

J. CRIST.
Car-Couplings.

No. 142,209.

Patented August 26, 1873.

Fig. 1.

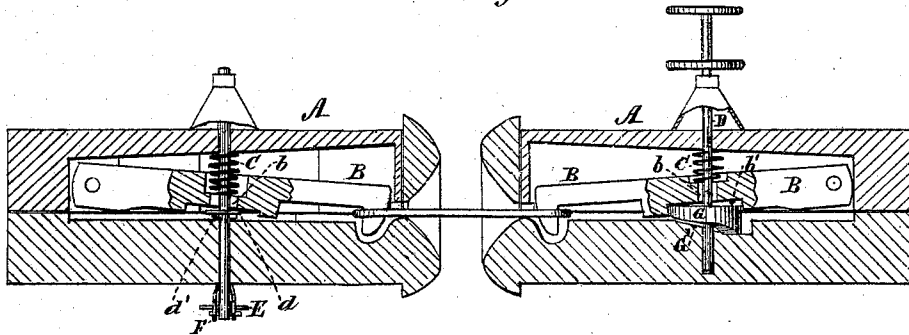


Fig. 2.

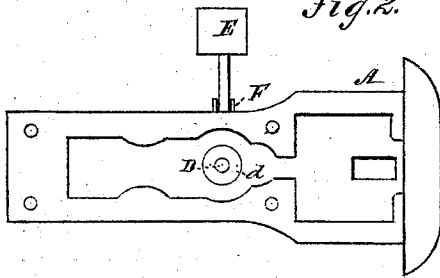
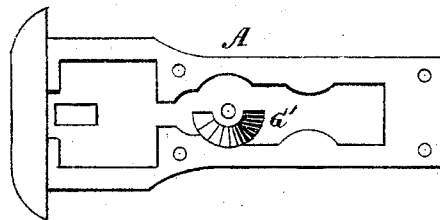


Fig. 3.



Witnesses:
G. Martins
John Kemon

Inventor:
John Crist
PER [Signature]
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN CRIST, OF TIFFIN, OHIO.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 142,209, dated August 26, 1873; application filed April 16, 1873.

To all whom it may concern:

Be it known that I, JOHN CRIST, of Tiffin, in the county of Seneca and State of Ohio, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a longitudinal sectional elevation of my invention shown under two modifications; and Figs. 2 and 3 are horizontal sections, respectively, of each modification.

The invention relates to automatic car-couplings wherein the link lifts a catch-hook by its own forward movement; and consists in attaching said hook to a bar pivoted at the rear end, held down by a spring, and lifted by a vertical rod. It also consists in a novel and effective mode of raising the lift-rod, as herein-after fully described.

In the drawing, A represents the draw-head, in the rear part of which is pivoted the catch-hook B that holds the link of coupling, and is held down by a superposed spring, C, the lower end of which rests in a countersink of a hole made through the catch-hook. This catch-hook B is apertured vertically at *b*, has a recessed seat, *b'*, and receives therethrough the lift-rod D, that is provided with a loose collar, *d*, upheld by a pin, *d'*. This rod is pivoted at

the lower end to a treadle, E, fulcrumed in a pendant, F.

The link, pressing against the inwardly-beveled end of hook, raises the catch B, enters the draw-head A, and the cars are then automatically coupled by the reaction of spring C. In order to free the link from the hook of catch-bar B, it may be lifted by hand or by various forms of mechanism, of which the treadle is one. I, however, preferably apply a spiral cam, G, to the lift-rod, so that by turning the same it moves up or down on a spirally-inclined surface, G', in the bottom of draw-head.

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

1. The catch-bar B, having at about the middle thereof a countersunk hole, the countersink being at the top, in combination with spiral spring C and lift-rod D, which passes through the catch-bar, and has bearing-supports in the top and bottom of the draw-bar, as and for the purpose specified.

2. The combination of the vertical rod D, cam G, and spirally-inclined surface G' in the draw-head with the catch-bar B, as and for the purpose specified.

JOHN CRIST.

Witnesses:

N. F. CRAMER,
C. H. CRAMER.