has a strong rod, R, extending downward through the top-plate of the draw-head in the right position to have the weight of the bar-lever, &c., rest on the head S of the coupler, near the point, and thus hold it level when the other end is not coupled for entering the draw-head and coupling self-actingly. As this rod R remains in this position it will, of course, be raised in case a car runs off the track, so that the other end of the coupler falls considerably, and it carries with it the bars M and inclines P, and thus uncouples self-actingly. Holes S are provided for the ordinary coupling-pins, so that cars with this kind of coupling apparatus may be readily coupled by the ordinary pin and link arrangement with others not having it. The top-plate T of the draw-head is made detachable from the other part, to which it is fitted as shown, and is secured to it by bolts. This allows of putting the jaws C in place, as will be clearly understood by inspection of Fig. 3, the said jaws being pivoted in sockets in the upper and lower walls of the draw-head.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with the cross-head arranged for uncoupling in the manner described and with the coupler H, of a rod, R, arranged to rest the said cross-head on the coupler when coupled, substantially as specified.

COURTNEY S. SERVOSS.

Witnesses:

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