

(No Model.)

D. BELLON.
CAR COUPLING.

No. 566,291.

Patented Aug. 25, 1896.

Fig. 1.

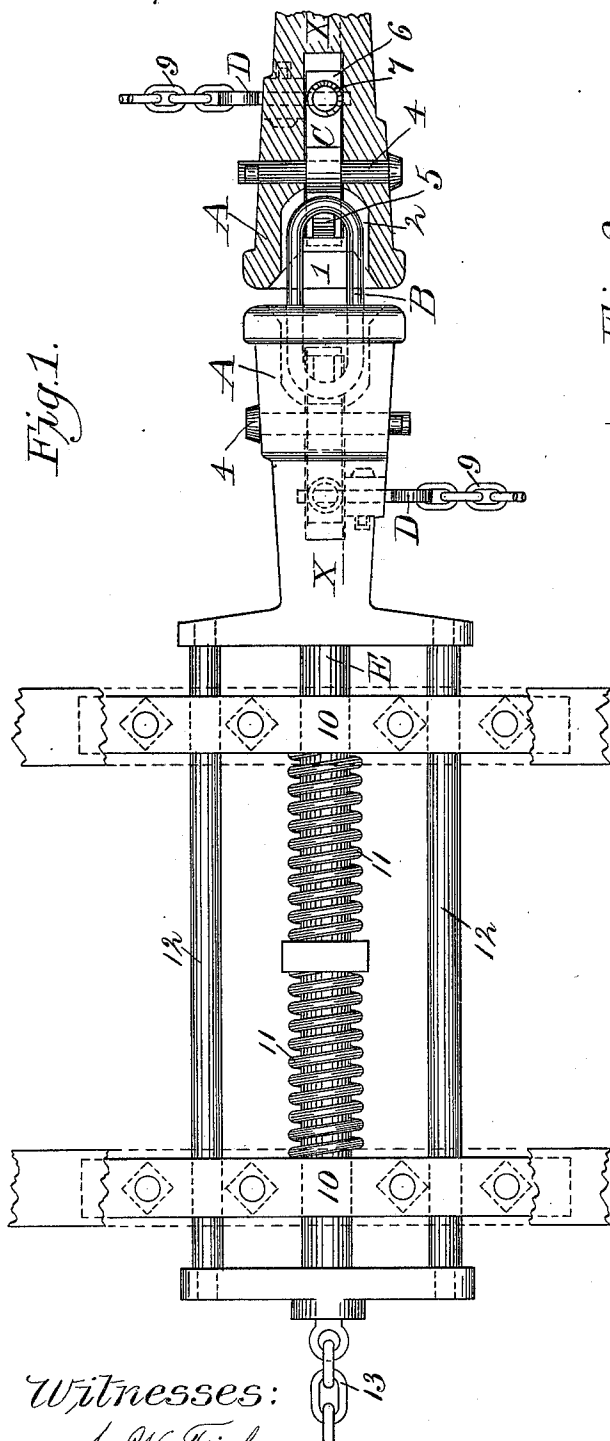


Fig. 2.

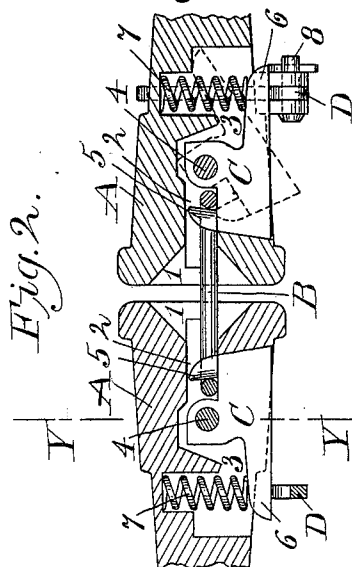
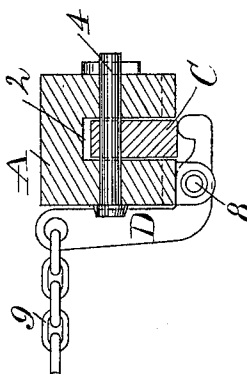


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

DAVID BELLON, OF WALTON, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 566,291, dated August 25, 1896.

Application filed April 23, 1895. Serial No. 546,860. (No model.)

To all whom it may concern:

Be it known that I, DAVID BELLON, of Walton, in the county of Delaware and State of New York, have invented new and useful Improvements in Car-Couplers, of which the following is a specification.

