

(No Model.)

S. R. WILLIAMS.  
CAR COUPLING.

No. 482,288.

Patented Sept. 6, 1892.

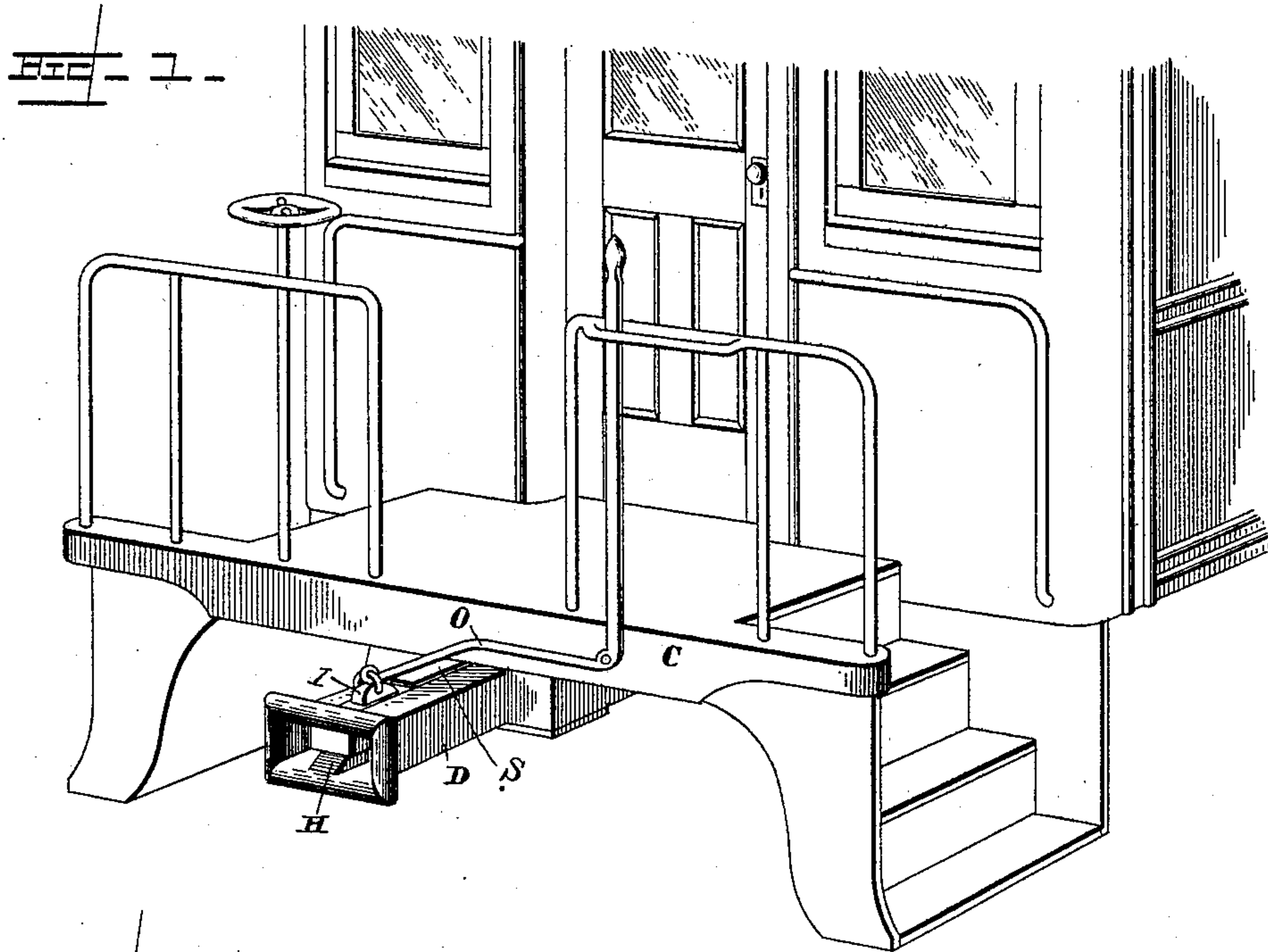


