

L. E. MUSICK.
Car-Coupling.

No. 165,857.

Patented July 20, 1875.

Fig. 1.

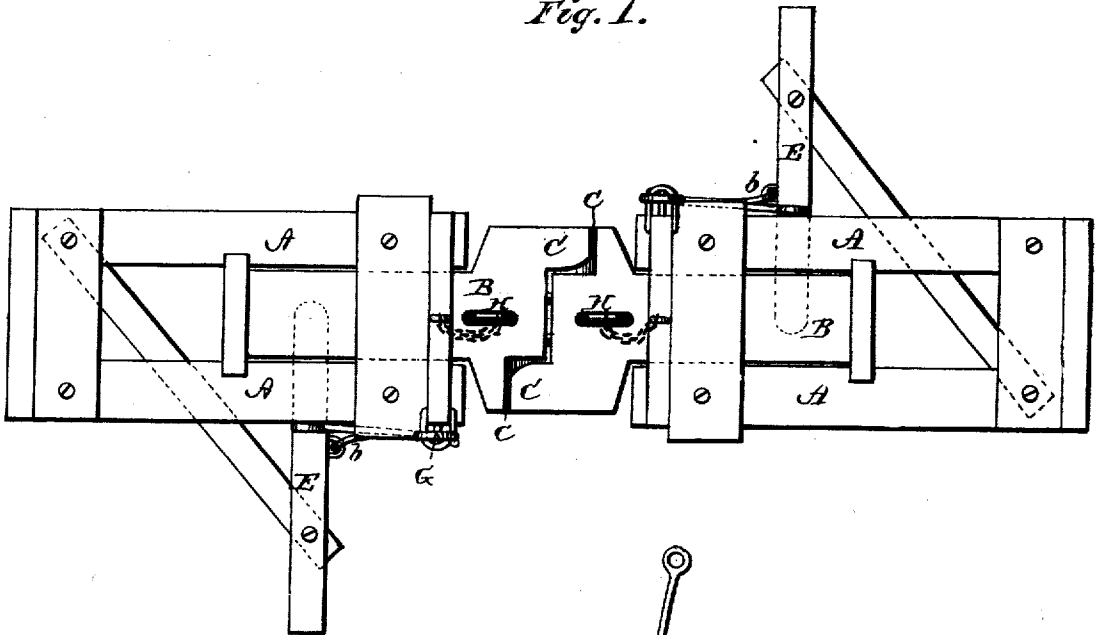
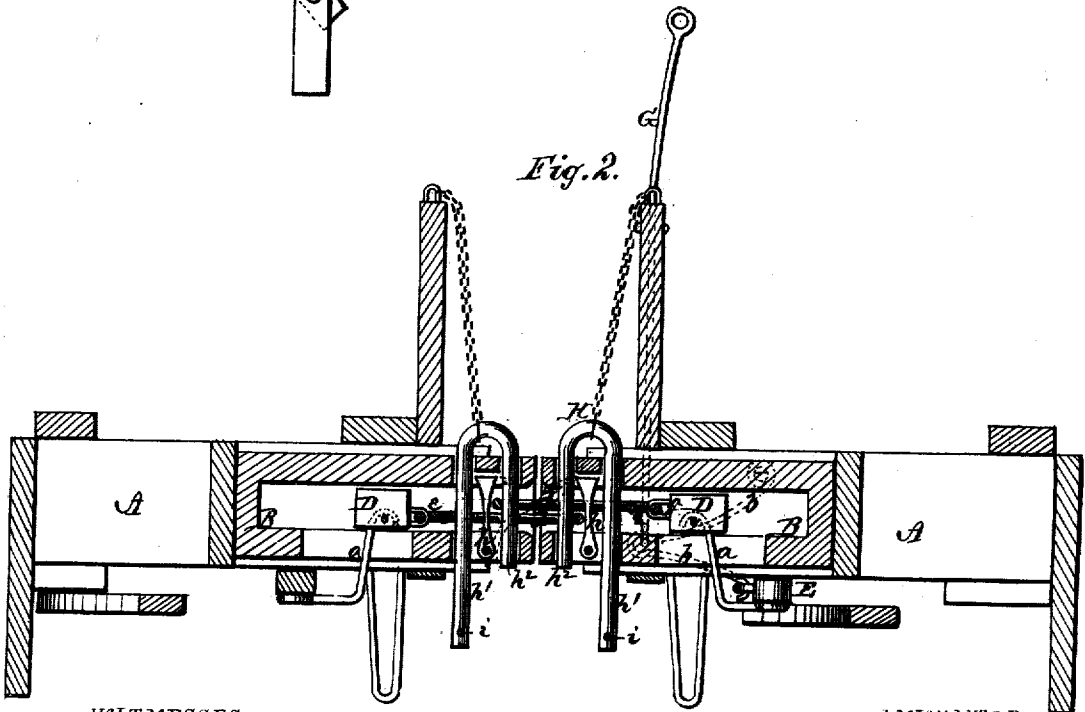


