No. 614,551.

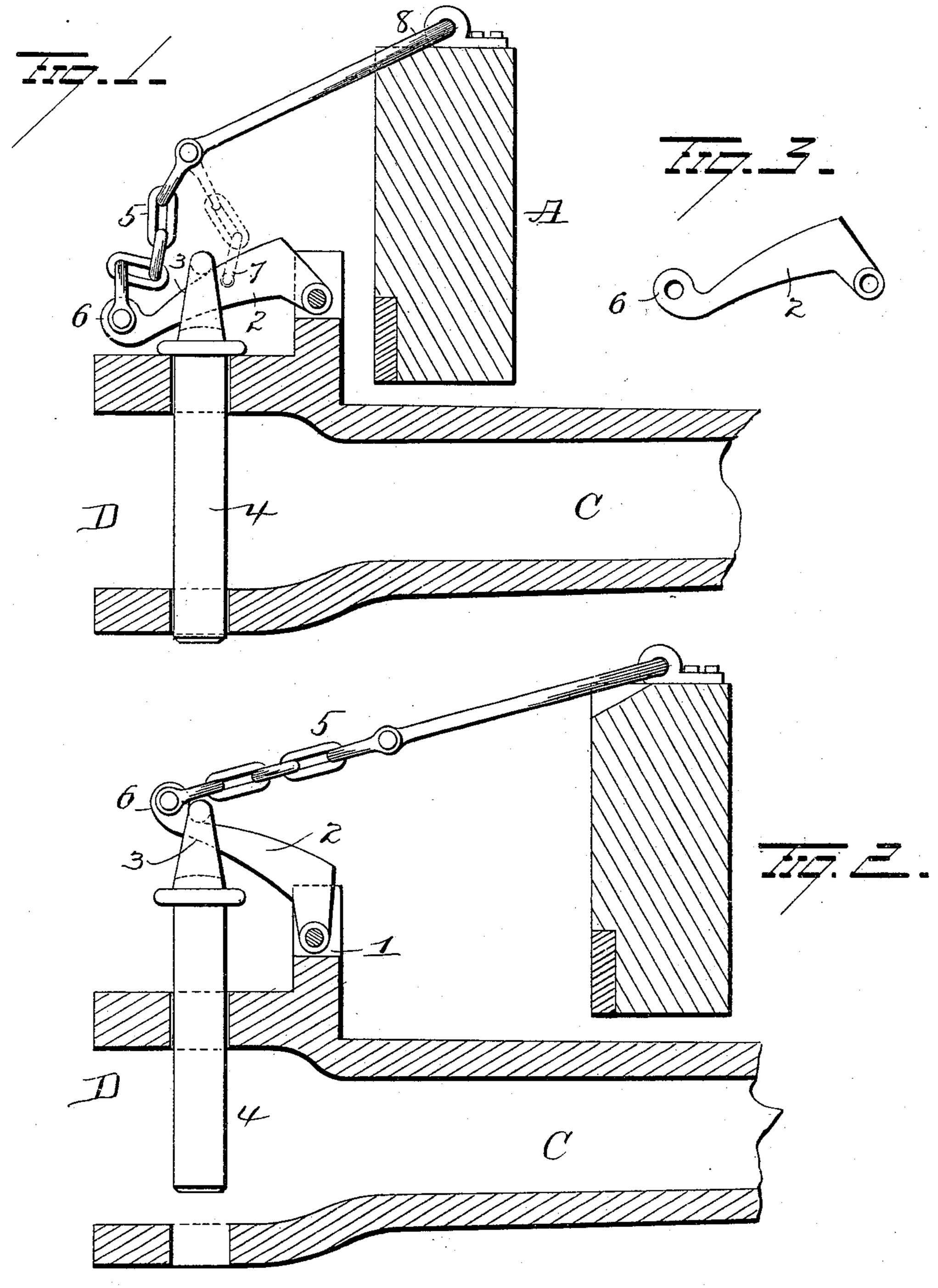
Patented Nov. 22, 1898.

## P. H. JACOBS. CAR COUPLING.

(Application filed Aug. 6, 1898.)

