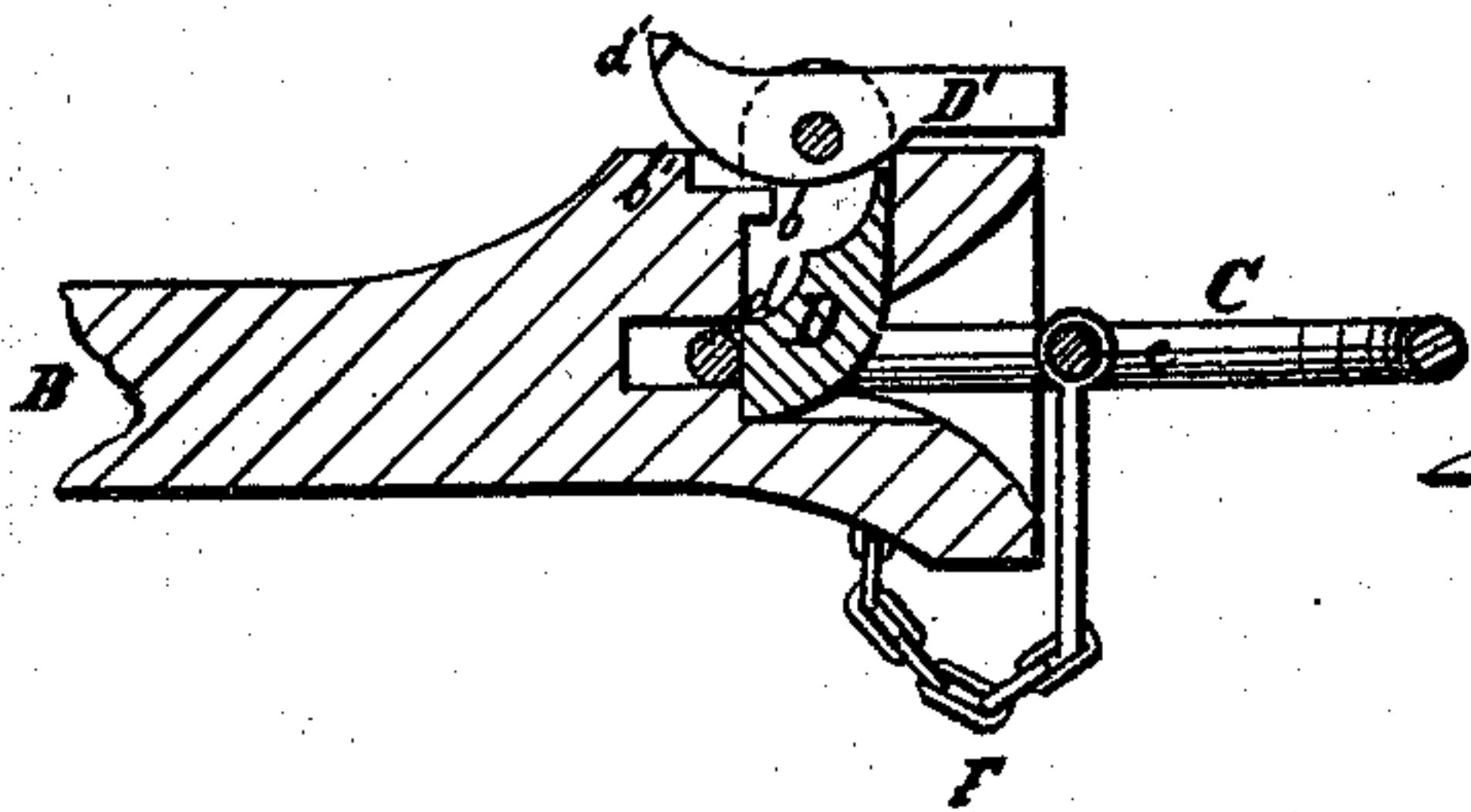


**M. R. WOOD.**  
**Car-Couplings.