Fig. 2.



WITNESSES

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LEWIS E. MUSICK, OF WELLSVILLE, MISSOURI.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **165,857**, dated July 20, 1875; application filed May 6, 1875.

To all whom it may concern :

Be it known that I, LEWIS E. MUSICK, of Wellsville, in the county of Montgomery and in the State of Missouri, have invented certain new and useful Improvements in Car-Couplers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a car-coupling, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of my car-coupling, and Fig. 2 is a longitudinal vertical section of the same.

A represents part of the frame-work of a railroad-car, in which the draw-bar or draw-head B is attached in any of the known and usual ways.

At the front or outer end of each draw-head B, on the sides, are formed wings or flanges C C, projecting, one at the top and the other at the bottom, a suitable distance in front of the draw-head. These wings or flanges are curved or beveled in such a manner that when two draw-heads come together the flanges will ride on each other, and adjust the draw-heads to the proper height.

In each draw-head B is placed a sliding block, D, which is connected through a slot in the bottom of the draw-head, by means of a rod, *a*, with a lever, E, pivoted at some convenient part of the frame A, and projecting beyond the side of the car. The lever E is, by a rod, *b*, connected with a vertical rod, G, passing through suitable guides on the front of the car to the top thereof. The rod *b*, which connects the lever E and rod G, is bent somewhat in V form, one end being attached to the lever and the other to the car-frame A, while the rod G is attached thereto at the angle. By these means the block D may be moved forward or backward, as desired, in the draw-head, either from the side or the top of the car.

To the front side of the sliding block D

is connected the coupling-link *d* by means of a link, *e*, formed on the inner end of the coupling-link and fastened by a staple, *f*.

The coupling-pins H used in my car-coupling are made in the form of a letter U inverted, with the rear prong *h*¹ extended below the end of the other arm or prong *h*².

Between the two arms of the coupling-pin in the bottom of the draw-head is pivoted a latch, *h*, the upper end of which extends up into a groove in the roof of the draw-head, and when the coupling-pin is raised this latch falls forward under the arm *h*² of the coupling-pin, and holds the same in an elevated position. In the end of the long arm *h*¹ of the coupling-pin is inserted a pin or key, *i*, which prevents the coupling-pin from rising higher than is necessary to allow the latch to fall forward under the short arm *h*² thereof.

To couple the cars the links are thrown forward by means of the lever arrangement connected to the sliding block D. The links, entering the opposite heads, force the latches *h* back, so that the coupling-pins will drop, their arms *h*² passing through the links.

To uncouple the cars the coupling-pin is raised, the links dropped back by the weight of the levers and lifting-rods, and the latches drop forward to their places of their own weight, holding the coupling-pins in position again.

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

1. A draw-head, B, provided with projecting curved or beveled side flanges C C, substantially as and for the purposes herein set forth.

2. The combination, in a car-coupling, of the sliding block D, with the coupling-link *d* connected thereto, the rod *a*, lever E, bent rod *b*, and lifting-rod G, all substantially as and for the purposes herein set forth.

3. The self-acting gravitating-latch *h*, pivoted to the bottom of the draw-head, in combination with the U-shaped pin H, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of April, 1875.

LEWIS E. MUSICK.

Witnesses:

S. B. HART,
SIDNEY L. ROBBINS.