

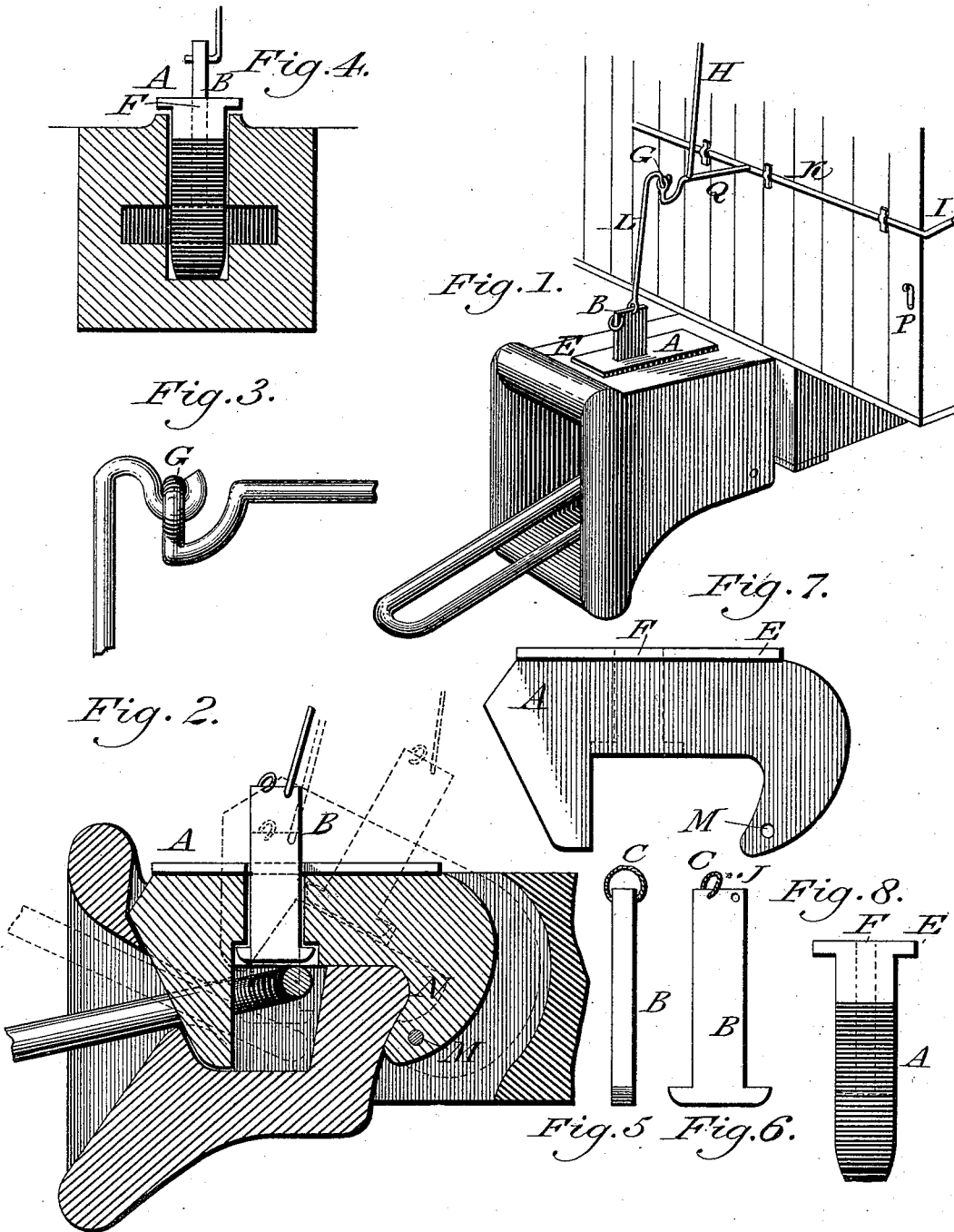
(No Model.)

L. A. HOUGHTALING.

CAR COUPLING.

No. 342,797.

Patented June 1, 1886.



Witnesses
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UNITED STATES PATENT OFFICE.

LLEWELLYN A. HOUGHTALING, OF ELMIRA, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 342,797, dated June 1, 1886.

