

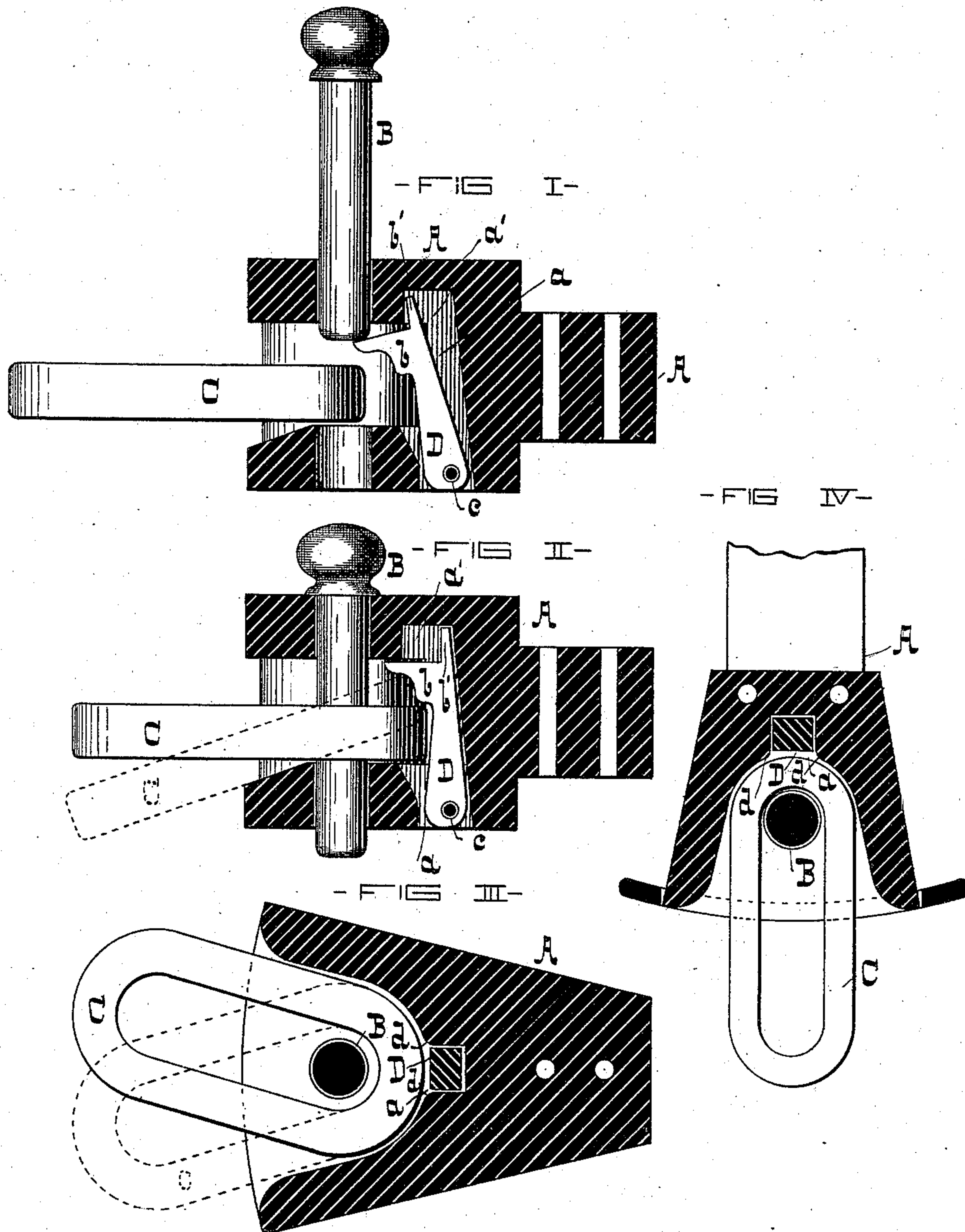
(No Model.)

E. T. LEONARD.

CAR COUPLING.

No. 305,607.

Patented Sept. 23, 1884.



- WITNESSES -

*Paul Fisher*  
*Chas B. Cassidy*

- INVENTOR -

*Edmund T. Leonard,*  
*by G. H. W. Howard,*  
*Atty.*

# UNITED STATES PATENT OFFICE.

EDMUND T. LEONARD, OF BALTIMORE, MARYLAND.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 305,607, dated September 23, 1884.

Application filed February 7, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, EDMUND T. LEONARD, of the city of Baltimore and State of Maryland, have invented certain Improvements in Car-Couplers, of which the following is a specification.

This invention relates to certain improvements in that class of car-couplers in which the introduction of the link to the draw-head displaces or forces back a support for the coupling-pin, and allows that device to fall through the link and to its proper position.

In the accompanying drawings, forming a part hereof, Figure I is a longitudinal section of the coupler, with the coupling-pin sustained in an elevated position. Fig. II is a similar view of the coupler, with the coupling-pin fully in place. Fig. III is a sectional plan of the coupler. Fig. IV illustrates a modified construction of the coupler.

A is the draw-head; B, the coupling-pin, and C the link. D is the support for the pin B; and it consists of an angular arm the rear portion of which rests in a cavity, *a*. A projection, *b*, on the front face of the upright portion of the support D, serves to force the link outward when in an inclined position, as shown by the dotted delineation of the link in Fig. II, and also to sustain the said link in a horizontal position when the adjoining coupler is on the same plane with the one shown in the drawings. The upper end, *b'*, of the support D enters an extension, *a'*, of the cavity *a*. This extension is of such size as to prevent the overhanging portion of the support D

from passing too far beyond the edge of the coupling-pin and without the assistance of any exterior devices. The material against which the rear side of the support D comes in contact is slightly inclined from a vertical line— or, in other words, overhangs, in order that the said support cannot be brought to an absolutely vertical position, and consequently a forward movement is initiated without depending on the overhanging portion of the support to effect that result. The lower end of the said support is pivoted at *e*.

By referring to Fig. III it will be seen that the cavity *a* is deeper than the width of the support D. Consequently the said support when forced back in the coupling operation is not liable to injury, the shock being sustained by the draw-head, and that the edges *d* are slightly rounded to prevent their being broken.

In some cases I apply a shell having an inner contour corresponding with that shown in Figs. I, II, and III, and provided with the improved support D, to an ordinary coupler, as shown in Fig. IV.

I claim as my invention—

In a car-coupler, the draw-head A, having the pin B and the cavity *a*, with its extension, *a'*, combined with the support D, the upper end, *b'*, of which enters the said extension *a'*, substantially as and for the purpose specified.

EDMUND T. LEONARD.

Witnesses:

WM. T. HOWARD,  
CHAS. B. CASSADY.