

L. E. MUSICK.
Car-Coupling.

No. 165,857.

Patented July 20, 1875.

Fig. 1.

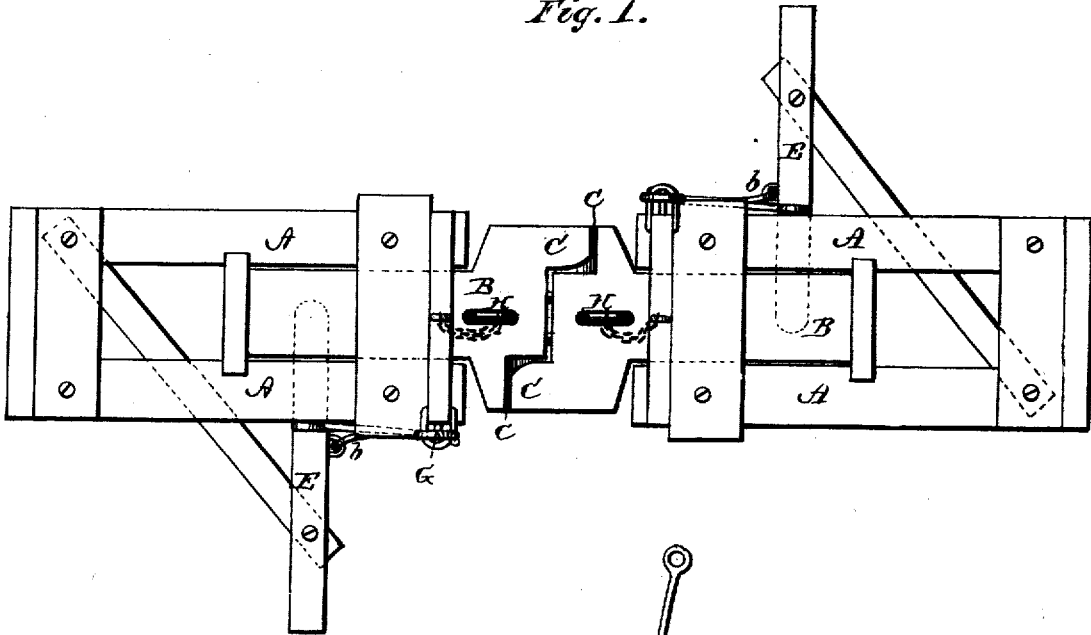
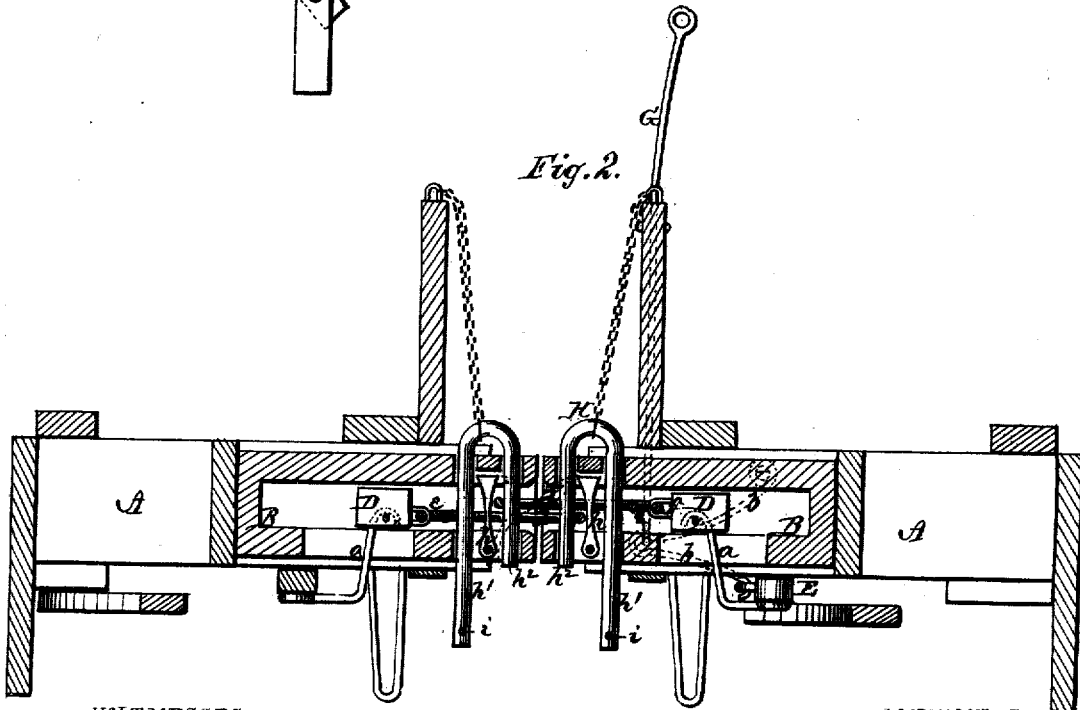


Fig. 2.



WITNESSES

C. R. Everts
S. S. Stout

By

INVENTOR

L. E. Musick
Alexander H. Mason
Attorney

UNITED STATES PATENT OFFICE.

LEWIS E. MUSICK, OF WELLSVILLE, MISSOURI.

IMPROVEMENT IN CAR-COUPINGS.

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.