

(No Model.)

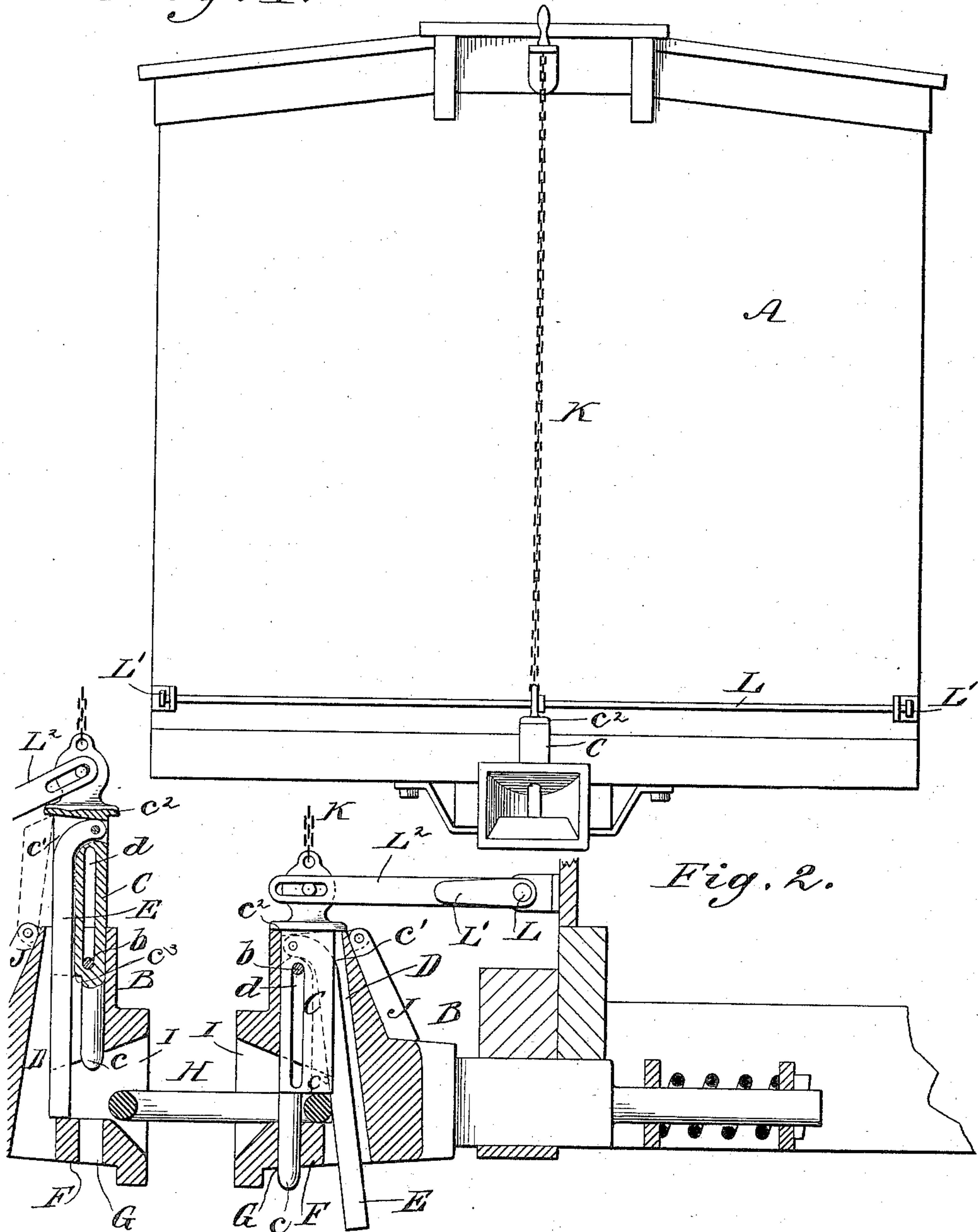
L. D. HOOVER.

CAR COUPLING.

No. 330,120.

Patented Nov. 10, 1885.

*Fig. 1.*



*Fig. 2.*

WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 330,120, dated November 10, 1885.

Application filed April 11, 1885. Serial No. 161,975. (No model.)

*To all whom it may concern:*

Be it known that I LORENZO D. HOOVER, of Rock Island, in the county of Rock Island and State of Illinois, have invented a new and useful Improvement in Car-Couplers, 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 both the figures.

Figure 1 is a front elevation of a car-body having my new car-coupler applied thereto, and Fig. 2 is a sectional elevation of one coupler retaining the link and a part of another with the coupling-pin elevated to receive the link.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

A represents the body of the car, to which the draw-head B may be attached in any suitable manner. The coupling-pin C, which is held in a vertical chamber, D, in the draw-head, has the leg E pivoted to it, which, when the pin is raised, swings forward to rest upon the cross-piece or bridge F of the draw-head for holding the pin in elevated position, as shown at the left in Fig. 2. The cross-piece or bridge F is back of the aperture G, which receives the point or lower end,  $c$ , of the coupling-pin C, as shown at the right in Fig. 2, when the pin is lowered for retaining the link H. The back of the chamber D is inclined from the top of the draw-head downward and backward, so that the entrance of the link H to the link-chamber I of the draw-head will force the lower end of the leg E off from the cross-piece F, so that the pin will drop of its own weight through the link. The coupling-pin is held in the draw-head by a pin,  $b$ , passed through the draw-head and through the slot  $d$ , made in the pin. At the back of the coupling-pin are formed the guard-flanges  $c'$   $c'$ , to protect the upper portion of the leg E, and at the upper end of the pin is formed the flange  $c^2$ , that prevents the pin from dropping down too far in the draw-head, and by means of this flange and the pawl J, pivoted back of

the pin to the draw-head, the pin may be locked in elevated position, as shown in the dotted lines at the left in Fig. 2.

The flanges  $c'$  terminate in shoulders  $c^3$ , that are adapted to rest upon the connecting-link, as shown at the right in Fig. 2, for holding the link in horizontal position for coupling.

The coupling-pin may be raised in the draw-head from the top of the car by the chain K, or from either side of the car by the rod L, that has the levers  $L'$  attached to its ends, and is connected to the pin by the central arm,  $L^2$ , so that the cars may be uncoupled without going between them.

In coupling the cars it is only necessary to place the link in one draw-head and elevate the pin in the other and back the cars together, the coupling being effected automatically by the link forcing the leg E backward off from the bridge or cross-piece F, which permits the point  $c$  of the pin to drop through the link, as above mentioned.

Constructed as described the coupler is not only automatic and certain in its action, but is cheap, strong, and durable.

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

1. The draw-head B, formed with the chamber D, and bridge F, and aperture G, in combination with the coupling-pin C, formed with the shoulder  $c^3$ , and provided with the pivoted leg E, the shoulder  $c^3$  being adjusted to hold the connecting-link upon bridge F, substantially as shown and described.

2. The coupling-pin C, formed with the flanges  $c'$  and slot  $d$ , in combination with the leg E, pivoted to the pin between the flanges  $c'$ , substantially as and for the purposes set forth.

3. The coupling-pin C, formed with the flanges  $c^2$ , and provided with the pivoted leg E, in combination with the pawl J, pivoted to the draw-head, substantially as described, and for the purposes set forth.

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Witnesses:

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