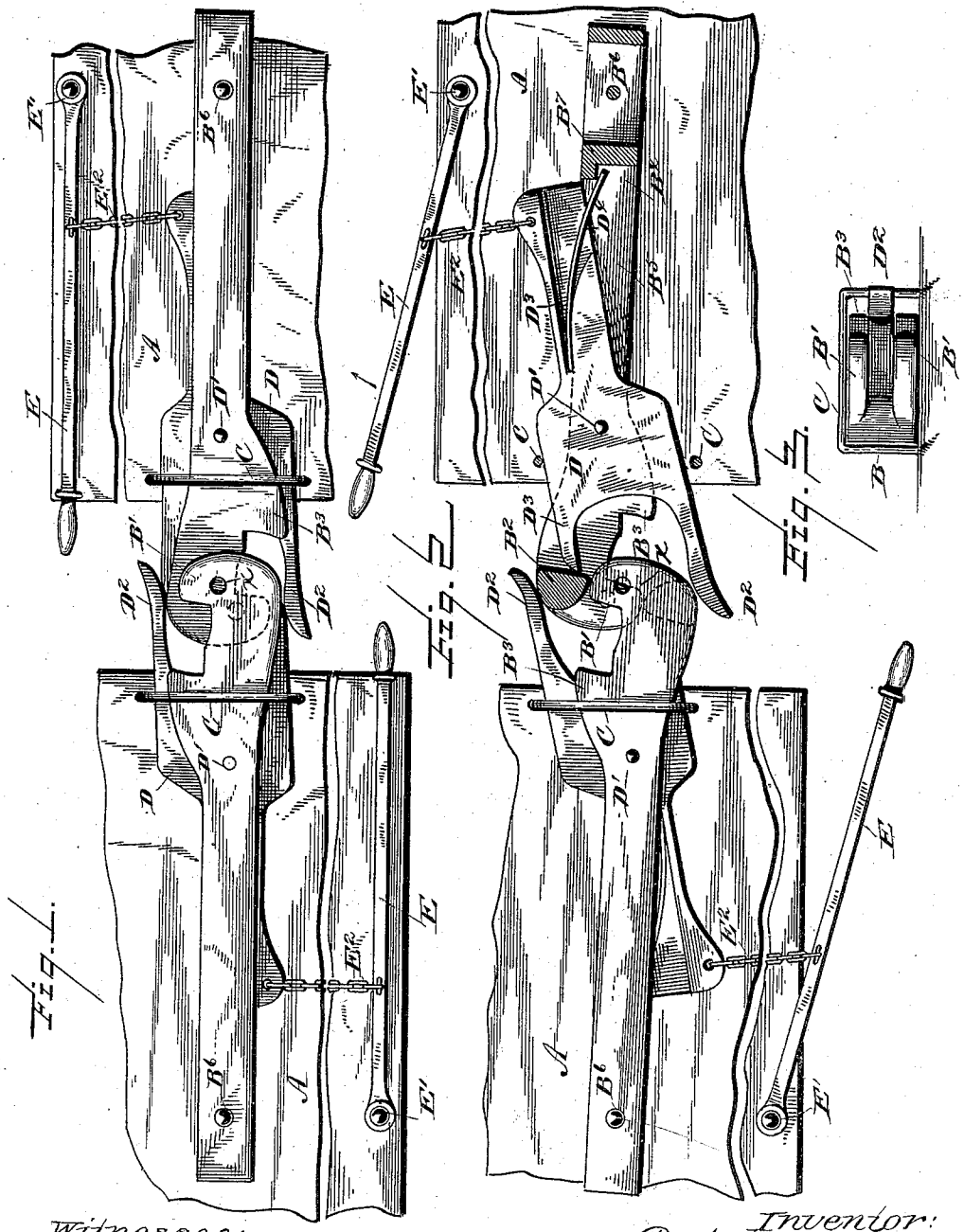
(No Model.)

P. FARWELL.

CAR COUPLING.

No. 365,738. Patented June 28, 1887.



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UNITED STATES PATENT OFFICE.

PULASKI FARWELL, OF FREDERICKSVILLE, ILLINOIS, ASSIGNOR OF ONE-THIRD TO JAMES B. JOHNSTON, OF ANTHONY, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 365,738, dated June 28, 1887.

