

(No Model.)

I. A. WHITMAN.

CAR COUPLING.

No. 322,512.

Patented July 21, 1885.

Fig-1-

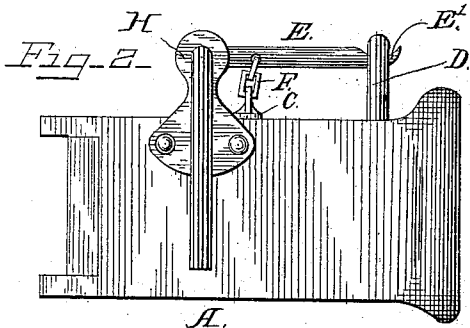
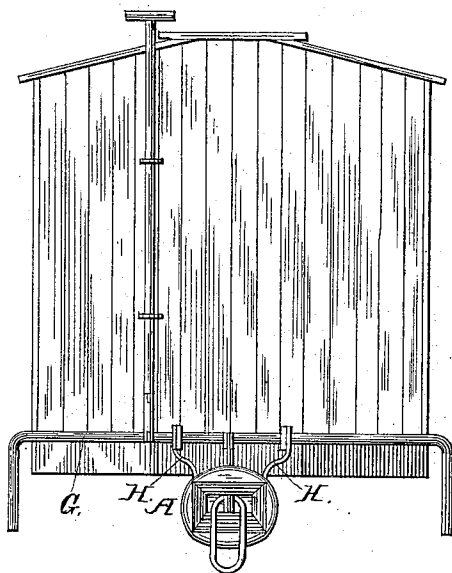


Fig-5-

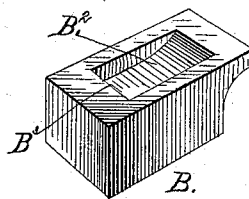
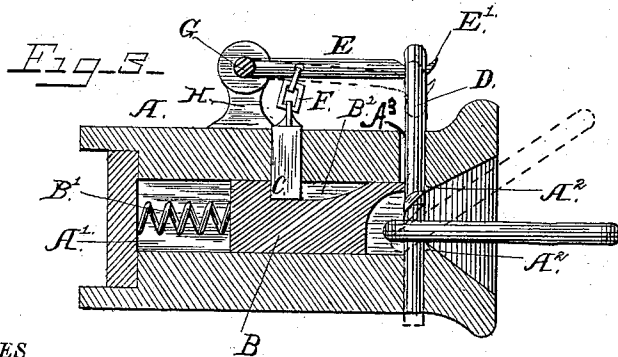
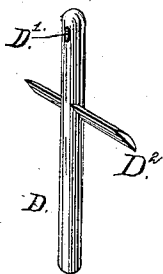


Fig-4-



WITNESSES

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UNITED STATES PATENT OFFICE.

IRVIN A. WHITMAN, OF LYONS, NEW YORK, ASSIGNOR OF ONE-HALF TO
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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 322,512, dated July 21, 1885.

Application filed May 20, 1885. (No model.)

To all whom it may concern:

Be it known that I, IRVIN A. WHITMAN, a citizen of the United States, residing at Lyons, in the county of Wayne and State of New York, 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 and figures of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in car-couplings; and it consists in the construction, combination, and arrangement of certain parts, as will be hereinafter fully described, and specifically pointed out in the claims.

In the drawings hereto annexed, Figure 1 is an end elevation of my coupling, showing it in position on the car. Fig. 2 is a side elevation, and Fig. 3 is a longitudinal section, of the coupling detached from the car. Fig. 4 is a detail view of the pin, and Fig. 5 is a detail view of the pin-supporting block.

