(No Model.)

J. McCREADY.

CAR COUPLING.

No. 315,048. Patented Apr. 7, 1885.

Fig. 2.

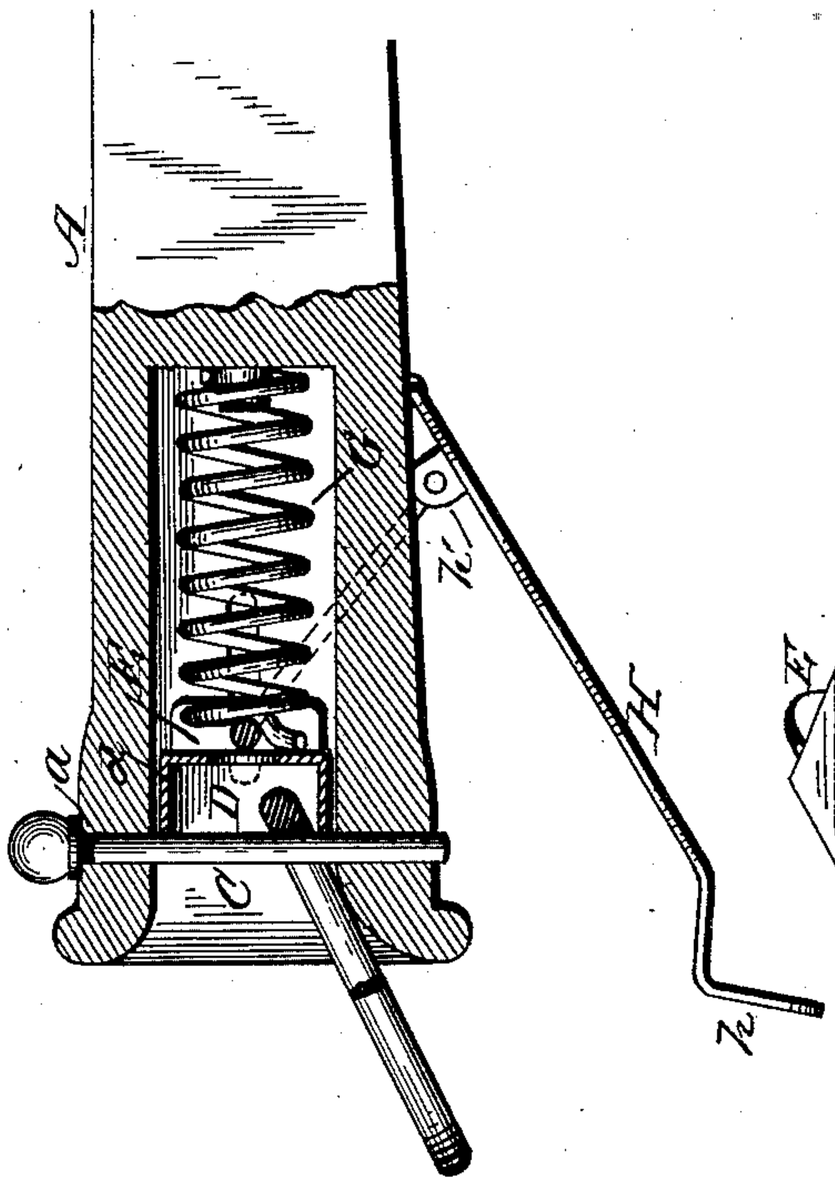


Fig. 4.

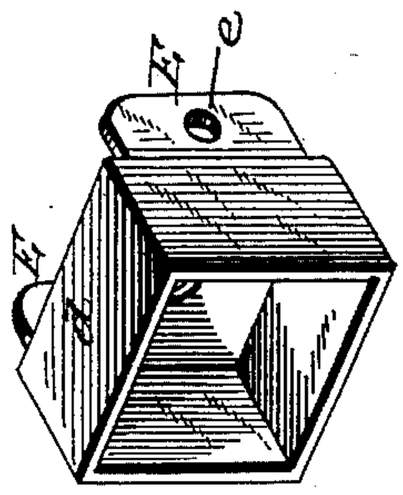


Fig. 1.