Application filed December 20, 1886. Serial No. 222,096. (No model.)

To all whom it may concern:

Be it known that I, PULASKI FARWELL, a citizen of the United States, residing at Fredericksville, in the county of Schuyler, State of Illinois, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to car-couplers; and the object of the invention is to provide a coupler that will be self-coupling, and which may be uncoupled from the side or platform of a car, and also to obviate the use of a coupling-pin.

With these objects in view the invention consists in certain features of construction, hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a bottom plan of two cars, or portions thereof, provided with my improved couplers, said couplers being shown in the position they occupy when coupled. Fig. 2 is a similar view, the couplers being in the act of coupling or uncoupling. Fig. 3 is an end view of one of the couplers.

Similar letters of reference indicate like parts in all the figures of the drawings.

A represents the bottom of a car, and B represents a bifurcated laterally-swinging draw-head, which is formed with locking-lugs B′, connected by locking bar or shoulder B^2, and with a stop, B^3. Integral with the draw-head B is a draw-bar, B^4, recessed, as at B^5, and pivoted to the car or any suitable adjunct thereof, as at B^6, whereby the bar and head are given a lateral play or swing, which play is limited by a bail, C, embracing the head and secured to the under surface of the car or platform.

Pivoted within the recess of the head B, as at D′, is a spring-actuated locking and unlocking lever, D, which is bifurcated, forming the retaining-arm D^2 and the ejecting-arm D^3, the swinging movement of said lever being limited by the bail C. Back of its pivot the lever is provided with a V-shaped recess, D^5, adapted to receive a flat spring, D^4, the opposite end of said spring bearing against a shoulder, B^7, formed in the draw-bar, the tendency of the spring being to retain the lever in parallelism with the draw bar and head.

At one side of the car is an operating-lever, E, pivoted, as at E′, to the car, and from the lever to the end of the lever D extends a chain, E^2; or, if desired, the uncoupling may be accomplished by devices leading to the top or platform.

This being the construction, the operation is as follows: As the draw-heads of two cars come in contact with each other, the locking-lug of each coupler next to the opposite coupler passes between the bifurcations of the opposite head, the lever D of each head being forced away from its draw-head by contact of its arm D^2 with the opposite draw-head, so as to admit of the introduction of the lugs into the heads, whereby a double lock may be formed. After the locking-lug has reached a point back of the bar B^2, the arm D^2 of the lever D, aided by the spring D^4, forces said lug into the chamber B^5 back of the bar B^2, where it is held in a locked or coupled position by the arm D^2 of the spring-pressed lever D, as clearly shown in Fig. 1. To uncouple the cars, it is only necessary to draw upon the lever E, which in turn draws upon the lever D, thus unlocking the head or opening it, as shown in Fig. 2, the arm D^3 of the lever forcing the locking-lug out of the chamber. After the cars are uncoupled the parts will automatically assume their normal position by reason of the spring D^4.

If preferred, and for the purpose of facilitating the manufacture of the coupler, the draw bar and head may be formed of two plates and bolted at suitable points.

An ordinary pin-hole, X, may be formed for coupling with other styles of couplers.

Having thus fully described my invention and its operation, what I claim is—

1. In a car-coupler, the combination of a draw-head pivoted to the car, the forward end being bifurcated and recessed, forming a locking-chamber, locking-lugs, and a locking-bar with a spring-pressed locking-lever pivoted within said chamber and bifurcated to form a locking and an ejecting arm, and with a bail embracing said head and lever for limiting the swinging movement of the lever and head, substantially as specified.

2. The draw-head B, pivoted, as at B^6, and formed with the locking-lugs B′, locking-bar B^2, chamber B^5, and projection B^7, in combination

with the locking-lever D, formed with the V-recess, and having a spring, D^4, and pivoted, as at D′, and having arms D^2 D^3, and with the operating-bar E, pivoted, as at E′, and connected to the lever D by the chain E^2, and with the bail C, substantially as specified.

3. A pivoted draw-bar provided with a bifurcated pivoted lever having one of its bifurcations or arms longer than the other, so as to perform the double functions of a guide in coupling and of an ejector in uncoupling, substantially as specified.

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

PULASKI FARWELL.

Witnesses:

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