In carrying out my invention I secure to the car a draw-head, A, the mouth of which is made flaring, as shown. A passage, A', runs nearly the entire length of the draw-head, and a block, B, works within this passage, as will be described. This passage A' is open at its outer end, as shown, forming, practically, a continuation of the flaring mouth. The flaring walls of the mouth of the draw-head project a short distance across the open end of the draw-head, forming the shoulders A² A², as shown. The pin-supporting block B is pressed toward the mouth of the draw-head by a coil-spring, B', placed behind the block and held between it and the rear wall of the draw-head. The front end of this block has its lower end cut away, as shown, so as to allow room for the end of the link behind the coupling-pin. In the top of this block B, I form a cavity, B², in which rests the latch C. This latch can be used or not, as desired. This cavity B² is constructed, as shown, with a shoulder, B³, at its inner end, and converging upward at its outer

end, so as to cause the latch C to gradually rise as the block is pushed back. This inclination of the outer end of the cavity B² also insures perfect action of the latch C in preventing the block B from pressing with too much force upon the coupling-pin, as will be described. The latch C and the coupling-pin D are suspended from the lever E, and are operated nearly simultaneously by it, as will be described. The latch C is held upon the lever E by a short chain, F, as shown. The outer end of the lever E is formed into a hook, E', which engages an eye or opening, D', in the upper end of the coupling-pin. By hanging the coupling-pin on the lever E in the manner just described, I am enabled to quickly substitute a good pin for one that has been broken. The coupling-pin is provided with a cross-bar, D², formed integral with it for depressing the end of the link, as will be described. This cross-bar D² is made of a length equal to the width of the link, so as to bear upon the link with each end. A rod, G, is placed across the end of the car, and is journaled in vertical supporting-plates H, secured to the sides of the draw-head or attached to the end of the car. The lever E is made integral with the rod G, which is bent at right angles at each end, as shown, the bent portions forming handles for turning the rod, and thereby operating the coupling-pin and latch, as will be readily understood.

When my invention is applied to passenger-cars, the plates H can be so adjusted as to bring the rod G just in front of the platform. When it is applied to stock or freight cars, it can be operated from the top of the car by running a suitable rod to the top of the car, as shown in Fig. 1.

The operation of my device will be readily understood upon reference to the drawings. In the drawings the parts are shown in the positions they will have when the cars are coupled. When it is desired to uncouple the cars, the rod G is turned so as to throw the outer end of the lever E up, thereby raising the coupling-pin and the latch C, and allowing the block B to be thrown forward by the spring B'. The link will be forced out fast enough

to prevent the pin from recoupling before the train is drawn apart. The chain F is made of such a length that the latch C will not be drawn up from the block B until the coupling-pin is nearly out of the draw-head. When the block B is thrown forward by the spring B', it is arrested by the upper shoulder, A². The coupling-pin and the latch are then lowered until they rest on the top of the block B. When it is desired to couple the cars, the link is placed in one draw-head by hand and one car then backed toward the other. The link will strike the block B, forcing it back, and the pin and latch will drop into their proper places, the pin passing through the link and the latch into the cavity B². The block will be pushed back farther than the position shown in Fig. 3, but on its recoil will assume that position, the latch C preventing its pressing too hard against the coupling-pin. By depressing the coupling-pin the cross-bar D² will be made to bear on the end of the link and raise the same, as shown in dotted lines, Fig. 3, the lower shoulder, A², acting as a fulcrum. By this action I am enabled to couple cars of different heights. The draw-head is provided with a transverse slot or elongated pin-opening, A³, to permit the lateral arms or cross-bar D² of the coupling-pin D to pass down into the said draw-head.

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

1. The combination of the pin provided with a cross-bar extended transversely to the opening in the draw-head, and adapted to bear on the link, the link and the fulcrum-shoulder, substantially as described, and for the purposes set forth.

2. The combination of the draw-head, the pin-supporting block sliding in the draw-head, and the latch C, resting upon the pin-supporting block, substantially as and for the purposes set forth.

3. In a car-coupling, the coupling-pin hereinbefore described, provided with a cross-bar or lateral wings extended transversely to the opening in the draw-head, and beveled or cut away on its under outer side, substantially as and for the purposes set forth.

4. The combination of the block B, the latch C, the coupling-pin, the link, the lever E, and the operating-rod G, substantially as shown and described.

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

IRVIN A. WHITMAN.

Witnesses:

F. A. TANNER,
E. K. LEONARD.