

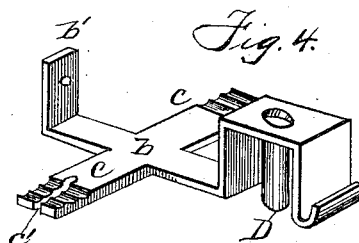
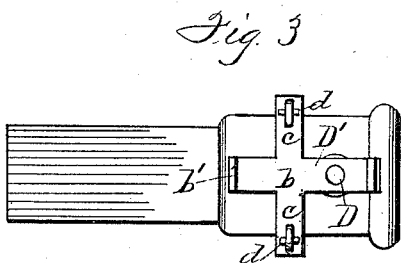
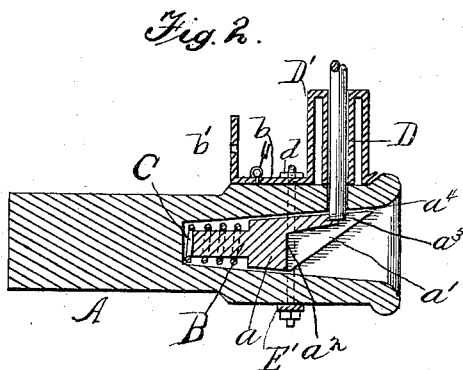
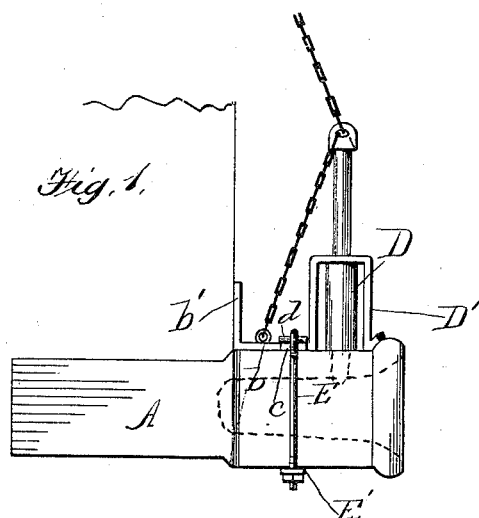
(No Model.)

G. W. WHITE.

CAR COUPLING.

No. 302,807.

Patented July 29, 1884.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE W. WHITE, OF BELLE MINA, ALABAMA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 302,807, dated July 29, 1884.

Application filed May 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WHITE, a citizen of the United States, residing at Belle Mina, in the county of Limestone and State of Alabama, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to improvements in car-couplings, having for its object to effect the automatic coupling and ready uncoupling of the cars; to enable it to be readily applied to the draw-heads in general use; to effect the automatic holding of the coupling pin in an elevated position out of engagement with the coupling-link, and to assist in guiding and in the retention of the pin, when in position, when elevated; and the invention therefore consists of the combination of parts and their construction, substantially as hereinafter more fully set forth, and particularly pointed out in the claims.

In the drawings which form a part of the specification, Figure 1 is a side view of a draw-head such as is in general use, together with a portion of the car with my invention applied thereto. Fig. 2 is a sectional view of the draw-head having my coupling. Fig. 3 is a plan view of the same; and Fig. 4 is an enlarged detailed view, with a portion of the metal which forms the arm of a contrivance that connects the external part of the coupling to the draw-head in an unfinished state.

In the organization of my invention, I apply to a draw-head, A, such as is in general use, a follower, B, disposing the same within the link-chamber of the draw-head. Said follower has a reduced portion or stem which is encircled by a spring, C, which permits the follower to yield inwardly and to automatically return to its forward position as the same is acted upon by the entering link and as the latter is withdrawn from the draw-head, respectively, as will more fully appear further on. The enlarged portion *a* of the follower is recessed, as at *a'*, in its forward end, said recess having a vertical face or inner end, while the lower edges of the sides of said recess are inclined upward, said inclination extending from the forward end of the follower, which is a little beyond said recess, said portion of the follower

also being recessed or cut away intermediately of its sides, as at *a''*. At the extreme forward end of the follower, in its upper side, is a shallow recess, *a'*, which receives the lower end of the coupling-pin when elevated. Upon the upper side of the draw-head A is secured a tubular casing, D, which receives and assists in guiding and retaining the coupling-pin in its elevated position out of engagement with the coupling-link when the cars are uncoupled. This casing is provided or formed with a frame, D', connecting at its horizontal top portion with the upper end of the tube, while its downwardly-projecting portions or legs are connected at their lower ends to the top of the draw-head, the rear leg of said frame extending rearwardly and resting upon the draw-head, as at *b*, and thence extending upwardly so as to rest against, and is fastened to the end of the car, as at *b'*. The extension *b* of the frame D' has two arms, *c c*, integral therewith, and which are provided with slots *c'*, and cross-wise of the latter said arms are corrugated, whereby when the free ends of said arms are bent up on themselves, as they are, as seen in Figs. 1, 2, and 3, eyes are formed with slots extending through them transversely to their longitudinal axes.

E E are rods disposed upon the sides of the draw-head A, with their lower ends bolted to a plate, E', arranged upon the under side of the draw-head, while their upper ends are formed with eyes and passed through the slots *c'* of the arms *c* of the frame D' to receive pins *d* inserted through the eyes of said arms, to effect the connection of said rod with said arms, whereby the aforesaid parts are readily connected to and disconnected from the draw-head. The coupling-pin may be connected to the cars and to the draw-head, as shown, to effect its convenient operation.

In operation, with the pin supported or elevated, as shown in Figs. 1 and 2, upon the entrance of the link in coupling the cars the link will move the follower rearwardly a limited distance, the spring compressing under the action of the link upon the follower, when the pin will drop and enter the link, thus effecting the automatic coupling of the cars. Immediately upon elevating the pin in uncoupling the cars, the pin being raised suf-

ficiently to permit it to just clear the bottom of the shallow recess a^4 in the follower, the link having thus been released, the recoil action of the previously-compressed spring of the follower will automatically return the follower to its former position, causing it to pass under and support the pin, said movement of the follower being limited by the contact of the shoulder produced by the said recess a^4 with the pin, the lower end of the pin resting in said recess, and which thus also serves to retain the follower in place in the draw-head.

Modifications in the form and proportions of parts may be made without departing from the principle or sacrificing the advantages of my invention, the essential features of which will be readily understood from the foregoing specification, taken in connection with the annexed drawings.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a car-coupling, the spring-follower, constructed, substantially as described, in combination with the case D, having frame D',

with an extension, b , provided with arms resting transversely across the top of the draw-head and connected by means of rods to a bar extending across the under side of the draw-head, substantially as and for the purpose set forth.

2. In a car-coupling, the pin-holding case D, having the frame D', with an extension, b , of its rear leg or portion provided with arms resting upon the top of the draw-head, having eyes with slots therein transversely to their longitudinal axes, in combination with the side rods with their upper eye ends passed through the slots of said arms and receiving pins inserted through the eyes of said arms, the lower ends of said rods being bolted to a bar upon the under side of the draw-head, substantially as and for the purpose set forth.

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

GEORGE W. WHITE.

Witnesses:

J. A. B. LOVETT,

D. T. YEATMAN.