

L. D. BENNETT.
Car-Couplings.

No. 142,142.

Patented August 26, 1873.

Fig. 1.

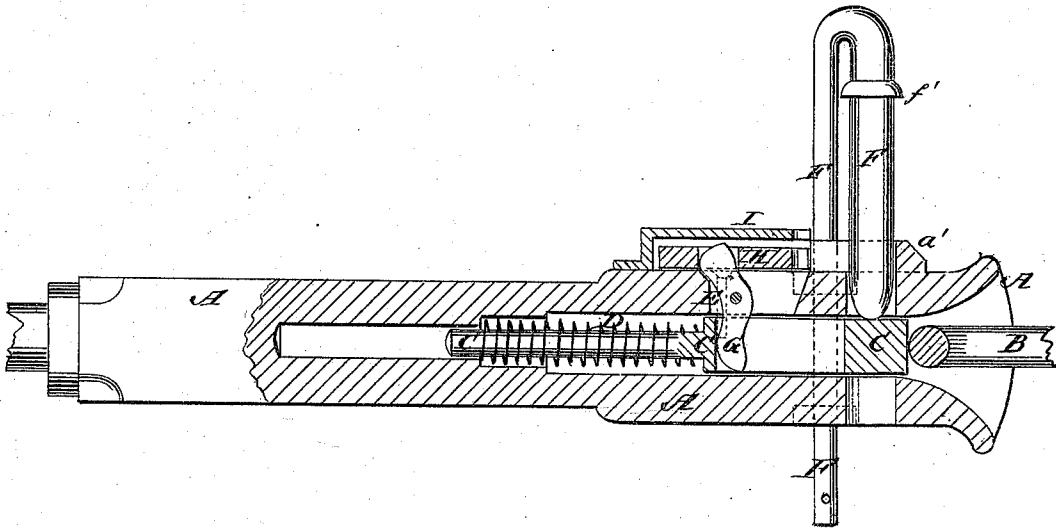
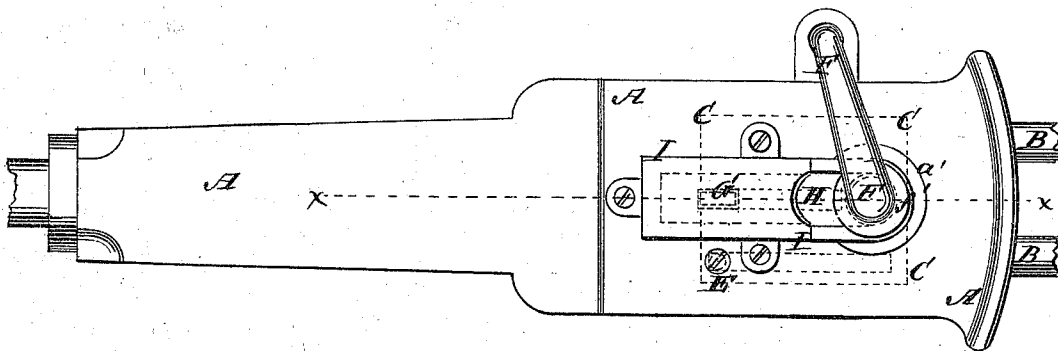


Fig. 2.



Witnesses.

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IMPROVEMENT IN CAR-COUPPLINGS.

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

To all whom it may concern:

Be it known that I, LUMAN D. BENNETT, of Willimantic, in the county of Windham and State of Connecticut, have invented a new and useful Improvement in Automatic Car-Coupling, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved coupling taken through the line *x x* of Fig. 2. Fig. 2 is a top view of the same.

My invention has for its object to furnish an improved car-coupling, which shall be so constructed that it may be readily adjusted to couple the cars automatically as they are run together, and which may be uncoupled when the cars are standing so close together that the link cannot be withdrawn, in such a way that the withdrawal of the link, as the cars are drawn apart, will adjust the coupling to couple itself as the cars are again run together.

The invention consists in an improved car-coupling formed by the combination of the sliding slotted block, the coiled spring, the U-shaped pin, the pivoted lever, and the sliding top block with each other and with the draw-head, as hereinafter fully described.

A is the draw-head, the mouth of which is made hopper-shaped, in the ordinary manner, to guide the entering-link B into place. The cavity of the draw-head A is made large to receive the block C, and with an inward extension of a smaller diameter to receive the spindle formed upon the inner end of said block, so that the block and spindle may move out and in. The block C is forced out as the pin and link are withdrawn by a spring, D, coiled around the spindle of the said block C. The movement of the block C is limited by a pin, E, attached to the draw-head A, and which passes down through a slot in the sliding block C. F is the coupling-pin, which is made U-shaped, and the arm of which, that passes down through the draw-head A, is made larger to receive the draft strain. The other or outer arm of the pin F is made smaller and longer, and passes down through lugs formed upon the side of the draw-head A. The upward movement of the pin F is

limited by a key or other stop attached to the lower end of the outer arm of said pin, and which strikes against the lower lug through which said arm passes. G is a lever, pivoted to the draw-head A, and the lower end of which enters a slot in the sliding block C, so that the said lever G may be operated by the movements of the said sliding block C. The upper end of the lever G passes through a slot in the upper side of the draw-head A, and enters a hole or slot in the block or plate H placed upon the upper side of the draw-head A, and which is moved back and forth by the movement of the said lever G. The sliding block H, end of lever G, and slot in the upper side of the draw-head A are covered by a cap or casing, I. Upon the upper side of the draw-head A is formed a flange, *a'*, passing around the pin-hole, and extending to the cap I to keep the end of the pin always in place upon the upper side of the coupling-block, the stop in the lower end of the outer arm of the coupling-pin being so arranged that the end of the shorter arm of said pin can never rise above the said flange. Upon the upper part of the shorter arm of the pin F is formed a collar, *f'*, which rests upon the flange *a'* when the coupling-pin is in working position.

In adjusting the pin for automatic coupling the end of the pin F is allowed to rest upon the block C, as shown in Fig. 1. As the link enters it pushes back the block C and the pin F drops through the link.

To uncouple the cars the pin F is raised, and its lower end is placed upon the upper side of draw-head A; then, as the link B enters the draw-head A to couple the cars, the inward movement of the block C causes the block H to move outward, pushing the pin F forward to the pin-hole, through which it drops, coupling the cars.

In case the cars stand so close together that the link cannot be drawn out in uncoupling, the end of the pin is placed upon the top of the forward end of the block H; then, as the cars are drawn apart, the outward movement of the block C draws the block H inward, and allows the end of the pin to drop upon the upper side of the draw-head A,

ready to be pushed into the pin-hole by the forward movement of the block H, as before described.

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

An improved car-coupling formed by the combination of the sliding slotted block C,

coiled spring D, U-shaped pin F, lever G, sliding block H, and the draw-head A, substantially as herein shown and described.

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Witnesses:

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