

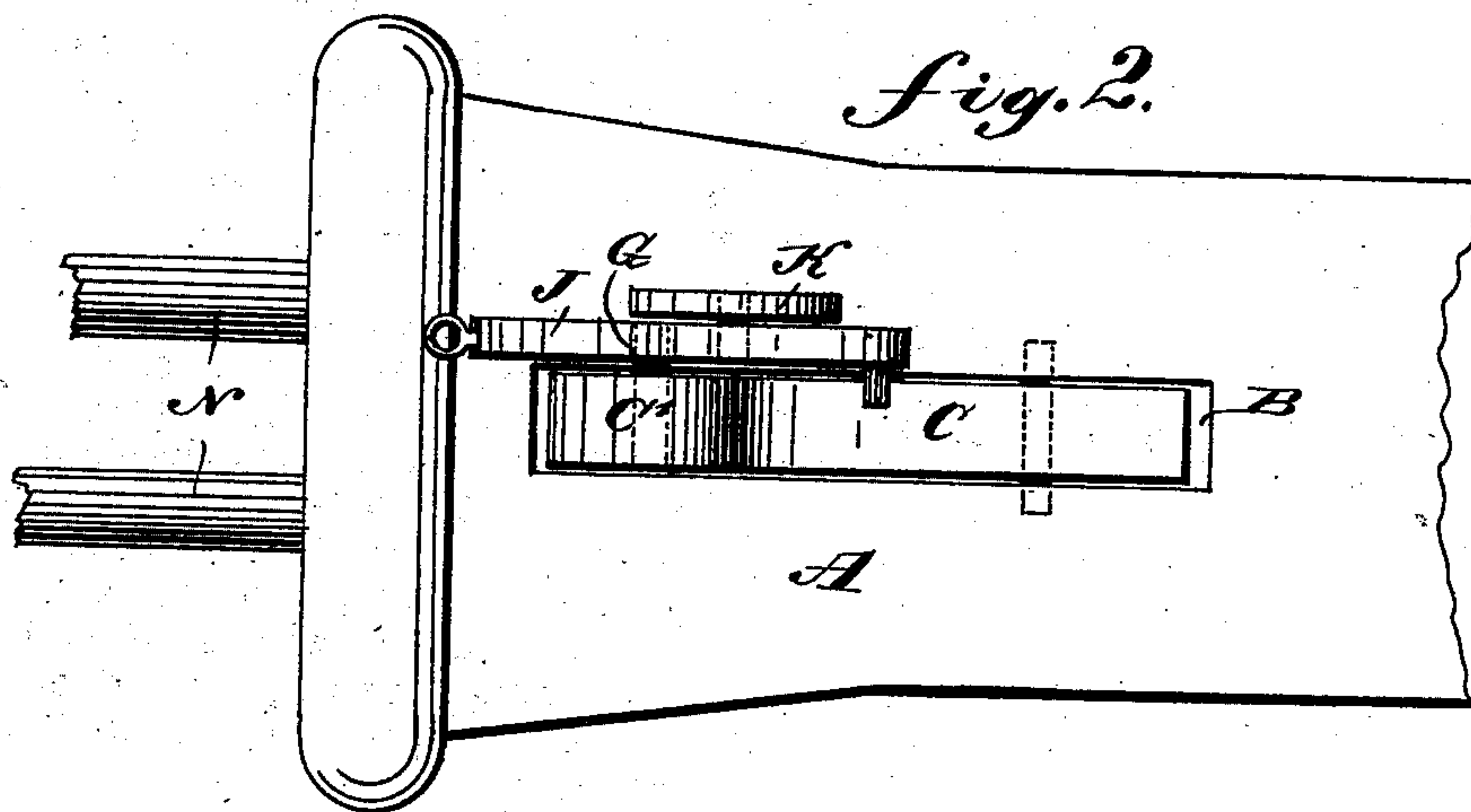
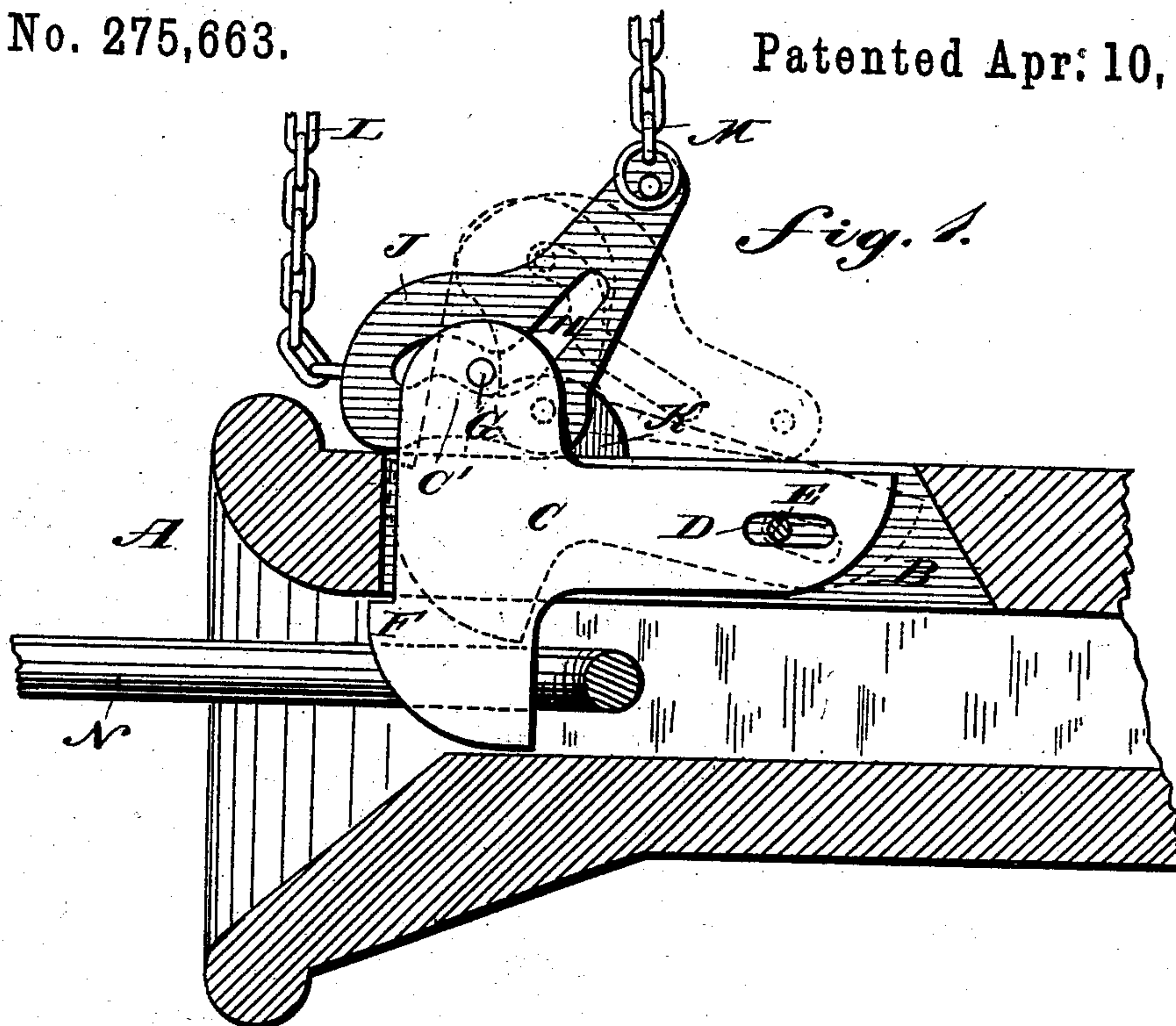
(No Model.)

