(No Model.)

# A. B. ALLEN.

## CAR COUPLING.

No. 464,000. Patented Dec. 1, 1891.

Fig. 1.

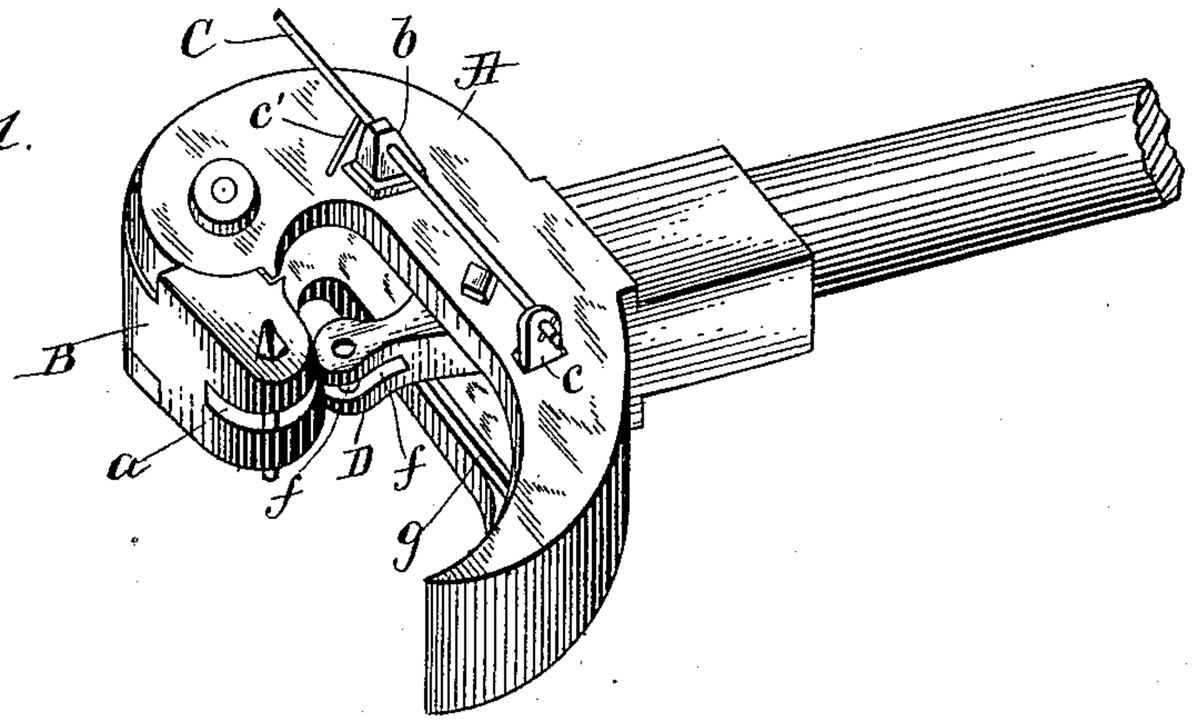



Fig. 2.

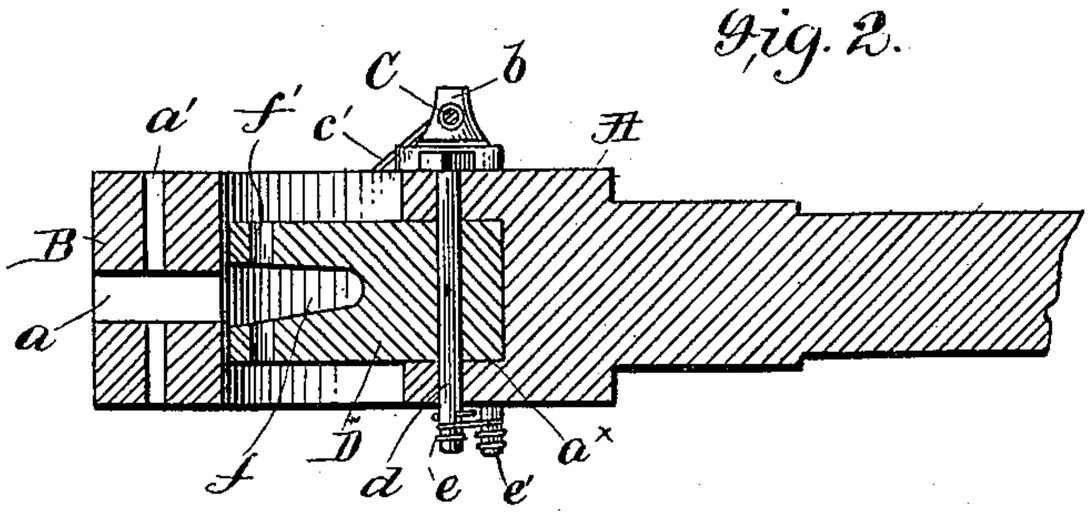



Fig. 3.