Fig. 2

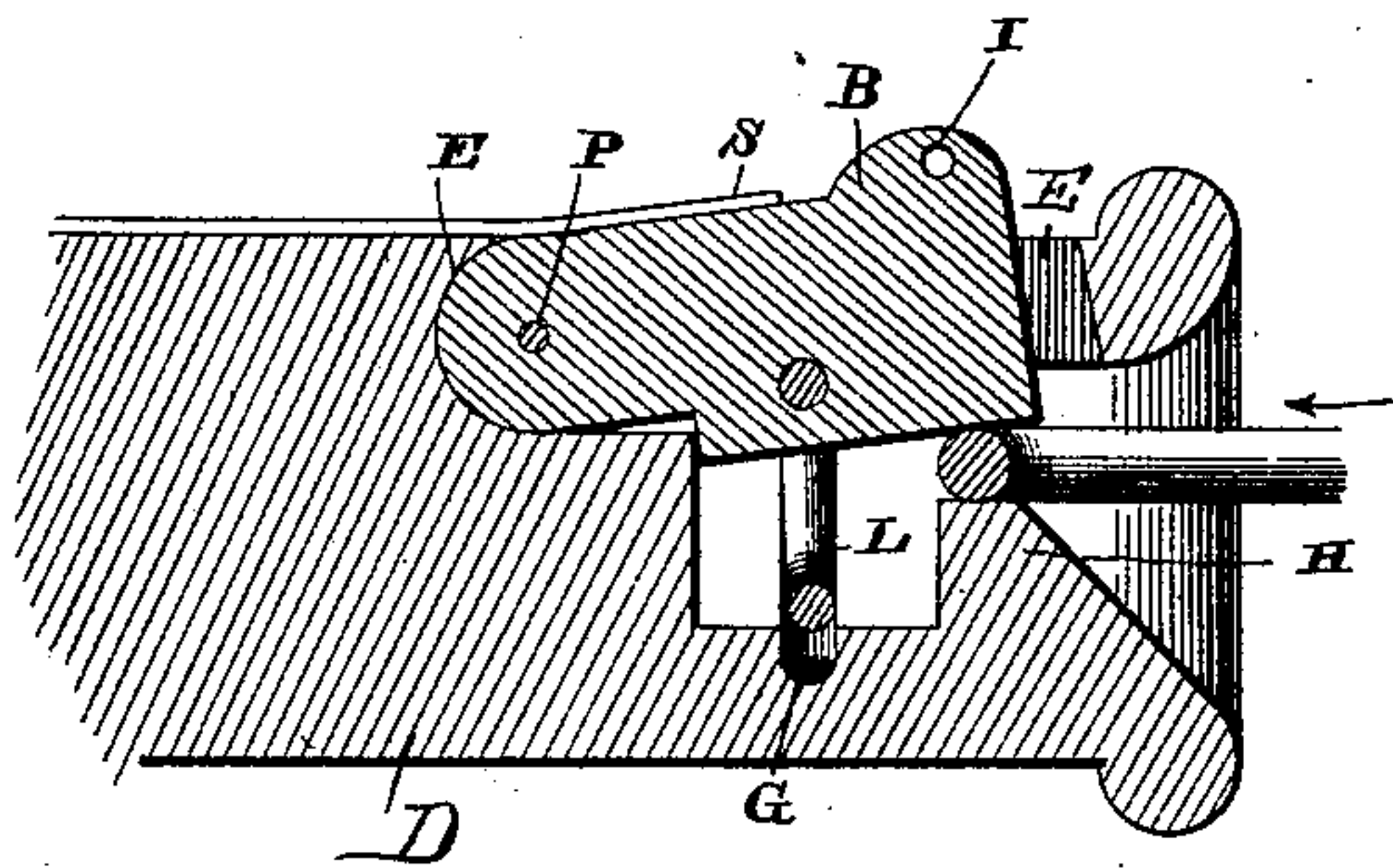
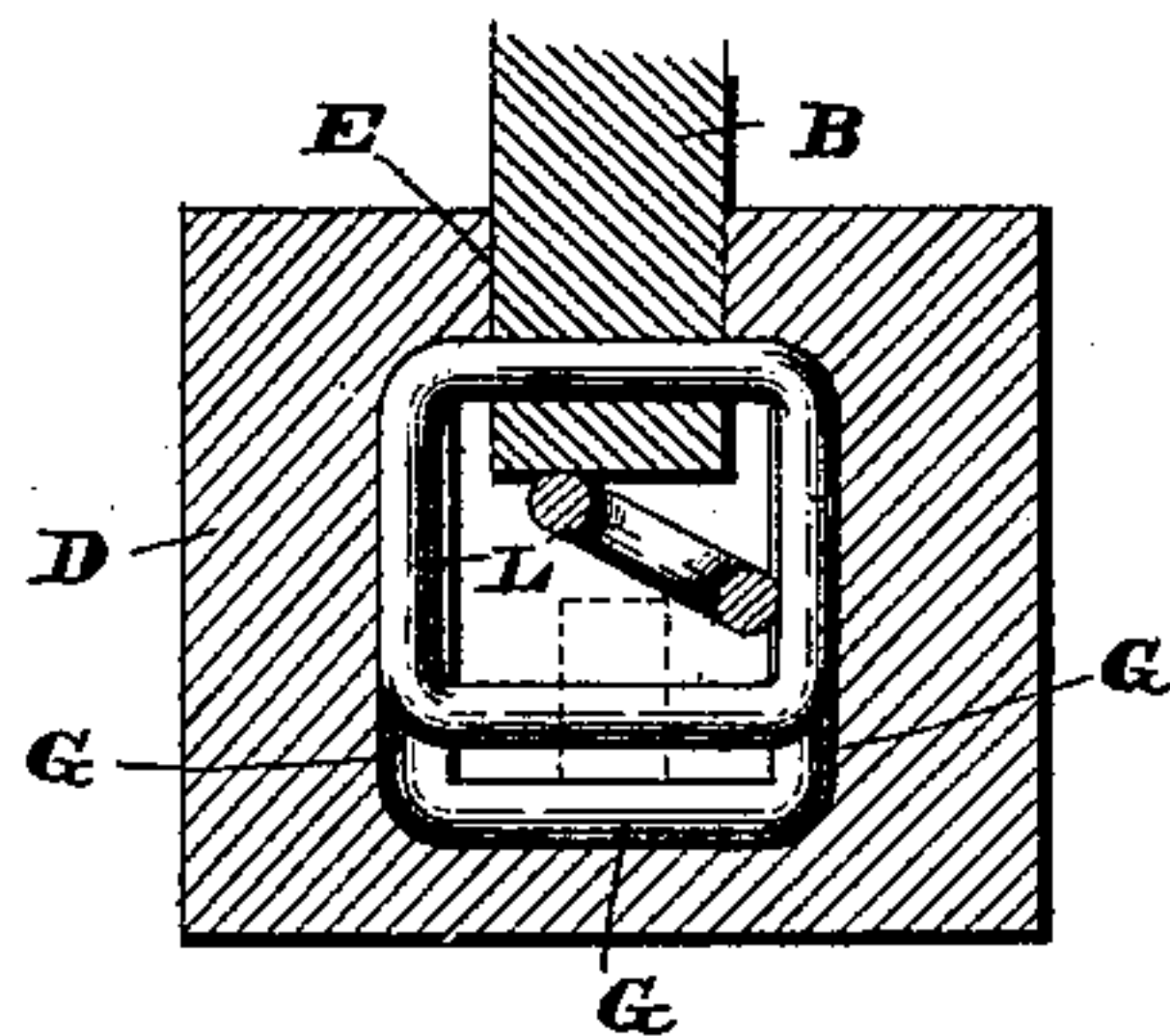


