

(No Model.)

C. STILGER.
CAR COUPLING.

No. 460,999.

Patented Oct. 13, 1891.

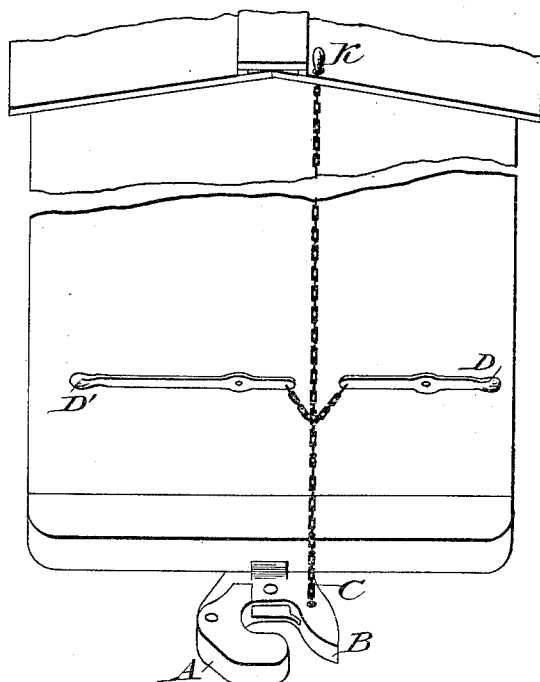


Fig. 1.

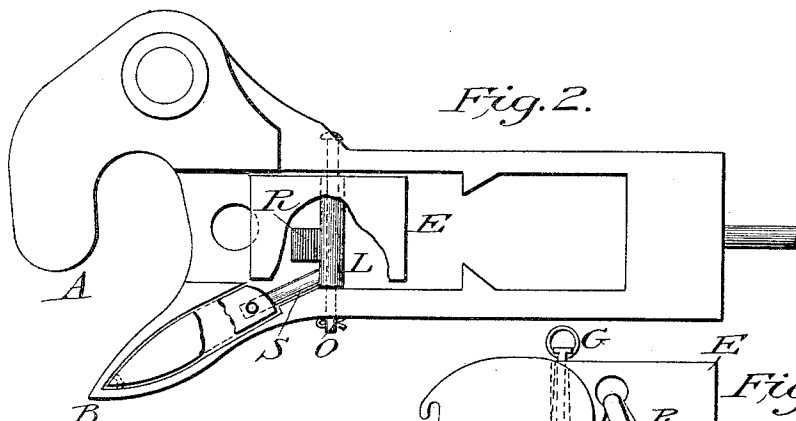


Fig. 2.

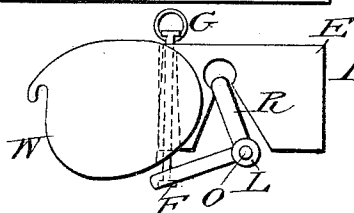


Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES STILGER, OF LOUISVILLE, KENTUCKY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 460,999, dated October 13, 1891.

Application filed April 6, 1891. Serial No. 387,865. (No model.)

To all whom it may concern:

Be it known that I, CHARLES STILGER, a citizen of the United States, residing in Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Improvement in Automatic Car-Couplers, of which the following is a sufficient specification.

My invention is confined to the detaining and discharging device and its manipulating attachments of an automatic car-coupler, in which laterally-swinging hooks are held in position when coupled by means of tumblers engaging the heels of the hooks, and the tumbler of my device is adapted to be withdrawn and the coupling discharged by persons some distance, if necessary, from the coupler.

The accompanying drawings will illustrate my device.

Figure 1 is a view in perspective of my coupler attached to a car and showing the controlling devices and attachments by which the tumbler is operated from without. The tumbler is removed and the opening therein displayed where it is to be inserted. Fig. 2 shows a coupler mostly in outline, but that which is original with me shown full and a portion of one side broken away for that purpose. Fig. 3 shows a side elevation of the parts of my invention original with me and not disclosed in Fig. 1.

