(No Model.)

J. A. PAINTER.

CAR COUPLING.

No. 453,891. Patented June 9, 1891.

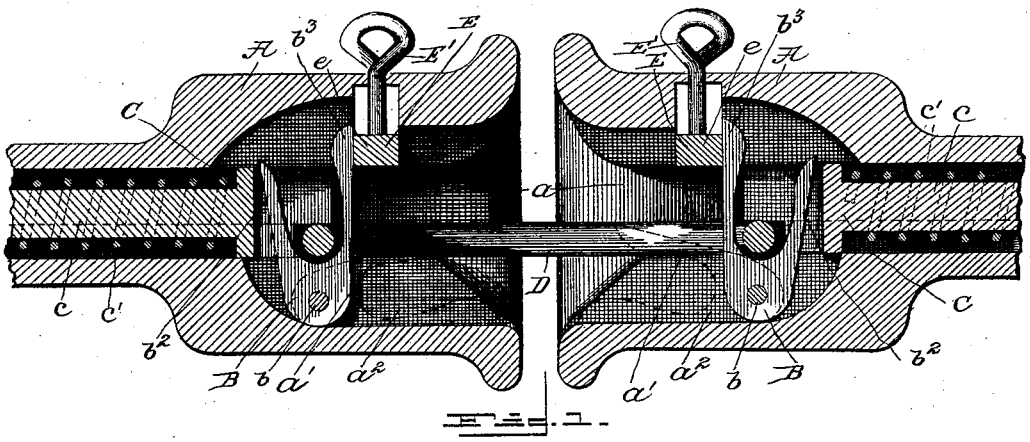

Fig. 1.

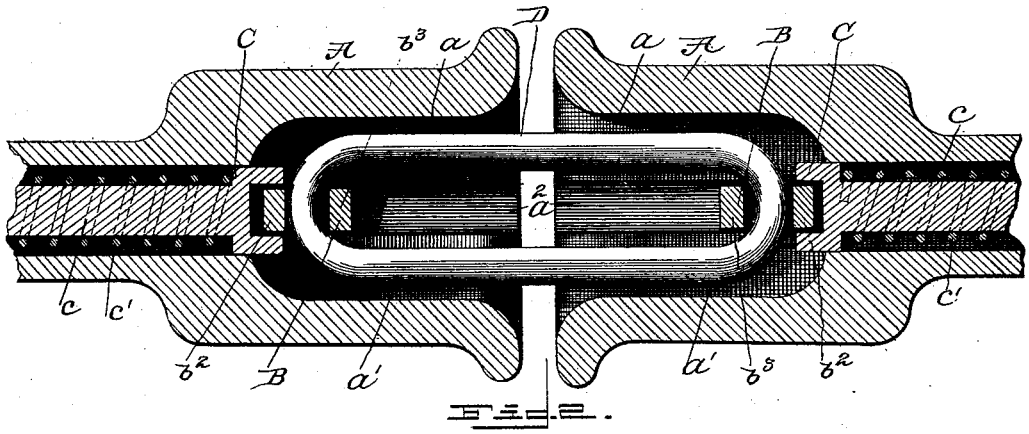

Fig. 2.

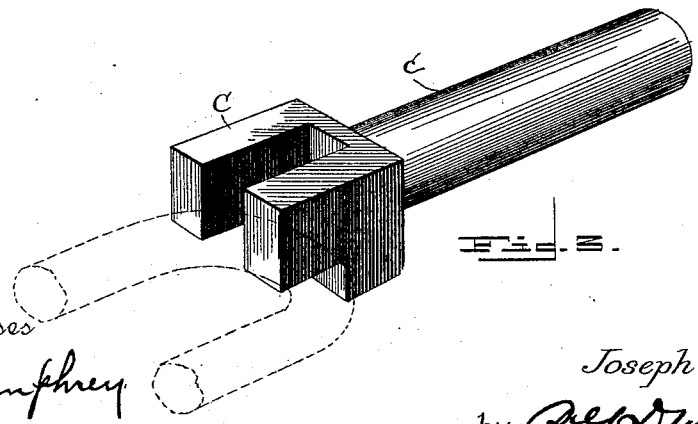

Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH A. PAINTER, OF ELKTON, VIRGINIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 453,891, dated June 9, 1891.

