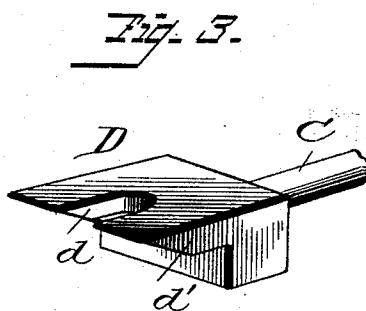
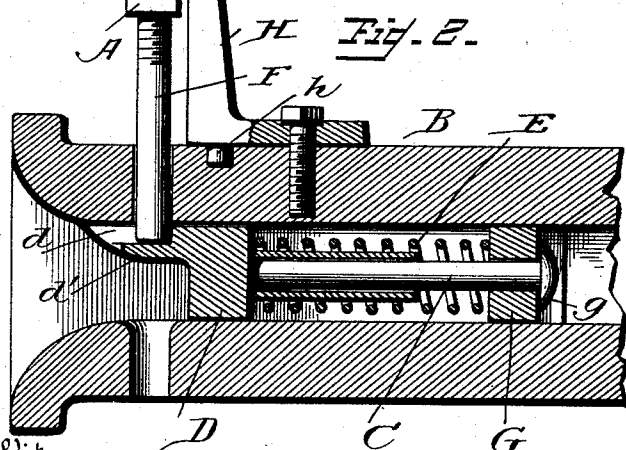
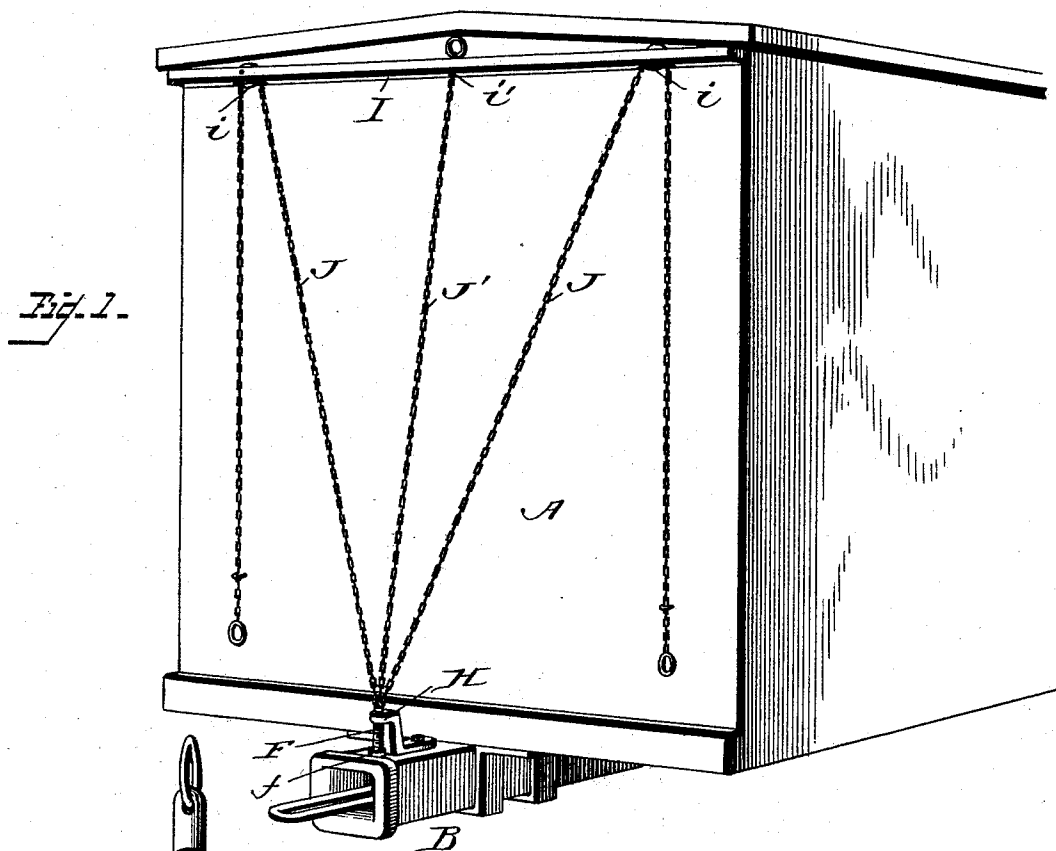


(No Model.)

J. B. E. TITTLE.
CAR COUPLING.

No. 498,827.

Patented June 6, 1893.



Witnesses
W. R. Hopper

Inventor
John B. E. Tittle
By Attorney *Franklin H. Hough*

UNITED STATES PATENT OFFICE.

JOHN B. E. TITTLE, OF JEWELL, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 498,827, dated June 6, 1893.

Application filed March 28, 1893. Serial No. 468,016. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. E. TITTLE, a citizen of the United States, residing at Jewell, in the county of Defiance and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and I do 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to car-couplings, and is designed to be automatic in its action, when the cars are run together, and which can be uncoupled either from the side or the top of the car, as required.

