(No Model.)

S. A. V. HARTWELL.

CAR COUPLING.

No. 260,195. Patented June 27, 1882.

Fig. 1.

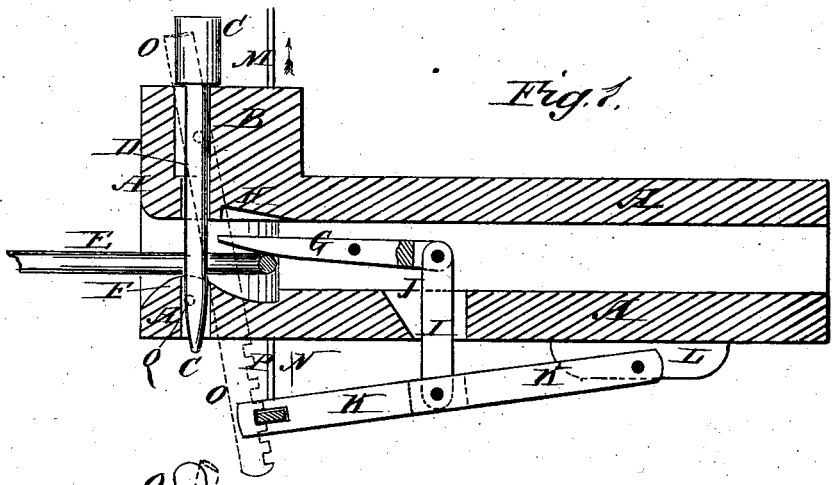


Fig. 2.

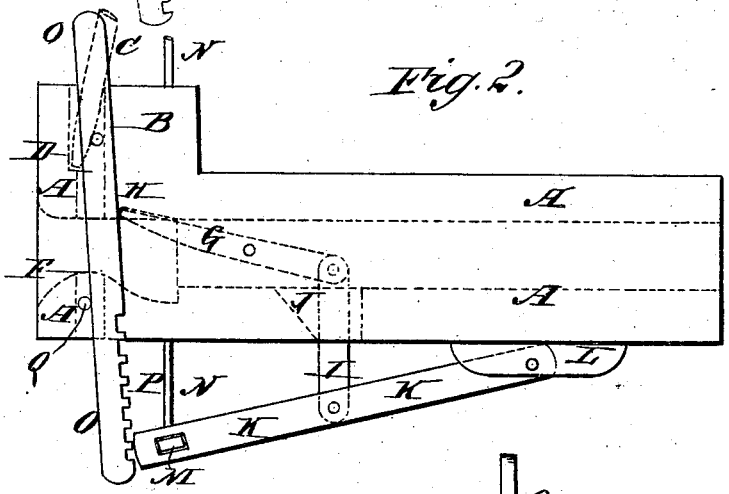
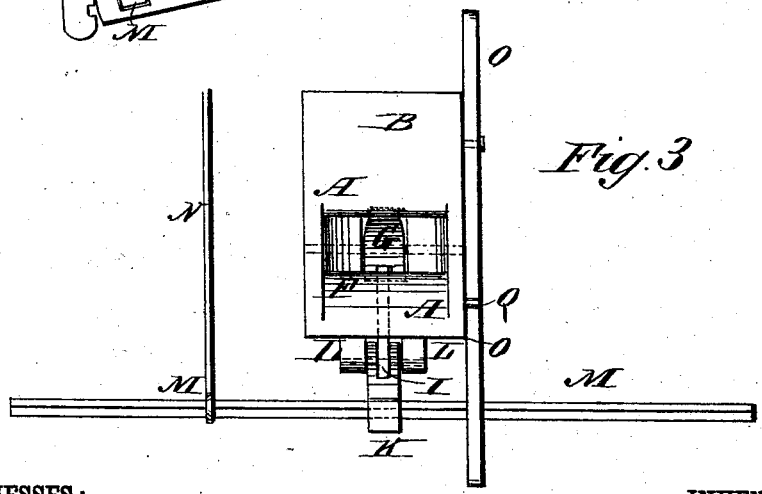


Fig. 3



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SAMUEL A. V. HARTWELL, OF VALLEY CENTRE, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 260,195, dated June 27, 1882.

Application filed March 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL A. V. HARTWELL, of Valley Centre, in the county of Sedgwick and State of Kansas, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description.

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

Figure 1 is a sectional side elevation of my improvement. Fig. 2 is a side elevation of the same. Fig. 3 is a front elevation of the same.

The object of this invention is to facilitate the coupling of cars.

