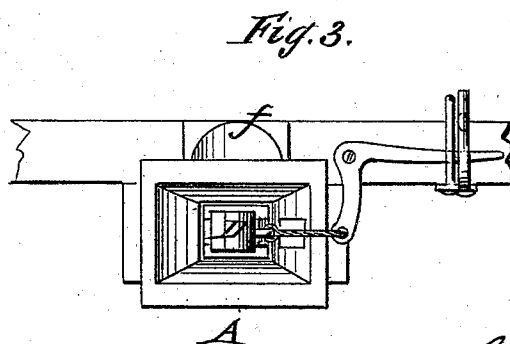
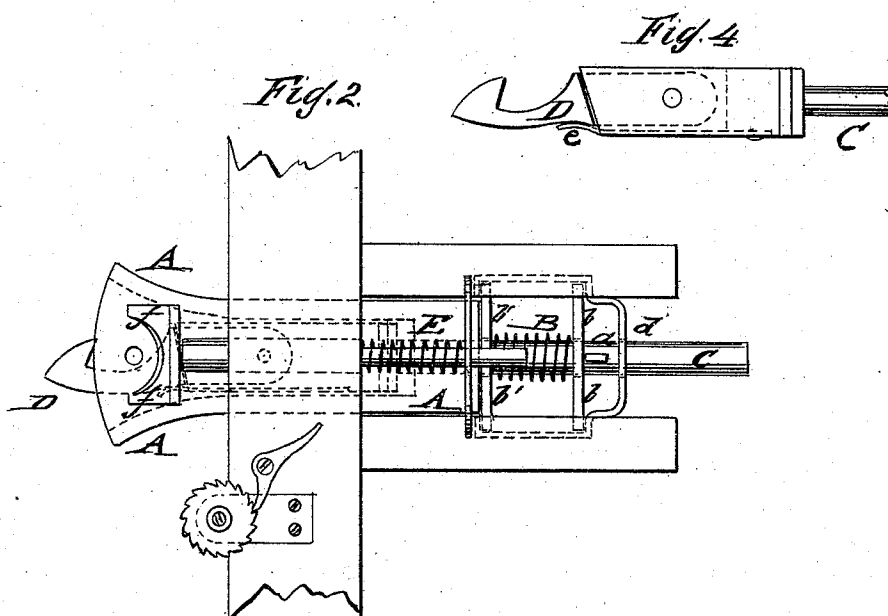
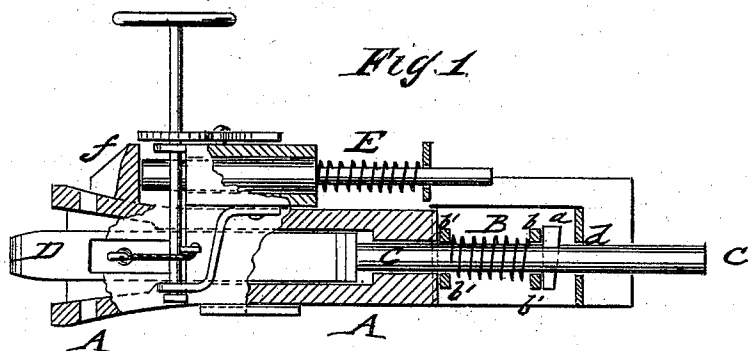


S. HAMER.
CAR-COUPLING.

No. 182,114.

Patented Sept. 12, 1876.



WITNESSES:

E. Mott
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INVENTOR:

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UNITED STATES PATENT OFFICE.

SAMUEL HAMER, OF SALT LAKE CITY, UTAH TERRITORY.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **182,114**, dated September 12, 1876; application filed July 1, 1876.

To all whom it may concern:

Be it known that I, SAMUEL HAMER, of Salt Lake City, in the county of Salt Lake and Territory of Utah, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of my improved car-coupling. Fig. 2 is a top view, Fig. 3 an end view, and Fig. 4 a detail top view, of coupling-hook as pivoted to draw-bar.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved automatic car-coupling for passenger and freight cars, which may be coupled with cars having the common pin-and-link coupling, and which combines a buffer arrangement with the draw-head and coupling.

The invention consists of a spring-acted draw-head, with interior separately-movable draw-bar, to which a coupling spring-hook is pivoted. The draw-head has a top shoulder or projection that comes in contact with an auxiliary spring-bolt, and acts as buffer-head thereby.

In the drawing, A represents a draw-bar of the usual construction, which is guided in longitudinal direction on the bottom frame of the car, and placed in connection with a strong spiral spring; B, by a separately-sliding draw-bar, C, that extends through the rear end of the draw-head. The draw-bar C acts by a cross-pin or fastening, A, and cross-plate *b* on the spring B, when pulled in forward direction, being stopped by a lateral guard-piece, *d*, in opposite direction. The draw-head A is, by its connection with the draw-bar C, readily drawn in forward direction; but also carried back independently of the draw-bar, which retains its position, when, by the concussion of the draw-heads, in coupling, the rear end of the draw-head is pushed back, acting by a lateral plate, *b'*, on the spiral spring B. The lateral plates *b b'* are guided in side recesses of the car-frame, and serve to transmit the

motion of both draw-head and draw-bar to the spring. The coupling-hook D is pivoted to the front or socket end of draw-bar C, so as to swing in horizontal direction within, the draw-head being pressed sidewise by a band-spring, *e*, to interlock with the coupling-hook of the approaching car when the same enters the draw-head. The draw-head A is provided with top and bottom holes to couple with the common link and pin, the link being inserted above or below the coupling-hook, and the pin then dropped in the usual manner.

The coupling-hook D is uncoupled by means of a hand-wheel, ratchet, pawl, and rope connection with the hook, as shown in Figs. 1 and 2, or by means of rope or chain and bell-crank lever, as shown in Fig. 3, either from the platform, top, or side of the car, as desired.

The top part of the draw-head A is provided with a raised shoulder, *f*, that is in contact with a sliding and guided spring-bolt, E, which serves to impart greater power of resistance to the draw-head, so that the same acts in the nature of a buffer by means of the auxiliary spring-bolt.

The cars, with my coupling, may be coupled or uncoupled on any curve, and produce the steady motion, as there will be no jerking of the hooks, as the buffer-springs are tightly compressed and hold the hooks tightly together, reducing thereby the wear to a minimum.

The draw-head may be made either with closed or open sides, as desired, it serving mainly as a buffer, and for coupling with the common coupling.

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

The draw-bar of a car-coupling, provided with shoulder *f* and spring-bolt E, arranged substantially as and for the purpose specified.

SAMUEL HAMER.

Witnesses:

WM. J. PLAYER,

GEORGE W. WRIGHT.