The object of the invention is to utilize the coupling pin to engage with the coupling-link and at the same time serve as a means to hold the combined pin and link support within the draw-head, at all times, whether the said coupling pin is raised and in position for coupling, or lowered.

A further object of the invention, is the provision of simple and efficient instrumentalities whereby the cars may be readily and easily uncoupled from the sides, or from the top of the car, thereby avoiding the necessity of passing between the cars to effect the uncoupling.

The invention consists in the novel features and the peculiar construction and combination of parts which will be hereinafter more fully described and claimed, and shown in the accompanying drawings, in which—

Figure 1, is a perspective view of the end of a car, showing the application of the invention. Fig. 2 is a longitudinal vertical section of the draw head and the combined pin and link support on an enlarged scale, showing the pin as elevated and in position for coupling the cars when the latter are run together. Fig. 3, is a detail view of the combined pin and link support removed from the draw-head.

A represents the end of a car, which may be of any ordinary and well known construction.

The draw-head B is attached to the car in the usual manner, and is hollow, the opening

extending from end to end, and flanging at its outer end to guide the link within the chamber, when the cars are run together.

The combined pin and link support is arranged within the chamber of the draw-head, and it is composed of a head D having a rod C projected in the rear thereof. This head D fits loosely within the draw-head, so as to move freely therein, and is provided with a projecting portion *d'* having a recess or depression *d* in its top side. The projecting portion *d'*, extends from the upper end of the head D forward thereof, and is designed to project over the end of the link and hold the latter in position to enter the draw-head on the car to be coupled. This projecting portion *d'* is beveled upward to ride over the end of the link when coupling. The recess or depression *d* receives the lower end of the coupling pin F, to support the latter and limit the forward movement of and retain the combined pin and link support within the draw-head. A cross-head or short bar G is located at the inner end of the draw-head, being held in place by stops or short ears *g* on the sides of the chamber, and is operated to receive the end of the rod C and guide the latter in its movements. A spring E is mounted on the rod C and is confined between the cross-head G and the head D, and presses the latter forward. The coupling-pin F passes through convenient openings in the top and bottom sides of the draw-head, and its upper end works through a guide H which also serves to limit the upward movement of the pin F, by engaging with a stop *f* thereon. This stop *f* is adjustable on the pin to admit of the latter being raised sufficiently high to free its end from the head D, so that the latter can be removed from the draw-head when desired. The guide H is a bracket which is attached to the draw-head by a single bolt, a pin or dowel *h* serving to prevent the bracket from turning on the bolt should the latter become loosened.

To the roof or upper portion of the car, is attached a strip I having pulleys *i* near each end, and a central opening *i'*. Chains J connected at one end with the coupling-pin pass over the pulleys *i* and extend within convenient reach on each side of the car, so that the uncoupling may be effected from the ground

on either side of the car, by drawing upon either of the chains. A third chain T' also extends from the pin F and passes through the opening *i'*, to be drawn upon from the top of the car, to permit the uncoupling to be effected from this point. The free ends of the chains J and J' have rings or handles to be readily grasped when it is required to uncouple the cars, or to raise the pin to a position to automatically couple the cars when run together.

When it is desired to couple the cars, the pin is raised until the stop *f* strikes the guide H. The lower end of the pin will just clear the bottom of the recess *d*, and the head D will be pushed forward until the inner end of the recess *d* engages with the pin which latter will be supported on the head D. When the cars are run together the link will strike the head D and move the latter in, and the pin being unsupported will fall and couple the cars.

It will be understood that each end of the cars will be similarly equipped, and that the link will be carried by the draw-head at the end of the car to be coupled.

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

1. A car-coupling comprising a hollow draw-head having stops or shoulders *g* at the inner end, a cross-head G held in place by the said stops *g*, a combined pin and link support hav-

ing a rod which works through the cross-head, and a spring mounted on the rod and held between the cross-head and the combined pin and link support, substantially as described.

2. In a car-coupling, the combination with the coupling mechanism, of a strip located at the upper portion of the car and having a central aperture and pulleys near each end, and chains attached at one end to the said coupling mechanism and passing over said pulleys and through the said aperture, whereby the uncoupling may be effected from the side or the top of the car, substantially as described.

3. In a car-coupling, the combination of a hollow draw-head having stops *g* at its inner end, a cross-head G, a combined pin and link support comprising a head D having the forward beveled projection *d'*, and recess *d*, the rod C adapted to work through the cross-head G, spring E on the rod C, pin F having adjustable stop *f*, guide H, strip I having pulleys *i* and aperture *i'*, and chains J and J' connected with the pin F and passing over the said pulleys and through the said aperture, substantially as and for the purpose described.

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

JOHN B. E. TITTLE.

Witnesses:

D. J. CHEYNEY,
BELL C. CAMERON.