

R. HOPKINS.
Car-Couplings.

No. 156,287.

Patented Oct. 27, 1874.

Fig: 1.

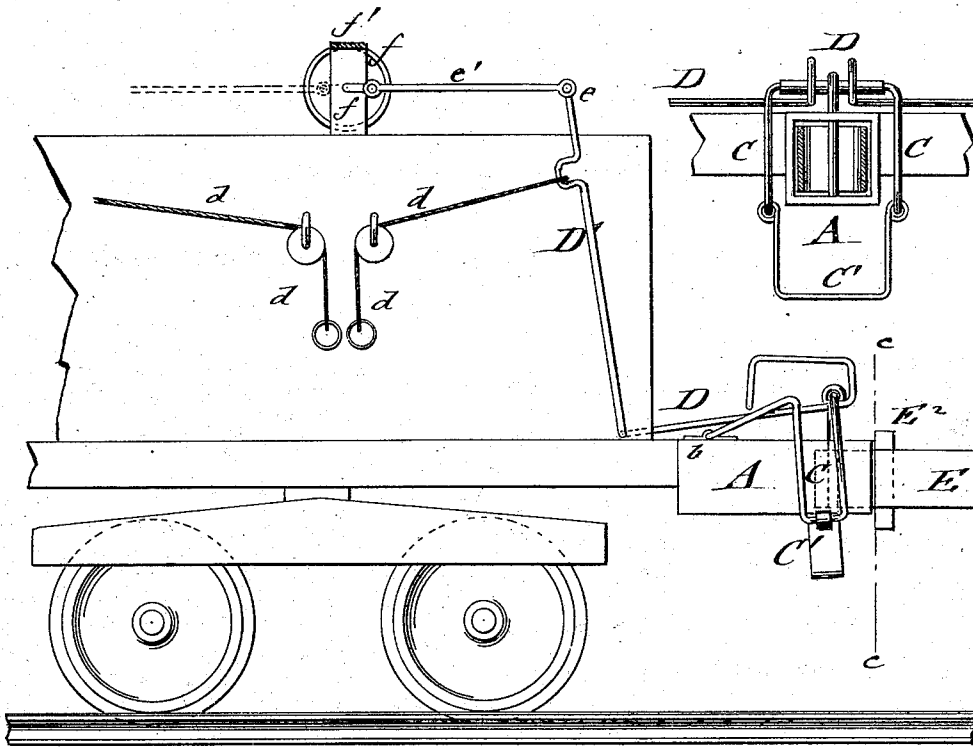


Fig: 2.

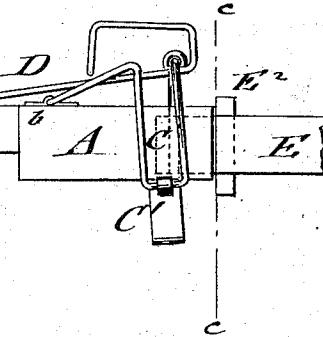
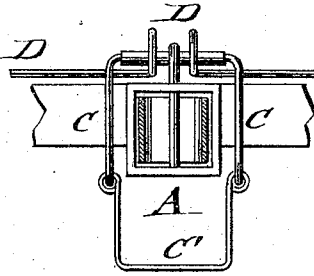
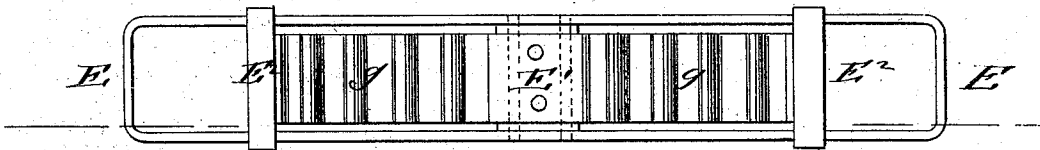


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

RICHARD HOPKINS, OF FROSTBURG, MARYLAND.

IMPROVEMENT IN CAR-COUPINGS.

Specification forming part of Letters Patent No. **156,287**, dated October 27, 1874; application filed June 13, 1874.

To all whom it may concern:

Be it known that I, RICHARD HOPKINS, of Frostburg, in the county of Alleghany and State of Maryland, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved car-coupling, with uncoupling mechanism at the top or sides of the car; Fig. 2, a front view of the draw-head, partly in section, through the uncoupling-link, on line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention is an improvement in the class of automatic couplings which are adapted for being uncoupled by devices operated from the top, side, or platform of the car.

The improvement relates to the construction and arrangement of parts, as hereinafter described, and specifically indicated in the claim.

In the drawing, A represents a draw-head, applied in any approved manner to the car-frame, and being made with square or rectangular cross-section and cavity. The draw-head A is provided with longitudinal top and bottom slots *a*, in which the coupling-pin swings. The coupling B is pivoted loosely to the lateral front piece of frame C, which is pivoted by its rearward-extending arms to suitable staples or fastening-bands *b* of the draw-head. The side part or arms of rod-frame C swing along the sides of the draw-head, and carry a bottom piece, C', which extends across the under side of the draw-head, and defines the extent of motion in raising the

pin for uncoupling, and also weights the same, to cause the dropping of the coupling-pin after the uncoupling mechanism is released. The rod-frame C is hung by its front rod to the hook-shaped end of levers D, which are pivoted to suitable staples of the car frame or platform, and connected by elbow-shaped extensions D', being bent under suitable angle to the forward-projecting lever D, and passing up along the sides of the car, to be there operated by cord-and-pulley arrangement *d*, or operated at the top of the car by a lateral crank-rod, *e*, and lever-connection *e'*, with a crank-shaft and wheel, *f*, supported in a top frame, *f'*, in such a manner that both draw-heads may be operated thereby, as required.

I show in Fig. 3 a form of link, E, adapted for use with the coupling devices above described. It is composed of an oblong rectangular frame, having a central cross-bar, E¹, and a convoluted plate-spring, *g*, whose ends are attached to sliding heads or bars E².

I do not claim this form of link.

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

The crank-wheel located on top of the car, the rod *e'*, right-angled lever D' D, and a coupling-pin, combined as shown and described.

RICHARD ^{his} × HOPKINS.
mark.

Witnesses:

DANIEL LEWIS,
JOHN A. HEIDLE.