**

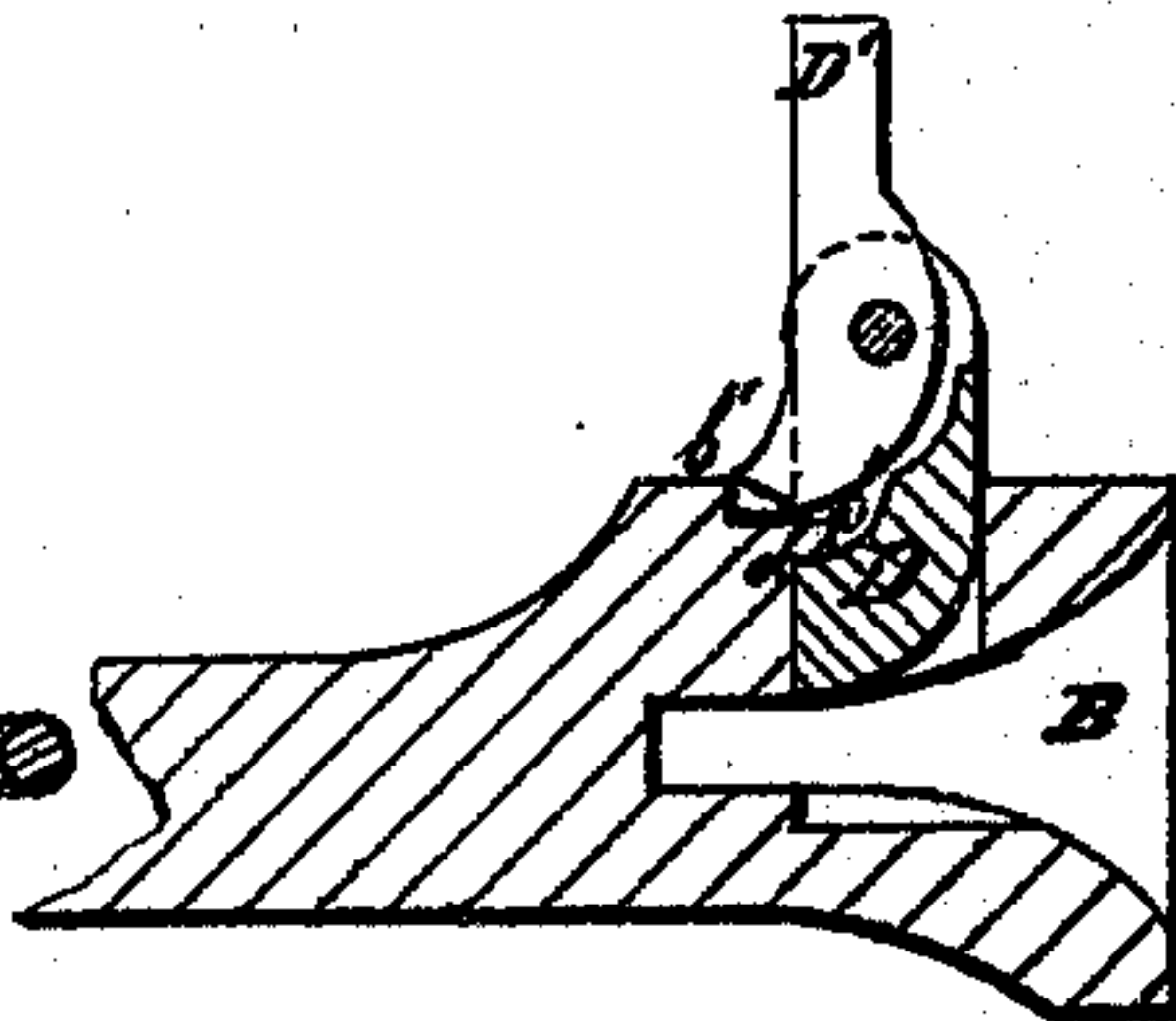
No. 144,490.

Patented Nov. 11, 1873.

