

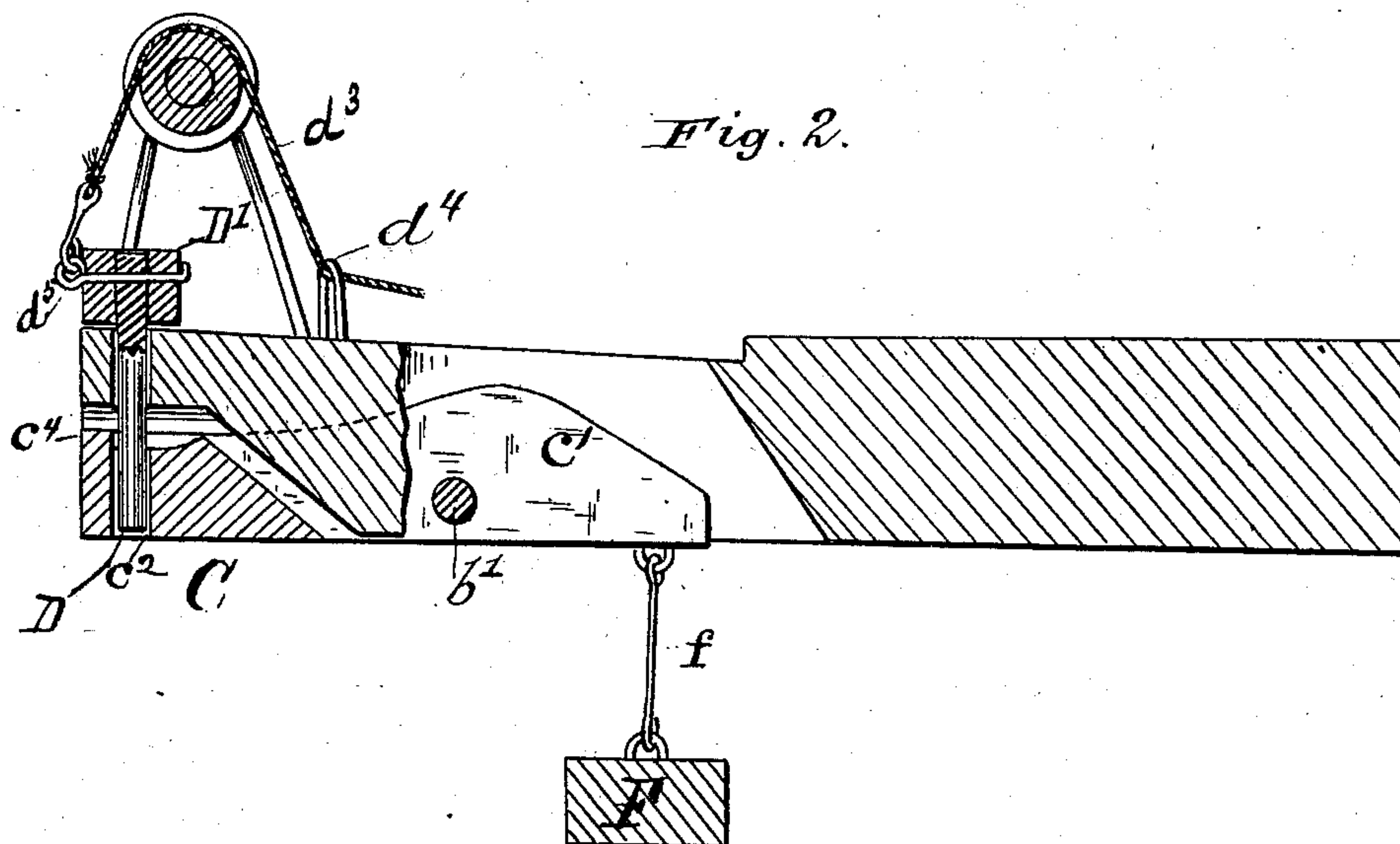
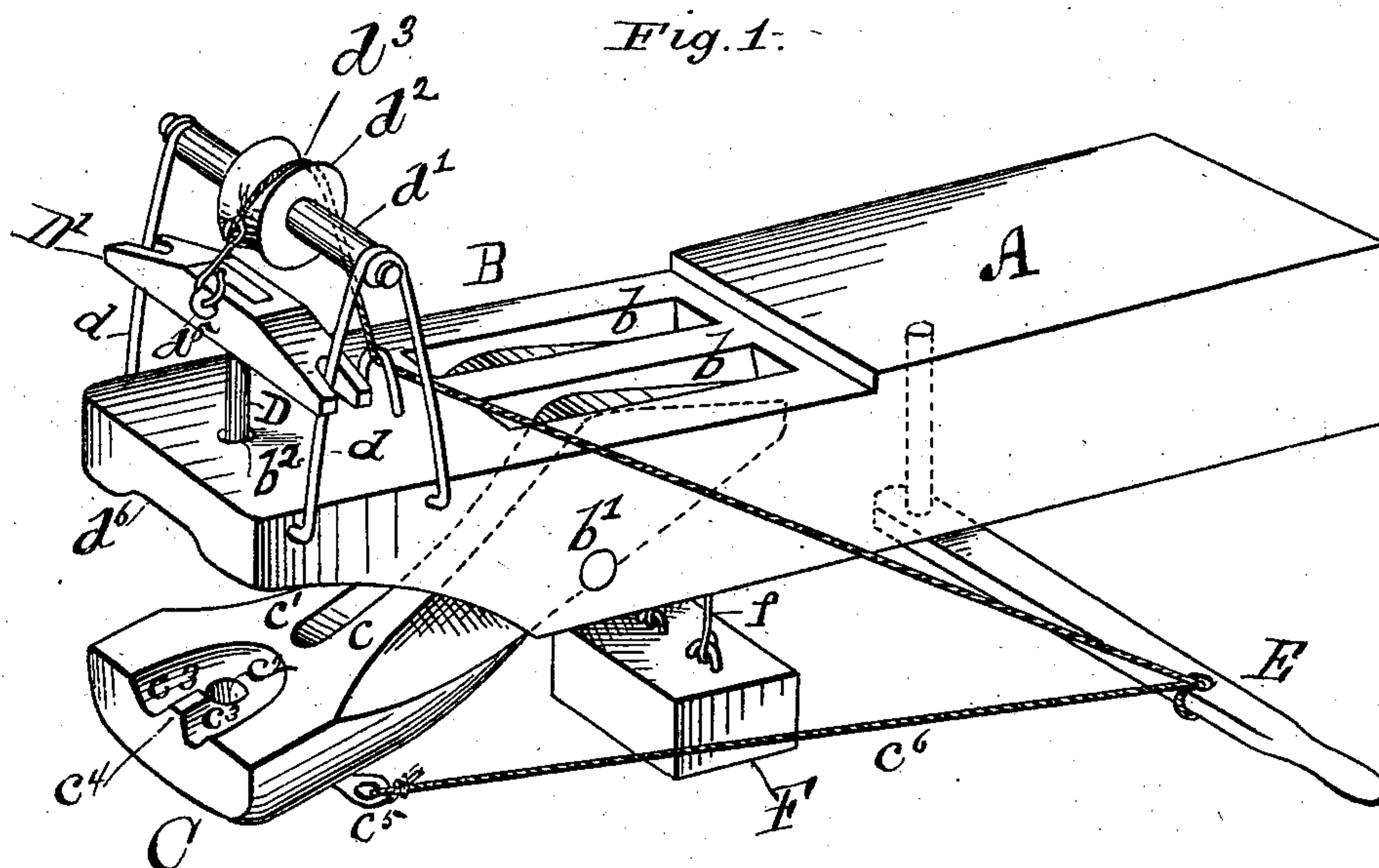
(No Model.)

