P. H. DECKER & N. LEE.

Car-Couplings.

No. 141,635. Patented August 12, 1873.

Fig. 1.

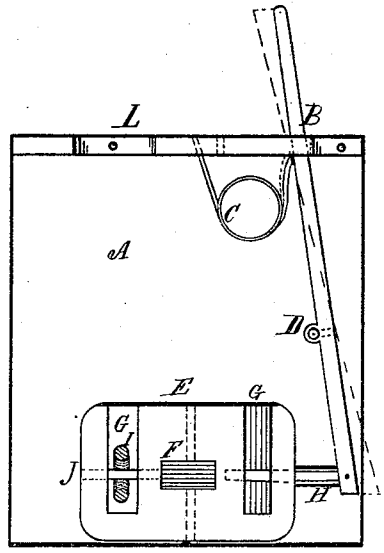


Fig. 2.

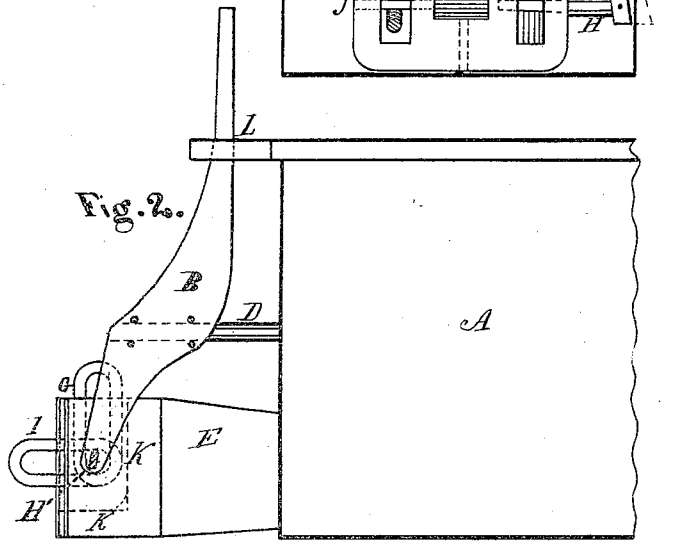
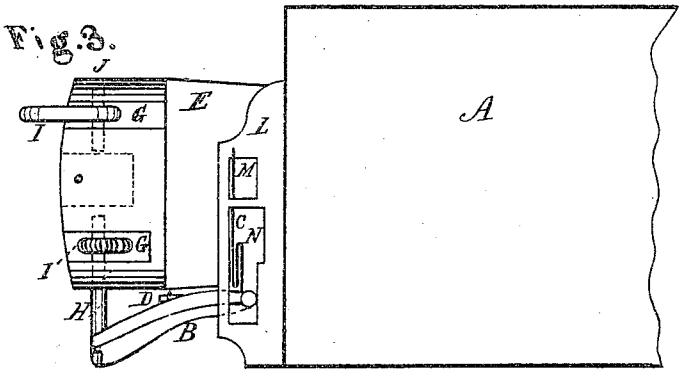


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

PHILLIP H. DECKER AND NELSON LEE, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **141,635**, dated August 12, 1873; application filed May 5, 1873.

To all whom it may concern:

Be it known that we, PHILLIP H. DECKER and NELSON LEE, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification:

The nature of the present invention consists in buffers constructed with two open mortises on their top sides, for the convenience of supporting coupling-links in horizontal or vertical positions, whereby cars can be coupled when the said buffers are in contact with each other; and in the novel construction and combination with the buffers of levers operating pins at the sides of the buffers, said levers being held in place by springs in racks fastened to the cars, so that the latter can be coupled or uncoupled from their tops as readily as from the track, as the whole is hereinafter fully described and shown.

In the drawing, Figure 1 is an end view of our improved car-coupling; Fig. 2, a side view thereof, and Fig. 3 is a top or plan view.

E represents the improved buffers, which are provided with two open mortises, G, of such size as shown by dotted lines K, Fig. 2, as will allow the links I to project out parallel with the buffers or to be turned in upright positions, as one is shown in Fig. 3. The object of this arrangement is so to elevate the links that cars can be coupled when the buffers are in contact with each other, thus in such a case obviating the necessity of moving the cars. The intention is to connect both links to complete the coupling when all the cars are provided with our improvement; but if any cars retain the ordinary link buffers they can be coupled by means of such links and slots F in the centers of buffers E, so that a car having our improvement can be readily coupled. On opposite sides of the buffers the links are held in the slots G by pins J, but on the other sides they are held by pins H pivoted to levers B. These levers are pivoted to the ends of the cars A by means of projecting arms D, and they may slide thereon, and they may project far enough above the tops of the cars to be conveniently operated by a person on the top thereof. The upper ends of the levers are held in place in racks L, as shown more clearly in Fig. 3, a notch, N, being provided to hold the levers in a fixed position, when the pin H is drawn out of slot G, so as to loosen the link I. To throw the lever B back to its present position after it is removed from the notch N a coil-spring, C, is employed. This spring is attached at one end to the lever B, and the other end projects through a slot, M, in the rack L, and is thus held in position to operate effectively. This spring or an equivalent one in form or length is necessary to the successful operation of the lever, inasmuch as its upper end moves a considerable distance.

To couple cars when the buffers are in contact bring the levers B into notches N, turn the links I down longitudinally with the buffers, then loosen the tops of levers from the notches, and the spring C will push in the pins H.

To automatically couple the cars, set the levers B in the notches N, and place the links I in position, as shown in Fig. 2, then the jar caused by the contact of the buffers will loosen the levers from the notches N and allow the pins H to fasten them at the proper time.

We claim—

The buffers E having open mortises G G, and links I arranged to set vertically and horizontally, in combination with levers B, rack L, pins J H, and spring C, as set forth.

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