(No Model.)

2 Sheets—Sheet I.



G. Forming

Sw. Froter

By A.a. Seymour
Attorney

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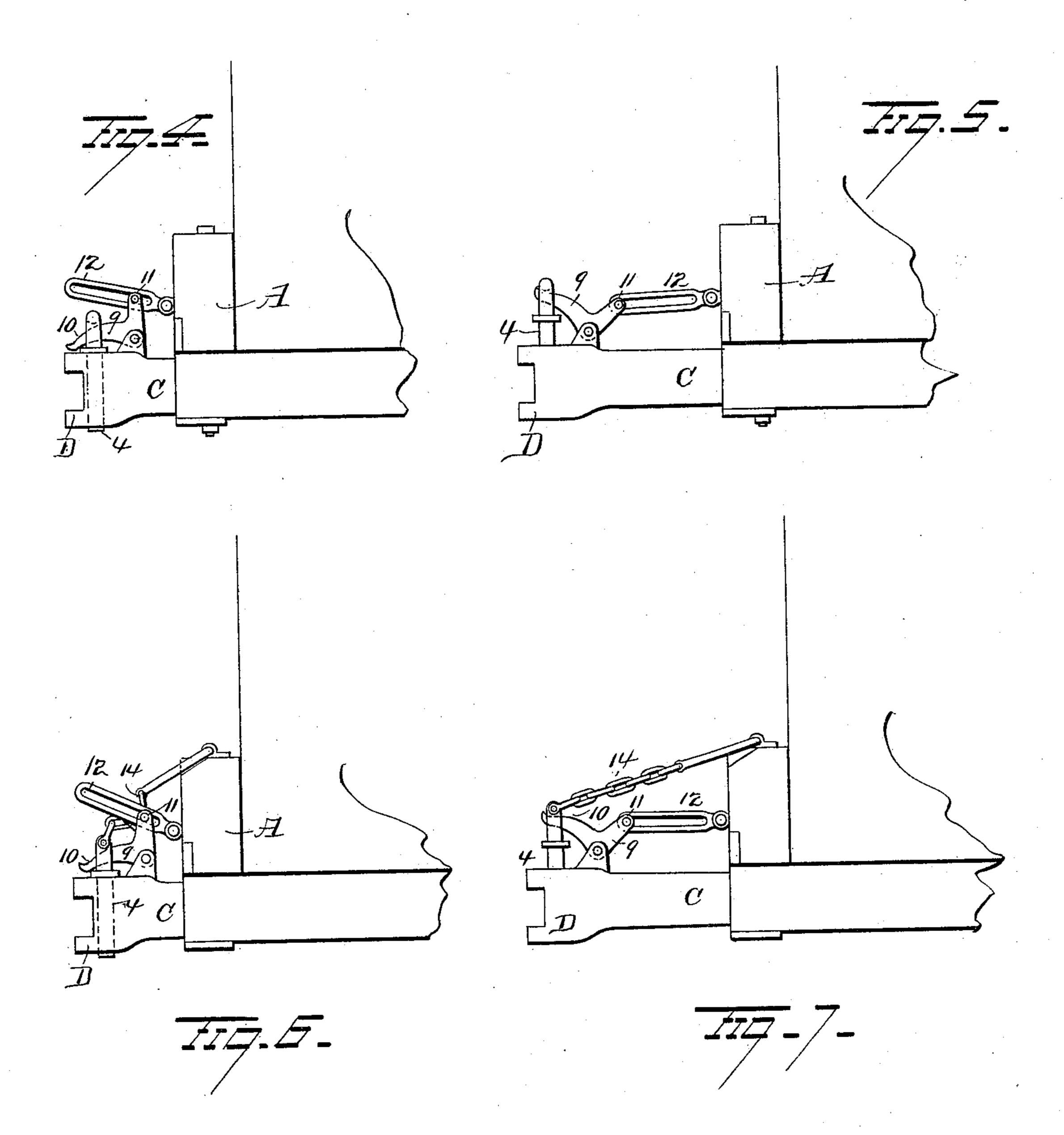
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2 Sheets—Sheet 2.