C. P. JOHNSON & S. T. WALKLEY.

CAR COUPLING.

No. 275,663.

Patented Apr: 10, 1883.



WITNESSES:

*Otto Beyer*  
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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

CALVIN P. JOHNSON AND SAMUEL T. WALKLEY, OF SPRINGFIELD, MO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 275,663, dated April 10, 1883.

Application filed July 26, 1882. (No model.)

*To all whom it may concern:*

Be it known that we, CALVIN P. JOHNSON and SAMUEL T. WALKLEY, of Springfield, Greene county, Missouri, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The invention consists in certain combinations, which will be first described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a longitudinal sectional elevation of our improved car-coupling, and Fig. 2 is a plan view of the same.

The draw-head A is provided in its top with a longitudinal slot, B, containing a swinging coupling-hook, C, which is provided with a longitudinal slot, D, through which the transverse pintle E passes. The hook C is provided at its front end with a projection or nose, F, which catches under the upper edge of the front or outer end of the opening of the draw-head and prevents the hook from being thrown upward by jolting of the car. The lower edge of the projection F is beveled downward and inward. The hook C is provided at its front end and on its top with a projection, C', from which a pin, G, passes through a curved slot, H, in a cam-lever, J, adjoining the projection C' of the hook C, and pivoted to a vertical lug, K, projecting from the top of the draw-head adjoining to the slot B. The slot H of the cam-lever J is so formed that when the rear end of the cam-lever rests on the draw-head the slot will extend forward on a horizontal line, and then will extend upward and forward on a curved line. The chain L is attached to the front end of the cam-lever. The chain M is attached to the rear end of the same. The chains L and M may extend to the roof of the car, or they may be connected with levers extending to the sides of the car. The hook C is provided with the slot through which the pinion E passes, for the purpose of permitting longitudinal movement of the hook.

The operation is as follows: If the cars are coupled, as shown in Fig. 1, the draft on the link N draws the hook C toward the outer end of the draw-head, so that the projection or nose F catches under the upper edge of the opening of the draw-head, and thus prevents the hook C from being thrown upward by the jolting of the cars. If the cars are to be un-

coupled, the cam-lever J is raised by pulling the chain L upward, whereby the hook C will be moved toward the rear end of the draw-head, and will then be raised, as shown in dotted lines in Fig. 1. The cam-lever J keeps the hook C locked in this position and prevents the coupling of the cars. If the cars are to be coupled, and the link N has been passed into the draw-head, the rear end of the cam-lever J is raised and the front end is lowered by pulling the chain M upward, whereby the hook C will be permitted to drop. The rear end of the slot B is beveled inward and downward to prevent clogging of the opening between the rear end of the hook C and the rear end of the slot B.

By means of this coupling the cars can be coupled automatically by the passage of the link N into the draw-head, whereby this link pushes the hook C inward a short distance, so that the same can be raised by the end of the link which slides along the lower beveled end of the hook, the slot H on the cam-lever J admitting of such movement. After the end of the link has passed under the outer end of the hook, the hook automatically drops through the slot of the link, thereby coupling the cars.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with the draw-head A, of the swinging hook C, the pivoted cam-lever J, provided with a slot, H, and pivoted on the top of the draw-head, and of the chains L and M, connected with the ends of the said cam-lever, substantially as herein shown and described, and for the purpose set forth.

2. The combination, with the draw-head A, of the swinging hook C, provided on its top with a projection, C', the lug K on the top of the draw-head, the slotted lever J, and the chains L and M, substantially as herein shown and described.

3. The combination, with the draw-head A, provided with a slot, B, having its rear end beveled downward and inward, of the swinging coupling-hook C, pivoted in this slot, substantially as herein shown and described, and for the purpose set forth.

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Witnesses:

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