Application filed March 17, 1891. Serial No. 385,396. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. PAINTER, a citizen of the United States, residing at Elkton, in the county of Rockingham and State of Virginia, have invented certain new and useful Improvements in Car-Couplings; and I do hereby 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.

This invention relates to car-couplers.

The object of the invention is to produce a car-coupler which shall be cheap and simple in construction, and whereby the coupling may be accomplished without endangering the life or limb of the operator.

Furthermore, the object of the invention is to produce a car-coupling of such construction that the coupling may be accomplished automatically and with certainty.

With these objects in view the invention consists in a car-coupling comprising a draw-head provided with a chamber, a longitudinal indentation or well in the floor of the chamber, a latch approximately **U**-shaped in form pivoted in the indentation or well, a spring-actuated head or buffer, against which the coupling-link impinges in the act of coupling, the spring-head being provided with a notch, whereby the link is engaged and retained in a horizontal position, and a gravity-pin engaging the **U**-shaped latch when the latch is in a locked position.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical section of my improved coupler. Fig. 2 is a longitudinal horizontal section, and Fig. 3 is a perspective view showing the spring-head with a portion of the link in its normal position in connection with the spring-head.

In the drawings, A A represent two draw-heads provided with a chamber a, having a floor a', in which is a longitudinal indentation a^2, extending from the front to within a short distance of the rear of the opening.

Pivoted in the well or indentation is a latch B, held in place by a pin b, upon which it rotates. The latch is provided with two arms $b^2 b^3$, having their outer ends rounded, as shown in Fig. 1.

In the rear of the chamber in the draw-heads are the heads C, the stems c of which extend rearward into the draw-head and are surrounded by a coil-spring c', whereby the heads are forced outward. The spring-heads are provided with an indentation on their lower faces and are slotted for the reception of the latch when the latter is in a position to lock the ordinary coupling-link D, the coupling-link, when in a locked position, resting on the floor in an opening in the draw-head and engaging the indentation in the spring-head, whereby it is retained in its proper horizontal position.

E represents a gravity-pin, the head e of which is designed to engage the arm b^3 of the latch when the coupler is in a locked position. The spindle of the pin extends through the top of the coupling-head, where it is provided with a handle or loop E′, adapting it for grasping, when it is desired to release the coupling-link.

In the use of the coupler the coupling-latch is in its normal position approximately horizontal, as shown in dotted lines in Fig. 1, the arm b^2 of the latch extending up into the top of the coupling-link as it enters the draw-head. When the link is pushed into the draw-head, it engages the arm b^2 of the latch and moves the entire latch upward and rearward, the short end b^3 passing beneath the head of the pin E, and the arm b^2 of the latch engaging the locking-pin and pushing it upward until this arm b^3 passes the pin, when the pin falls, thus locking the link, as shown in full lines in Fig. 1.

In order to couple automatically, it is only necessary to lock the link into one of the coupler-heads, when the link will be held in proper horizontal position for introduction into another draw-head.

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

A car-coupling comprising a draw-head provided with a chamber, a longitudinal well or indentation in the floor of the chamber, a U-shaped latch pivoted in the well or indentation, a spring-actuated head or buffer against which the coupling-link impinges in the act of coupling, the spring-head being provided with a notch whereby the link is engaged and retained in a horizontal position, and a gravity-pin engaging the U-shaped latch, substantially as described.

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

JOSEPH A. PAINTER.

Witnesses:
R. G. DYRENFORTH,
T. B. KEEFER.