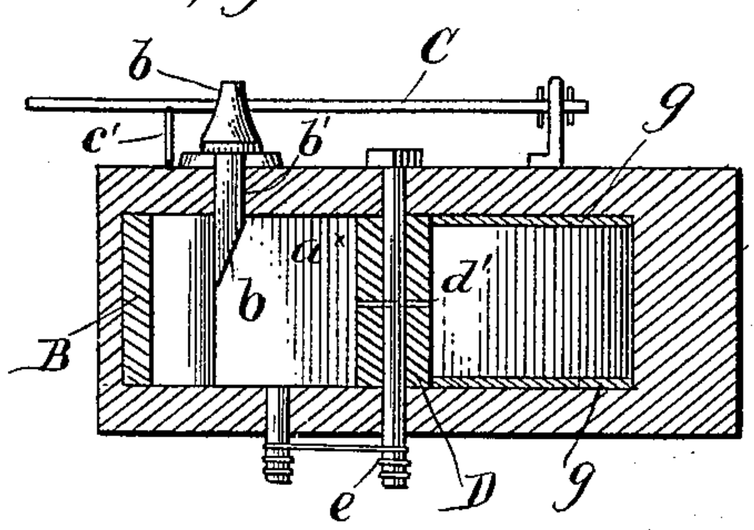
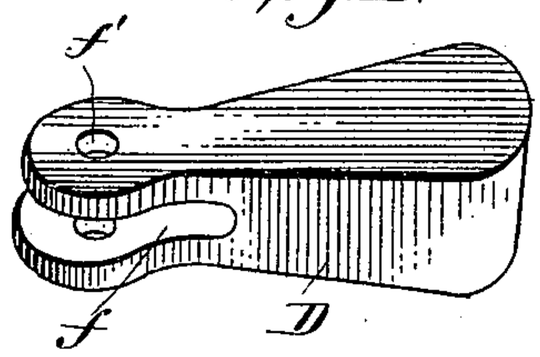



Fig. 4.




Witnesses
W. E. Bowen
J. A. Hagmann

Inventor
Aaron B. Allen
By his Attorneys Myers & Co

# UNITED STATES PATENT OFFICE.

AARON B. ALLEN, OF PUEBLO, COLORADO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 464,000, dated December 1, 1891.

Application filed February 25, 1891. Serial No. 382,785. (No model.)

*To all whom it may concern:*

Be it known that I, AARON B. ALLEN, a citizen of the United States of America, residing at Pueblo, in the county of Pueblo and State of Colorado, 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.

My invention relates to certain improvements in car-couplings, having for its object to provide against the breaking of the coupling hook or knuckle by the jerking action or concussions of the cars; and it consists in the novel construction and combination of the parts, as will hereinafter fully appear from the specification and claims.

In the accompanying drawings, Figure 1 is a perspective view of one section of a draw-bar with its hook or knuckle. Fig. 2 is a longitudinal sectional view, and Fig. 3 is a transverse sectional view, thereof, taken immediately alongside the locking-pin; and Fig. 4 is an enlarged detail perspective view of the abutment or buffer for the coupling hook or knuckle.

In carrying out my invention I provide, as usual, the draw-bar A, with the coupling hook or knuckle B articulated or pivoted thereto, as shown, its free end having the link-receiving slot *a* and the pin-passage *a'* for effecting the engagement therewith of the ordinary coupling-link. This hook or knuckle has its inner end engaged by the locking-pin *b* working in a passage *b'* in the draw-bar A, while through a slot in the upper end or head of said pin passes a rod or lever C, adapted to have axial movement in its pivot bracket or axis *c* on the draw-bar. The rod or lever C has a lateral arm or pin *c'*, adapted, as said rod or lever is turned in its axis or bracket, to have engagement with or rest upon the draw-bar, and thus provides for the retention of the locking-pin elevated, when desired, without doing that by hand.

D is an abutment or buffer having its inner or one end let into a recess $a^{\times}$ in the draw-bar A and its other end adapted to stand immediately in the rear of and close to the coupling hook or knuckle, to aid in relieving the latter of strain or being broken as the cars bump together. The inner end of the buffer or abutment D has passing through it and connected to it a pivot-bolt *d*, bearing in the draw-bar and held by a set-screw *d'* to said buffer. The pivot-bolt *d* is held in its outstanding position normally in engagement with the coupling hook or knuckle by means of a spring *e*, preferably coiled in opposite directions upon the projecting lower end of said bolt, and a stud *e'* on the draw-bar. The buffer or abutment D, it will also be seen, is thus permitted to be pushed laterally as the coupling hook or knuckle of the draw-bar of the approaching car engages the aforesaid coupling hook or knuckle, and said buffer is caused to automatically return to its normal position as the cars are uncoupled. The outer end of the buffer or abutment D is provided with a link-receiving slot *f* and with a pin-receiving passage *f'*, intersecting said slot, to provide for effecting the engagement therewith of the ordinary coupling-link, thus relieving the coupling hook or knuckle of the pulling strain or liability of being jerked out of place or broken, as would be the case were the connection made with said hook or knuckle instead of with the buffer or abutment. Stops or shoulders *g* are provided upon the side walls of the recess $a^{\times}$ at their outer edges to limit the movement of the buffer D after being returned to its normal outstanding position under the action of its pivot-bolt spring.

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

1. The combination, with the coupling-hook-locking pin, of the axially pivoted or mounted rod or lever passing through the upper end of said pin and provided with a lateral pin or arm adapted to rest upon the draw-bar, substantially as specified.

2. In a car-coupler, the combination, with the draw-bar, of the buffer or abutment having a slotted forward end and adapted for connection with an ordinary coupling-link, substantially as set forth.

3. In a car-coupler, the combination, with the draw-bar and the coupling hook or knuckle, of the pivoted buffer or abutment adapted to stand immediately in rear of and close to said coupling hook or knuckle, and

adapted to permit the engagement of said hook or knuckle with a meeting coupling hook or knuckle, substantially as set forth.

4. The car-coupler having the buffer or abutment adapted to stand immediately in rear of the coupling hook or knuckle and having its inner end let into the draw-bar and secured to a pivot-bolt, and the spring coiled around the lower projecting end of said pivot-bolt, and a stud on said draw-bar in opposite directions, substantially as specified.

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

AARON B. ALLEN.

Witnesses:
J. M. BARNES,
NEIL WALKER.