My invention relates to improvements in that class of car-couplers in which a link is arranged to enter two conjoining draw-heads and engage with hooks adapted to enter said link and thereby secure together two adjoining cars; and the object of my invention is to provide a simple and effective device for the purpose of coupling together railway-cars automatically in a safe and reliable manner. This object I attain by the mechanism illustrated in the accompanying drawings, which are herein referred to and form part of this specification, and in which—

Figure 1 is an inverted plan view of one of my couplers connected to the draw-head of a conjoining coupler, the latter being shown in horizontal section; Fig. 2, a longitudinal vertical section of the draw-heads of two conjoined couplers at the line X X on Fig. 1, and Fig. 3 a transverse vertical section of one of the draw-heads at the line Y Y on Fig. 2.

As represented in the drawings, A designates the draw-head of my coupler, having in its outer end an opening 1, which is beveled outwardly in every direction to form a guide by which a link B, when held in a conjoining coupler, will be guided to its required place. Opening into the opening 1 there is a mortise 2, which is adapted to receive one end of the link B, and following the mortise 2 there is a vertical mortise 3, whose outer end is formed on an inclination, as shown in Fig. 2. Said mortise is fitted to receive a spring-actuated lever C, which is pivoted to the draw-head A by a fulcrum 4, so that said lever will swing in a vertical direction. The outer end of the lever C is provided with an inclined head that is fitted to bear against the inclined outer end of the mortise 3 and thereby relieve the fulcrum 4 from the strain of the train of cars, and it is also provided with a hook 5, that is fitted to engage in an end of the link B in the operation of coupling cars. The inner end of the lever C has an arm 6, to which the pressure of a spring 7 is applied to normally press the lever C into

the position shown by the full lines of Fig. 2. A bent lever D is fulcrumed, as at 8, to the draw-head A, and one end of the same is fitted to bear against the arm 6 in such manner that a movement of the lever D will produce a corresponding movement of the lever C to disengage the hook 5 from the link B. The opposite end of the lever D is preferably provided with a chain 9, or other means, for tilting said lever when occasion requires.

E is the draw-bar, which is a continuation of the draw-head A and is fitted to move in guides 10, which are arranged transversely beneath the body of the car. A spring or springs 11 surround said draw-bar and are fitted to resist either a strain of tension or compression, according to circumstances. Guides 12 are preferably provided to resist any torsional strain, and a chain 13 or other connection can be employed to connect the two couplers of a car together when it is desirable to form a continuous connection of all the draw-bars of a train of cars.

My invention operates in the following manner: While the link B is projecting from one of the draw-heads A, two cars are run together with sufficient force to carry said link into the opening 1 of the draw-head, which is connected to a car that is to be coupled to the moving car. The link B, by taking against the curved face of the hook 5, will cause the lever C to tilt against the resistance of the spring 7, and when said link has entered the mortise 2 sufficiently the lever C will be tilted by the spring 7, so that the hook 5 of said lever will engage in the link B to complete the operation of coupling. To effect a disengagement of the two couplers, the lever D should be manipulated to tilt the lever C sufficiently to free the link B from the hook of the tilted lever, and as soon as this is accomplished the cars can be drawn apart from each other.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

In a car-coupler, the combination, with a draw-head, A, having a horizontal mortise, 2, adapted to receive a coupling-link, B, a vertical mortise, 3, leading into the lower side of said horizontal mortise and having its outer end inclined upward and outward as shown

and described, an engaging lever, C, fulcrumed in the mortise 3 and provided with an upwardly-projecting hook, 5, fitted to engage in said coupling-link; the outer end of
5 said engaging lever having an inclined face that corresponds to the inclined end of the mortise 3; the inner end of said engaging lever having an arm, 6, which takes against a spring, 7, to normally tilt said engaging
10 lever and retain the inclined face of said lever in contact with the inclined end of the mortise 3, a bent lever, D, fulcrumed to the

outer side of said draw-head and fitted to bear against the lower face of the arm 6, of a draw-bar, E, secured to said draw-head and provided with springs, 11, arranged to resist a
15 longitudinal movement of said draw-head in either direction, and guides, 12, attached to said draw-head and arranged to retain the latter in position, as specified.

DAVID BELLON.

Witnesses:

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