-G. Founing Sufferter Jy A. J. Seymour Attorney

## United States Patent Office.

PRICE H. JACOBS, OF LARAMIE, WYOMING.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 614,551, dated November 22, 1898.

Application filed August 6, 1898. Serial No. 687,961. (No model.)

To all whom it may concern:

Be it known that I, PRICE H. JACOBS, of Laramie, in the county of Albany and State of Wyoming, have invented certain new and useful Improvements in Car-Couplings; 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.

My invention relates to an improvement in car-couplings, and more particularly to means for automatically uncoupling in case of breakage of the draw-head or draw-bar or the connection thereof with the car, the object of the invention being to provide simple and efficient means applicable to any Master Car-Builders' coupling for automatically effecting the uncoupling of two draw-heads should either of them or parts connecting them with the car become broken or accidentally detached or loosened.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view showing the application of my improvements with the parts in their normal positions. Fig. 2 is a similar view showing the parts in uncoupled positions. Fig. 3 is a detail view of the lifting-lever. Figs. 4, 5, 6, and 7 are views illustrating modifications.

A represents the dead-wood or sill of a car, C the draw-bar, and D the draw-head.

To the upwardly-projecting flange 1 of the draw-head a cam-lever 2 is pivotally connected. The cam-lever projects loosely through a slot 3 in the upper end of the coupling-pin 40 4 and has a chain 5 connected with it. The chain 5 may be attached to the lever at its free end 6 or it may be attached to the lever at 7. The upper end of the chain is preferably connected with the dead-wood or sill of the car through the medium of a crank-shaft 8, mounted on said dead-wood or sill.

From the construction and arrangement of parts above described it will be seen that in case of breakage of one of the draft devices or the loosening of any connection thereof with the car the outward movement of the draw

head or bar will cause the cam-lever to turn on its pivotal connection with the draw-head and its free end to rise, thus raising the coupling-pin through the slot, in which said lever 55 has a free movement, and result in uncoupling one draw-head from another.

In the form of the invention shown in Figs. 4 and 5 the cam-lever is made in the form of a bell-crank lever 9, pivotally supported on 60 the draw-head, the outwardly-projecting arm of said lever being provided with a cam face or edge 10. The upwardly-projecting arm of the lever 9 is provided with a pin 11, which enters and is free to move in an elongated 65 slotted link 12, pivotally connected at one end to the dead-wood or sill of the car.

In the form of the invention shown in Figs. 6 and 7 the construction is similar to that shown in Figs. 4 and 5, with the addition 70 thereto of a chain 14, connected with the coupling-pin and adapted to be attached to the dead-wood of the car.

In the constructions shown in Figs. 4, 5, 6, and 7 the coupling-pin is provided at its up- 75 per end with a slot, the same as in the preferred form of the invention, for the passage of the arm of the bell-crank lever.

My improvements are simple in construction, cheap to manufacture, and are applica- 80 ble to any coupling of the Master Car-Builders' type.

Other slight changes than those above specified might be made in the details of construction of my invention without departing from 85 the spirit of my invention or limiting its scope, and hence I do not wish to limit myself to the precise details herein set forth.

Having fully described my invention, what I claim as new, and desire to secure by Letters 90 Patent, is—

1. The combination with a car, a draw-head and a coupling-pin having a slot in its upper end, of a cam pivotally supported by the draw-head and passing through the slot in 95 the pin and a movable connection between said cam and the car, whereby when the draw-head becomes released from its fastenings and moves outwardly, said connection between the car and cam will operate to turn the cam and 100 cause the latter to raise the coupling-pin, substantially as set forth.

2. The combination with a car, a draw-head and a coupling-pin having a slot at or near one end, of a lever having an upper cam-face, pivoted on the draw-head and passing through the slot in the coupling-pin, and a flexible device permanently connected with said cam-lever and the car, whereby when the draw-head becomes released from its fastenings and moves outwardly, the flexible connection between the car and lever will be drawn taut

and turn said lever on its fulcrum to raise the coupling-pin, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

PRICE H. JACOBS.

Witnesses:

W. R. WRIGHT, C. W. SPALDING.