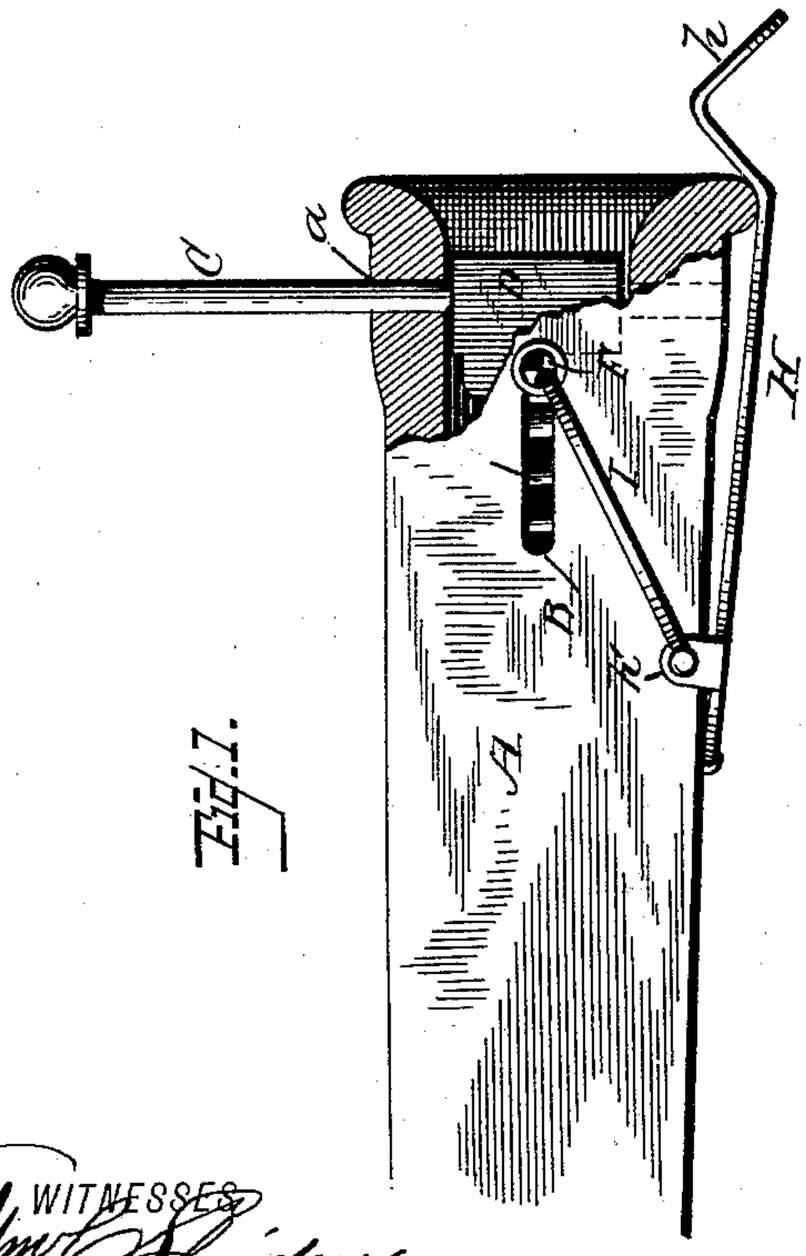
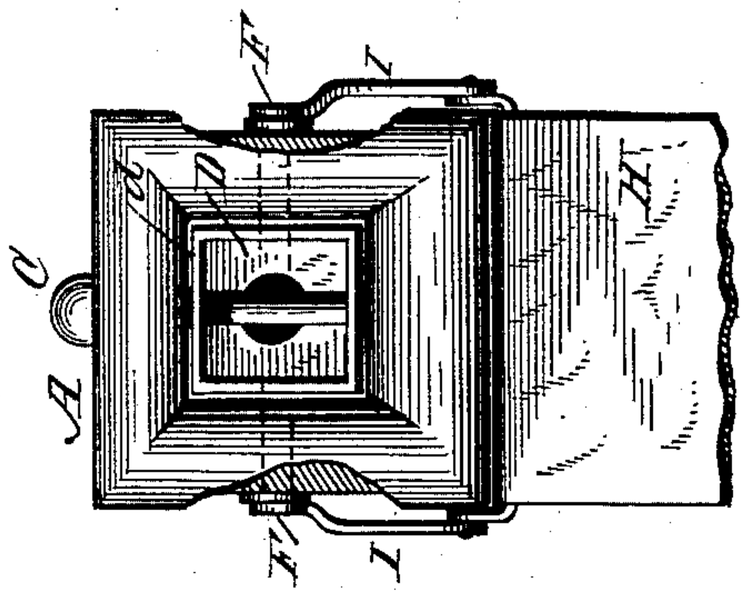


Fig. 3.



