

(No Model.)

J. B. GARRETT.

CAR COUPLING.

No. 345,498.

Patented July 13, 1886.

Fig. 1.

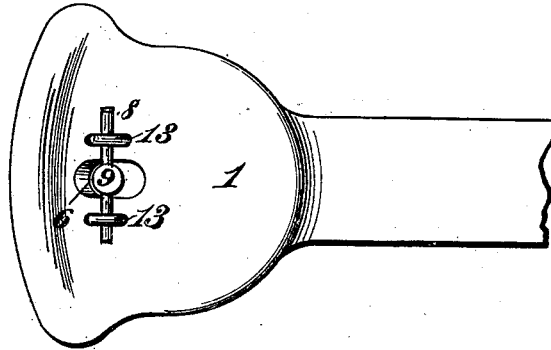


Fig. 2.

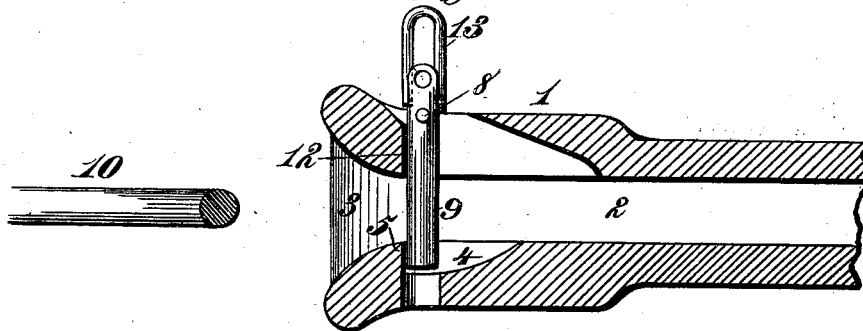


Fig. 3.

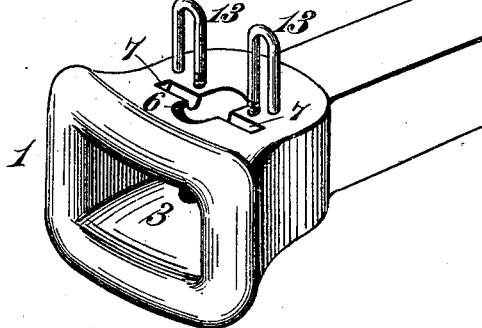
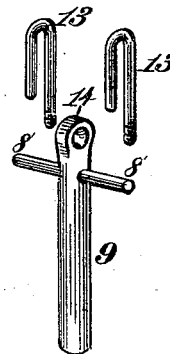


Fig. 4.



Witnesses.

Robert Emmett

Dennis Cumby

Inventor.

Jackson B. Garrett.

By *James L. Norris.*
Atty.

UNITED STATES PATENT OFFICE.

JACKSON B. GARRETT, OF MCGREGOR, TEXAS, ASSIGNOR OF ONE-HALF TO
ALFRED I. FOLSOM, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 345,498, dated July 13, 1886.

Application filed March 18, 1886. Serial No. 195,714. (No model.)

To all whom it may concern:

Be it known that I, JACKSON B. GARRETT, a citizen of the United States, residing at McGregor, in the county of McLennan and State of Texas, have invented new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention relates to certain improvements in car-couplings whereby an ordinary draw-head provided with the usual pin-and-link coupling can be readily and cheaply adapted for use as an automatic coupling.

The invention consists in the combination, with a slotted draw-head and a coupling-pin swinging therein and provided with pivotal supports or trunnions, of a vertically-projecting and axially-rotatable guide loop or staple arranged on each side of the pin-slot and adapted to hold the pin from being jolted out of the draw-head, and to permit its withdrawal and replacement when necessary.

My invention also consists in the construction and combination of parts in an automatic car-coupling, as hereinafter more fully set forth.

In the annexed drawings, illustrating the invention, Figure 1 is a plan of my improved car-coupling. Fig. 2 is a longitudinal section of the same. Fig. 3 is a view of one of the draw-heads with coupling-pin removed. Fig. 4 represents the coupling-pin and its guides detached.