Application filed February 10, 1886. Serial No. 191,435. (No model.)

To all whom it may concern:

Be it known that I, LLEWELLYN A. HOUGHTALING, a citizen of the United States, residing at Elmira, in the county of Chemung and State of New York, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention consists in a device which, when combined with the frame-work of a car and the buffer-head of the same, enables an attendant to couple and uncouple cars without going between them. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a car with my device attached. Fig. 2 is a sectional view of the buffer-head, showing the parts in position. Fig. 3 is a view of the self-disconnecting joint in the operating-rod, which will be disconnected in case the draw-bar and buffer-head are violently drawn apart from the car. Fig. 4 is a cross-section of buffer-head, showing an end view of the hook A in position. Fig. 5 is a view of the edge of the plunger B. Fig. 6 is a side view of the same. Fig. 7 is a side elevation of the draft-hook A. Fig. 8 is an end view of same, the dotted lines of which indicate the open slot through which the plunger plays in regulating the elevation and depression of the link.

Similar letters refer to the same parts throughout the several views.

The link used in coupling is the same as has long been in common use.

The rocking bar K is not materially different from that used in a former invention of mine, patented February 6, 1883, except in the joint G. This bar may be attached to the end of the car at any convenient height, and is operated from the side by the lever I, or from the top of a car by the rod H.

The hook A and its co-operating plunger B, in its combination with the buffer-head and the operating-rods L and H, are the essential features of my invention. This hook, though perforated at M and bolted through this hole to the buffer-head, is automatic in its movement in the act of coupling, and is not dependent at all on the bolt, except to keep it from being removed when not in use. It will be noticed that the hook is a double one, and that the part N presses against a correspond-

ing part of the buffer-head, and that no strain comes on the bolt above mentioned. The throat of the buffer-head is so shaped that the back end of the link can be pressed down by pressing down on the plunger when it is desirable to elevate the front end of the link in coupling with a car whose buffer-head is higher than the one containing the link. By lifting the pressure of the plunger from the back end of the link the forward end of the same falls by its own weight (more or less, as the case may require) to meet a car whose buffer-head is lower than the one holding the link. So it will be seen that with a buffer-head differing but slightly from those in common use, by the addition of two simple parts—the hook and the plunger—operated as above described, I am able to couple and uncouple cars of various heights either from the top or from the side without going between the cars, thus avoiding all the dangers to life and limb so incident to the method in common use, and that, too, without in any way abridging the freedom of movement of the cars in any respect. I attach a ring, C, to the upper end of the plunger, so that it may be operated, if ever so desired, without the aid of the operating-rod; and in this case even much of the danger of coupling is averted, as the link is entirely managed by the plunger, without applying the hand to the link. The plunger, of course, must be made to play freely through the slot F in the hook. When the coupling is completed, the weight of the plunger and operating-rod may be removed from the link by fastening the rolling bar in a position to lift the plunger just as high as may be without the flange D lifting the hook upward. For this purpose any simple hook or clasp may be applied in a suitable position, as at P. In uncoupling the plunger is lifted, as seen in Fig. 2 and indicated by the dotted lines. In case the buffer-head should be violently wrenched from the car when the rocking bar is not fastened, the arm Q will drop sufficiently to allow the open joint G to separate.

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

1. In a car-coupling, the combination, with open throat of the buffer-head, shaped as shown, and an ordinary car-link, of the dou-

ble hook A, having a vertical slot, F, through it, and provided with a plunger, B, operated by the rods L and H, and rocking bar K, as and for the purposes shown and described.

- 5 2. In a car-coupling having an open throat in the buffer-head, shaped as shown, and a double hook, A, with the portion N shaped to fit the portion N of the buffer-head, the combination therewith, through the vertical
10 slot F, of a plunger, B, and operating rods L and H, open joint G, and rocking bar K, as and for the purpose shown and stated.

3. In a car-coupling having the peculiarly-shaped open throat and double-hook, the plunger B, operating rods L and H, and rocking bar K, the combination therewith of the open joint G, as and for the purposes shown and stated. 15

LLEWELLYN A. HOUGHTALING.

Witnesses:

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