WITNESSES:

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 315,048, dated April 7, 1885.

Application filed February 10, 1885. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH MCCREADY, a citizen of the United States, residing at New Brighton, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

This invention relates to car-couplers, and has for an object to provide an improved automatic coupling attachment that may be conveniently applied to the draw-heads now in general use.

The invention consists in a hinged or pivoted link-guiding apron connected with a spring-actuated bumper-case in such manner that when a link is coupled by the pin to the draw-head the apron will be lowered out of line with such draw-head, and when the link is removed the apron will assume a position to guide the link properly into the draw-head, all constructed, combined, and arranged substantially as hereinafter specified.

In the drawings, Figure 1 is a side view of my coupling, the draw-head being partly broken away. Fig. 2 is a vertical longitudinal section of the coupling. Fig. 3 is a front view of the coupling, and Fig. 4 is a detail view of the bumper-case.

The draw-head A is of the ordinary construction, except that it is provided in its opposite sides with horizontally-elongated slots B, terminating at their forward ends slightly in rear of the usual pin-openings, *a*, for the coupling-pin C.

The bumper-case D is fitted to and movable in the draw-head. This bumper-case has its back plate arranged to receive the stroke of the link in coupling, and it (the case) is preferably formed with a top plate, *d*, which projects forward under the upper opening, *a*, and supports the pin C when the link is removed.

Lugs E project rearwardly from the opposite sides of the bumper-case, and are provided with openings *e* for the retaining-shaft F. A coil-spring, G, is held in the draw-head and bears against the rear side of the bumper-case, giving said case an outward tendency or spring whereby to resist the blow of the link in entering the draw-head. The ends of the shaft F are extended through the slots *a*, as shown most clearly in Fig. 2. This arrangement of the said shaft has a double purpose. In the first place, it prevents the bumper-case from being forced out of the draw-head by the force of spring G, and also prevents such case from being forced by the link so far into the draw-head as to damage the spring G. Again, the ends of this shaft serve as convenient means for connection with the bumper-case of the rods which connect the said case with the link-guiding apron H. This apron H is pivoted at its rear end to the draw-head and extends forward below the front end of the draw-head, as shown. The front end of this apron is bent into the inverted-V shape shown, so that its link-guiding plate *h* will be properly inclined to guide the link and be arranged in position to receive such link from the approaching draw-head, as will be understood from Figs. 1 and 2.

Rods I I are attached at one end to the retaining-shaft and at their other ends to the apron at a point of the latter shortly in advance of its pivot. I prefer to connect the rods I to the apron through openings in lugs *h'*, struck up from the sides of the apron, as shown.

In operation, when the parts are in the position shown in Fig. 1, the pin is upheld by the bumper-case, which in turn, together with the apron, is held in the position shown by the action of the spring G. When the link approaches the draw-head, it strikes first on the part *h* of the apron, and is thereby directed into the mouth of the draw-head. Striking the bumper-case, the latter is forced back, releasing the pin, which drops through and secures the link. This backward movement of the bumper-case by means of rods I throws the front end of the apron down, so that it will not be struck and damaged in the bumping together of the draw-heads. Thus it will be seen I provide an efficient guide for the link in entering the draw-head, and automatically throw the said guide out of the way of damage when it has served its purpose.

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

1. In a car-coupling, the combination, with the draw-head, of the spring-actuated bumper-case, the link-guiding apron pivoted at its rear end to the draw-head, and the connecting-rods attached at one end to the bumper-case and at their other ends to the apron, substantially as set forth.

2. The combination of the draw-head having longitudinal slots in its sides, the bumper-case arranged therein and having perforated lugs projected rearwardly from its opposite sides, the transverse shaft placed through the openings in the lugs and having its ends extended through the slots in and beyond the draw-head, the spring, the apron having its forward end adapted to guide the link and hinged at its rear end to the draw-head, and the rods connecting the transverse shaft and the apron, all arranged and operating substantially as and for the purposes specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH McCREADY.

Witnesses:

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SAMUEL J. RUHE.