W. J. ROBERTS.

CAR COUPLING.

No. 255,117.

Patented Mar. 21, 1882.



Witnesses.  
E. B. Stockline  
H. A. Smith

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# UNITED STATES PATENT OFFICE.

WILLIE J. ROBERTS, OF EATON RAPIDS, MICHIGAN.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 255,117, dated March 21, 1882.

Application filed February 3, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIE J. ROBERTS, a citizen of the United States of America, residing at Eaton Rapids, in the county of Eaton and State of Michigan, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective of my invention, and Fig. 2 is a longitudinal section thereof.

Like letters refer to like parts in both figures.

A represents the draw-bar portion of the coupler, which is designed to be secured to a car in the usual manner well known to car-builders, and B is the coupling portion proper thereof, and is slotted at *b b* for the reception of the bifurcated rear end, *c c'*, of the jaw C, which is pivotally attached by and upon the rod *b'*, the front portion of said jaw being provided with an aperture, *c''*, for the reception of the coupling-pin D, and a link-seat, *c''' c'''*, and an intervening unremoved portion or lug, *c''''*.

To the rear end of the jaw is attached by rods *f f* a weight, F. The portion B is perforated at *b''* for the reception of the coupling-pin, and has also a similar link-seat, *d''*. The pin D is secured by an eyebolt, *d'''*, to a cross-head, D', adapted to ride upon the uprights *d*, which serve as bearings for the shaft *d'*, which supports pulley *d''*, over which a cord or chain, *d'''*, passes from the eyebolt *d'''* through a staple, (or it may be any suitable guide,) *d''''*, to the lever E. To the jaw C at *c''* is attached a cord, *c''''*, which is also attached to lever E. The lever

E is herein shown as attached to the bottom of the draw-bar A; but it can and preferably would be attached to the bottom of a box-car, or to the frame-work of the platform of a passenger-coach, and disposed thereon in an accessible manner, suitable pulleys and guides being provided to render it operative, as hereinafter described.

The operation of my invention is as follows: The weight F tends to keep the jaw C closed; but as the car approaches or is approached by another to which it is to be coupled the lever E is operated to draw the jaw open and simultaneously to raise the cross-head D', with the pin D, by means of the ropes, cords, or chains *c''* and *d'''*, which brings the parts in the condition shown in Fig. 1, and at the proper time lever E is released, when, by reason of the weight F and the weight of the cross-head D', the cross-head falls and the jaw closes, thus securely retaining the link within the seat *c'''* and back of the pin D.

To uncouple the cars the lever is operated and the cords open the parts, as clearly shown.

If desired, a spring or springs may be substituted for the weight F.

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

The combination of slotted bar A B, provided with uprights *d*, shaft *d'*, pulley *d''*, cross-head D', carrying pin D, cord *d'''*, and lever E, with the bifurcated jaw C, weight F, and cord *c''*, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIE J. ROBERTS.

Witnesses:

ALANSON OSBORN,  
F. N. DE GOLIA.