The invention consists in a car-coupling constructed with a bar hinged in the interior of the draw-head in such a position that its forward end will rest upon the rear end of the coupling-link, and connected by a short bar with a lever hinged beneath the draw-head, and having a cross-bar attached to its forward end, so that the link can be controlled from the side of the track.

With the cross-bar of the hinged lever is connected a rod or chain for controlling the link from the top of the car, and with the draw-head is connected a swinging notched bar to engage with the cross-bar of the lever and make the coupling automatic, as will be hereinafter fully described.

A represents the draw-head, which is perforated longitudinally, and may be made of cast or wrought iron. The forward end of the draw-head A has a projection or block, B, formed upon or attached to its upper side to strengthen the draw-head, better adapt it to serve as a bumper, and give the requisite length to the vertical hole for the coupling-pin C. The pin-hole is countersunk upon its forward side to form a shoulder, D, to serve as a seat for the end of the coupling-pin C when the cars are uncoupled. When the cars are run together and the draw-heads A come in contact the jar will throw the upper end of the coupling-pin forward and its lower end off the seat D, so that the said pin C will drop through the link E and couple the cars. The link E rests upon a rounded projection, F, formed upon the lower side of the mouth of the draw-head, at or a little in front of the pin-hole, so that the said link can be easily moved to raise and lower its forward end in adjusting it in proper position to enter the draw-head of an adjacent car.

G is a bar, which is pivoted at its middle part to and between the sides of the draw-head A in such a position that the forward end of the said bar G will be a little in the rear of the coupling-pin C.

In the lower side of the upper part of the draw-head A, a little in the rear of the coupling-pin C, is formed a recess, H, to receive the forward end of the bar G when raised, so that the said forward end will be out of the way of the entering link E. To still further protect the forward end of the hinged bar G from the blow of the entering link the said forward end can be beveled upon the lower side, as shown in Figs. 1 and 2.

To the rear end of the bar G is pivoted the upper end of a short connecting-bar, I, which passes down through a slot, J, formed in the lower part of the draw-head A. The forward end of the slot J is inclined or beveled, as shown in Figs. 1 and 2, so that the lower end of the bar I will readily pass through the said slot J when the bars I G are slid into the interior of the draw-head A from its forward end.

To the lower end of the bar I is pivoted the lever K, the rear end of which is pivoted to long lugs L, or other supports formed upon or attached to the lower side of the draw-head A, or some convenient part of the car-frame.

In a perforation in the forward end of the lever K is secured the middle part of the rod or bar M, the ends of which project into such positions that they can be readily reached from the side of the track. With this construction, by raising the forward end of the lever K by means of the cross-bar M the forward end of the hinged bar G will be pressed down upon the inner end of the link E, so as to raise the outer end of the said link into such a position as to readily enter the draw-head of an adjacent car.

To the cross-bar M is attached the lower end of the rod or chain N, which extends to the top of the car, so that the link E can be controlled from the top of the car when required.

To the side of the forward part of the draw-

head A is hinged the upper part of a swinging bar, O, in the rear side of the lower part of which are formed notches P to receive the cross-bar M and support it, holding the outer end of the link E at any desired elevation, so that the cars will couple themselves automatically when run together. With this arrangement, when the cars are run together the jar will throw the notched bar O off the cross-bar M and allow the lever K to drop and raise the forward end of the bar G away from the link E.

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

1. In a car-coupling, the combination, with the draw-head A, provided with the rounded projection F upon the upper side of lower part, and the link E, of the hinged bar G, and means, substantially as herein shown and described, for operating said bar, as and for the purpose set forth.

2. In a car-coupling, the combination, with the draw-head A, of the hinged bar G, the connecting-bar I, and the lever K, having a cross-bar, M, attached to its forward end, substantially as herein shown and described, whereby the coupling-link can be guided from the side of the track, as set forth.

3. In a car-coupling, the combination, with the draw-head A, the hinged bar G, the connecting-bar I, and the lever K, having a cross-bar, M, attached to its forward end, of the rod or chain N, substantially as herein shown and described, whereby the coupling-link can be guided from the top of the car, as set forth.

4. In a car-coupling, the combination, with the draw-head A, the hinged bar G, the connecting-bar I, and the hinged lever K, having cross-bar M, of the swinging notched bar O, substantially as herein shown and described, whereby the coupling-link can be supported with its forward end at any desired elevation, as set forth.

5. In a car-coupling, the combination, with the draw-head A, provided with the recess H in the lower side of its upper part, of the hinged bar G, having its forward end beveled upon the lower side, and means for operating said bar, substantially as and for the purpose set forth.

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