Fig. 3



Witnesses

*C. S. Duval*  
*J. T. Collamer*

By his Attorneys,

Inventor

*Sanford R. Williams,*

*C. A. Snow & Co.*



# UNITED STATES PATENT OFFICE.

SANFORD R. WILLIAMS, OF MONMOUTH, OREGON, ASSIGNOR OF ONE-HALF  
TO J. J. MALLOY AND SUSIE MALLOY, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 482,288, dated September 6, 1892.

Application filed December 24, 1891. Serial No. 416,051. (No model.)

*To all whom it may concern:*

Be it known that I, SANFORD R. WILLIAMS, a citizen of the United States, residing at Monmouth, in the county of Polk and State of Oregon, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings of that class known as "hook-and-link;" and the object of the same is to produce certain improvements in couplings of this character.

To this end the invention consists in the construction hereinafter more fully described and claimed, and as illustrated on the accompanying sheet of drawings, wherein—

Figure 1 is a perspective view of the end of a car provided with my improved coupling, viewing the latter slightly from the upper side. Fig. 2 is a longitudinal section of the draw-head, showing a link as just passing into the same. Fig. 3 is a cross-section of the draw-head, showing how a link will draw out of the same when one car is derailed and tipped over.

Referring to the said drawings, the letter C designates the car-body, beneath which is supported the draw-head D, having an open and beveled mouth, and at the center of the lower side and within this mouth is located a hook H, having a beveled front face and an approximately vertical rear face, as seen in Fig. 2.

B is a block mounted on a horizontal pivot P in an elongated slot E in the top of the draw-head, and this block is borne normally down around its pivot by a spring S.

L is a loop or link pivoted in the block and working in grooves G in the sides and bottom of the draw-head and some distance in rear of the vertical face of the hook H.

O is an operating-lever pivoted to the car-body and connected, as by a chain or otherwise, with an eye I on the upper side and near the front end of the block.

In operation when a link is driven into this draw-head it rides up the beveled front face of the hook and under the block which rises

to permit, and when the link drops behind the rear face of the hook the force of the spring S drives the block down onto the hook, as will be clear. The draft is then positive and strong, the hook being preferably integral with the metal of which the draw-head is cast. To uncouple, the lever O is operated in the proper direction to raise the block, and this movement also raises the loop L. As the latter embraces the inner end of the link this is also raised and permitted to draw out of the draw-head by slipping over the hook. When in use on a train, if one of the cars should become derailed and should tip over to one side sufficiently to turn the link to an angle, the same would automatically raise the block B and disengage the hook, as illustrated in Fig. 3.

This device is simple in operation and easy of construction, and considerable change may be made without departing from the spirit of my invention.

What is claimed as new is—

In a car-coupling, the combination of a draw-head having vertical grooves in its sides and a horizontal groove in its bottom, a hook arranged at the center of the bottom of said mouth and having a beveled front and approximately vertical rear face and a flat top face, a block pivoted in a draw-head and having a flat lower face adapted to rest upon the upper face of the hook, a spring bearing the block normally upon the hook, means for raising the block against the tension of the spring, and a rectangular loop pivoted in a perforation of the block and working in the grooves on the sides and bottom of the draw-head in rear of the hook, all as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SANFORD R. WILLIAMS.

Witnesses:

JOHN MALLOY,  
SUSIE MALLOY.