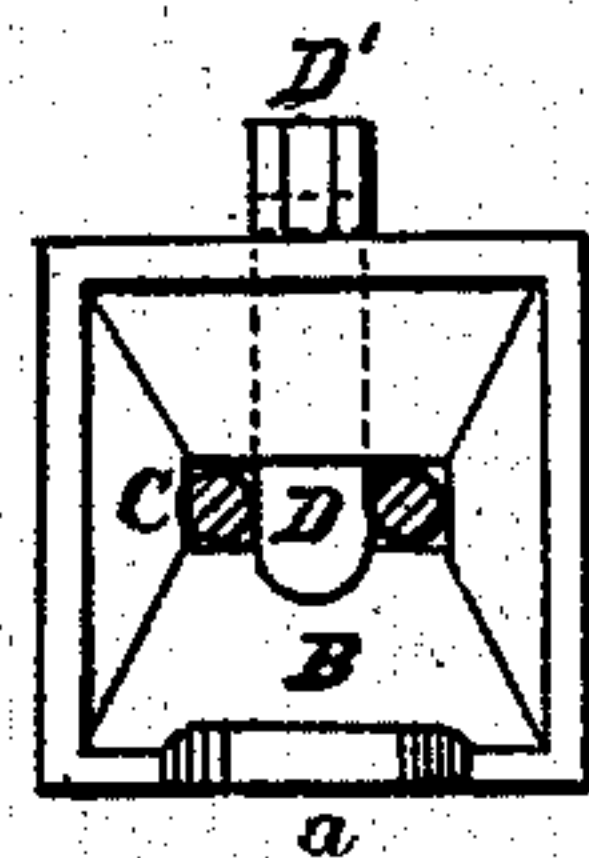
*Fig. 1.*



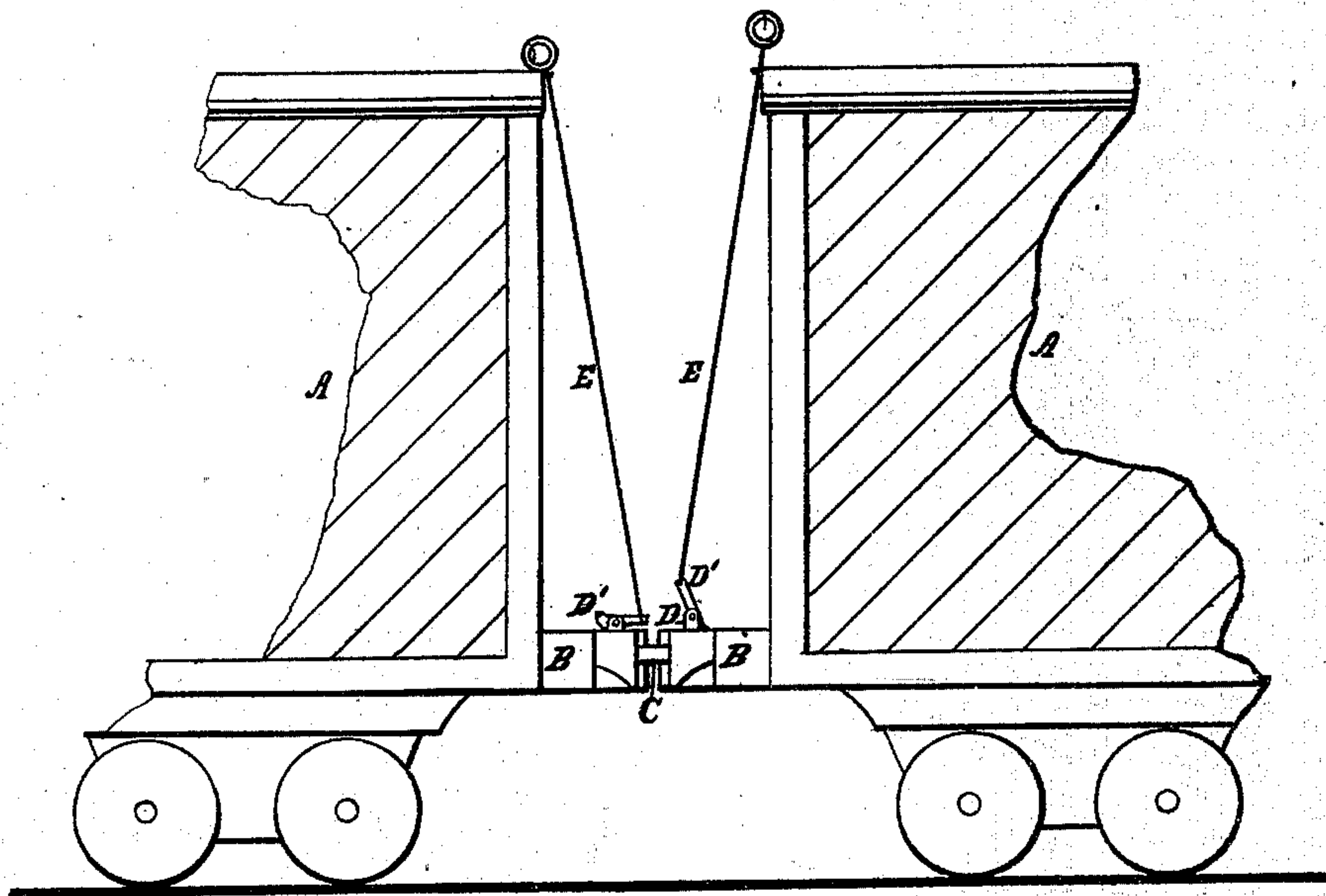
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES.