Referring to the drawings, the numeral 1 designates a draw-head having a longitudinal recess, 2, with a beveled mouth, 3, leading thereto. The lower part of the recess 2 is formed with an inclined or beveled depression, 4, to permit a swinging movement of the pivoted coupling-pin, and at the forward end of this depression is a shoulder, 5, that limits the forward movement of the pin and forms an abutment for supporting its lower end.

In the upper part of the draw-head, at its forward end, is a slot, 6, formed by elongating the ordinary upper pin-hole. This slot 6 is intersected at the top of the draw-head by shallow transverse grooves or depressions 7, that serve as bearings for the trunnions 8 of the coupling-pin 9, which is thus adapted to swing within the draw-head. The forward and rear ends of the slot 6 are beveled, as shown, to allow

the pin to swing back when pressed against by the entering link 10, and a shoulder or abutment, 12, is formed at the bottom of the forward inclined end of said slot, immediately above the shoulder or abutment 5, to serve therewith as a bearing for the forward side of the pin when it is in a vertical position. On each side of the slot 6 is a movable pin guide or stop, 13, consisting of a staple having a long arm inserted in the top of the draw-head and turning on its axis, and a short arm nearly touching the top of the draw-head, but adapted to clear the trunnions 8 as the staple or guide is turned. It will be observed that the grooves 7 are of such depth as that when the pin 9 is in position its trunnions 8 are approximately flush with the top of the draw-head, and therefore offer no obstruction to the adjustment of the stops or guides 13. By turning these guides outward on their long or pivoted arms their short arms will clear the grooves 7 and trunnions 8, and so permit the pin 9 to be removed and replaced without difficulty. After the coupling-pin has been placed in position, with its trunnions 8 resting in the grooves 7, the guides 13 will be turned on their pivots so as to cover or straddle the trunnions, and thus prevent the pin being jolted out of the draw-head.

In attaching the movable or pivoted guides 13 it is preferable to provide their long arms with a series of screw-threads, by which they can be readily engaged in suitable orifices formed in the top of the draw-heads. This method of attachment permits a vertical adjustment of the guides, by which their short arms can be made to approach the surface of the draw-head more or less nearly.

In the upper end of the coupling-pin is an eye, 14, for attachment of a chain, cord, or lever, by which said pin can be raised either from the sides or top of the car without the risk of injury incident to passing between the cars in uncoupling.

It will be observed that the pivoted staples 13 serve as stops to retain the pin 9 within the draw-head, and also as guides for the pin-trunnions 8 when the pin is elevated in the act of disengaging it from the link.

The coupling of the cars is effected auto-

5 matically by reason of the entering link forcing the lower end of the swinging pin backward until it clears the end of the link and falls into engagement therewith. Should the draw-heads be of slightly-different heights, the beveled mouths 3 will permit the link to assume the proper position for securing and maintaining engagement with the coupling-pins.

10 It will be seen that draw-heads provided with the ordinary pin-and-link coupling can be readily adapted to my invention by simply elongating the upper pin-hole to convert it into a slot having beveled ends, and then providing 15 the transverse grooves 7 for the pin-trunnions and the orifices for receiving the pivotal ends of the pin-guides. When the link and pins are engaged and the cars in motion, the draft is distributed on the shoulders 5 and 12, so as 20 to avoid undue strain on the pins, and in case of injury or breakage the pin can be readily detached and replaced by simply turning the guides 13 to one side, and then returning them to their normal position when the pin has 25 been placed in the draw-head.

Having thus described my invention, what I claim is—

1. The combination, with a slotted draw-head and a coupling-pin swinging therein and provided with pivotal trunnions, of two vertically-projecting and axially-rotatable loops arranged, respectively, at opposite sides of the pin-slot, to serve as a guide for the trunnions of the pin in the rising and falling movements of the latter, substantially as described. 30 35

2. The combination of a draw-head having recess 2, provided with inclined depression 4, and a slot, 6, having beveled ends, the coupling-pin 9, swinging in the slot 6, and having trunnions 8, supported in grooves 7, that intersect said slot, and the movable guides 13, arranged on opposite sides of said slot, said guides being each provided with a long arm having a screw-threaded end inserted in the top of the draw-head and a short arm adapted 45 to clear the pin-trunnions in the act of adjusting said guides, substantially as described.

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

JACKSON B. GARRETT.

Witnesses:

JAMES L. NORRIS,

J. A. RUTHERFORD.