Similar letters refer to similar parts throughout the views.

A is a laterally-swinging hook rotating freely around a connecting hinge or pin and constructed to be engaged with the tumbler E. B forms the other side of the coupler, is hollow in structure, and has no inclosing bottom portion, but is covered over on top.

E is a tumbler adapted to be moved backward and forward in the hollow central portion of the draw-bar. It has a depression in its lower side at right angles to the line of the draw-bar. This depression is deep enough to contain the lever R (upright) while attached to the sleeve L and broad enough to allow the tumbler a forward and backward movement of about two inches.

L is a sleeve rotating upon the rod O and so situated that the upper half is within the depression of the plunger and the lower half in a depression, if necessary, in the draw-bar.

The sleeve supports the lever R and the lever S, the two being situated nearly at right angles with one another. The sleeve is supported upon the rod O, which passes transversely through the draw-bar, and has a head at one end and opening for a split-key at the other. The lever R, working in the recess of the tumbler E, forces it backward until the hook is disengaged and the coupling destroyed. When the force on the levers outside is removed, the weight W presses the lever-arm S down again. This actuates the lever R, which brings the tumbler E forward again. When another coupling is to be made, the pressure of the second coupler forces the hook A back. The hook likewise forces the plunger back until the heel of the hook is rotated sufficiently to allow the tumbler to come forward again, when of course the gravity-weight and its attachments cause the forward movement. I have also placed in my draw-bar a half web or shoulder to prevent the tumbler being driven too far backward in a severe concussion.

W is a gravity-weight so shaped as to be included in the side B, which is constructed hollow for that purpose, and provided with a hook adapted to interlock with a small eye cast into the end of the side B, so as to extend into the hollow space. The weight is further provided with a vertical opening adapted to receive the pin F and yet to have a movement even independent of the pin around the eye aforesaid. The pin F is adapted to pass through the weight W and the lever-arm S at its extremity, and provided at its upper extremity with a swivel or eye.

My device is inserted as follows: The gravity-weight is held with its hook uppermost and is inserted into the side B from beneath. It is then turned until its hook engages the eye in the end of the side B. While still supporting the weight in position insert the tumbler E and the sleeve L at the same time. A side recess has previously been constructed in the inner wall of the side B, as shown in Fig. 1, and this allows an entrance likewise to the lever S, attached to the sleeve L. As soon as the sleeve L falls into its recess in the draw-bar the rod O is inserted through the draw-bar and sleeve and then a split-key is inserted through the end not provided with

a head. The pin F is then inserted from below through the weight W and the lever-arm S, and a swivel or eye is then attached to its upper end. To this swivel is attached the chain C, and the moving parts of my device are then ready for operation. The chain C passes to a handle near the roof of the car, and the side levers D and D' are connected to it by suitable links.

10 When my coupler is in connection with another, all that is needed to uncouple is to lift up on the chain or depress the side levers. This lifts the lever S, which in turn turns the sleeve L and its lever R.

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

20 In an automatic car-coupler, the combination of a draw-bar having a laterally-swinging hook and the side opposite the hook hol-

lowed out to receive a portion of the moving parts with the tumbler E, recessed to receive the upper portion of the sleeve L and all of the lever R and adapted to engage and detain the laterally-swinging hook, the sleeve L, supported on the rod O and supporting in turn the two levers S and R, which are adapted the one to rotate the sleeve L, the other to move the tumbler E, the gravity-weight W, attached by a loosely-fitting pin F to the lever S and likewise having a hook by means of which it is retained in the draw-bar, and the chain C, attached to the pin F by a swivel and also connected with the side levers D and D', adapted to be attached to a car, all substantially as described.

CHARLES STILGER.

Witnesses:

GEORGE W. MILLER,
OTIS BAGGERLY.