*J. T. Herring*

*M. J. Lang*

INVENTOR.

*Milton R. Wood*  
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# UNITED STATES PATENT OFFICE.

MILTON R. WOOD, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **144,490**, dated November 11, 1873; application filed March 13, 1873.

*To all whom it may concern:*

Be it known that I, MILTON R. WOOD, of Chicago, in the county of Cook and State of Illinois, have invented a new, useful, and Improved Car-Coupler, of which the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, and in which—

Figure 1 represents a vertical longitudinal section of my improved coupler applied to the draw-head or buffer, and arranged in a position to couple the cars; Fig. 2, a like view, showing the position of the coupler when it is inoperative; Fig. 3, an end view of the draw-head or buffer when provided with the coupler, and Fig. 4 a side elevation of cars provided with the coupler.

The object of my invention is to improve the construction and operation of that class of car-couplers by means of which the operation of coupling the cars is performed automatically as the cars approach each other; and it consists in certain novel features relating to the construction of the coupling-pin, and to the means employed for the purpose of rendering it operative in connection with the draw-head or buffer, all of which will be hereinafter fully described and set forth.

In the drawing, A represents a railway-car. B is the draw-head or buffer. C is the coupling-link. The mouth of the draw-head or buffer is made flaring, so as to receive the coupling-link with certainty, notwithstanding the rocking and irregular movements of the car. The mouth of the buffer also terminates in a recess, which receives one end of the coupling-link, and is constructed and arranged to retain the link in a horizontal position, as shown. D is a coupling-pin, and D' is a lever pivoted thereto. The pin D is arranged in a slot in the buffer, so that the lower end of the pin may engage the coupling-link when the latter is arranged in the mouth of the buffer, as shown in Fig. 1, and when the pin engages the link the lever D is in a horizontal position. The outward face of the pin D is beveled or rounded off, as shown, so that the contact of the link and pin, as the cars come together, will push the pin upward. When the link has passed into the mouth of the buffer sufficiently, the pin drops, engages the link, and couples the cars. In

order to uncouple the cars, the outward end of the lever D' is raised, and by this means the pin is drawn from its engagement with the link. It will be observed that the downward movement of the pin is limited by the lever D', and by the contact of the lower end of the pin against the buffer. *d* is a shoulder on the pin D, and *b* is a pin or shoulder on the buffer. The shoulders *b* and *d* are arranged to engage each other, and limit the upward movement of the pin D. When the pin D has reached the limit of its upward movement it is free from its engagement with the link, and the lever D' is then in a vertical position, as shown in Fig. 2. In order to retain the lever D' in a vertical position, I provide the buffer with a shoulder, *b'*. It will also be observed that one end of the lever D' is made cam-shaped, so as to facilitate the operation of drawing the pin from the link. The buffer also serves as a fulcrum for the lever. When the lever D' is in the position indicated in Fig. 2, a sufficient space should exist between the shoulders *b* and *d* to admit of the lever being released from its engagement with the shoulder *b'*.

It will be observed, from reference to Fig. 1, that the link C is provided with a cross-bar, *c*, to prevent it from being spread apart, or crushed in when it is crowded by both buffers.

E is a rod attached to one end of the lever D', and arranged so that the latter may be readily operated from the top of the car. F is a chain attached to the cross-bar *c* and to the buffer, so as to secure the link when not in use. The buffer is also cut away to receive the chain F, as shown at *a*.

I am aware that a yielding hook beveled and arranged to receive a coupling-link, and attached to and supported horizontally by a draw-head or buffer having a flaring mouth, has heretofore been employed for the purposes herein set forth, and I do not here claim such; but

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

The beveled coupling-pin D, and cam-lever D' pivoted thereto, in combination with the draw-head B, substantially as specified, and for the purposes set forth.

MILTON R. WOOD.

Witnesses:

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