

(No Model.)

A. W. ROBINSON.

CAR COUPLING.

No. 280,516.

Patented July 3, 1883.

Fig: 1.

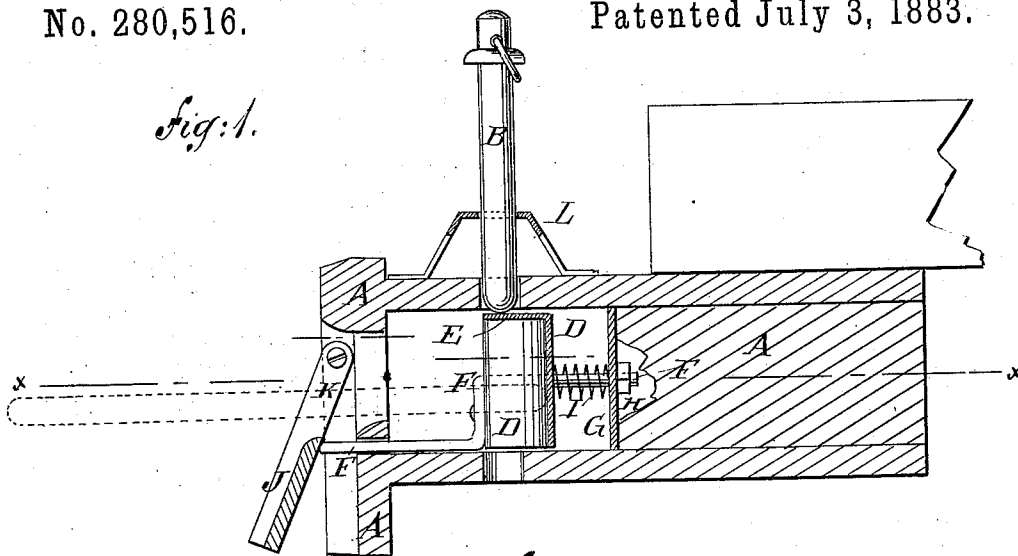


Fig: 2.

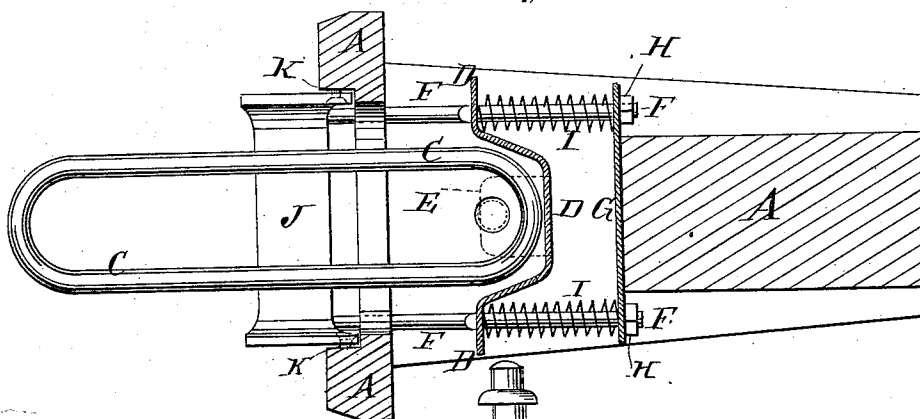
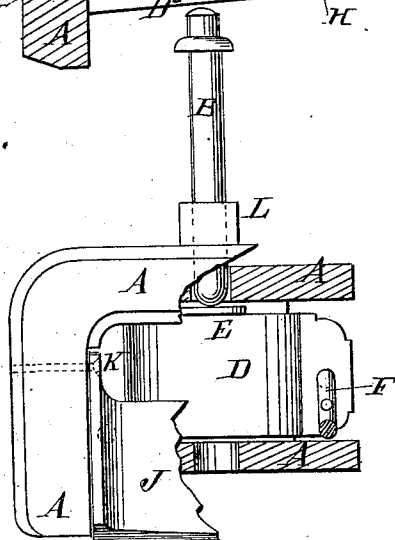


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ABEL W. ROBINSON, OF ANNA, ILLINOIS, ASSIGNOR TO HIMSELF AND
THOMAS B. RHODES, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 280,516, dated July 3, 1883.

Application filed April 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, ABEL WESLEY ROBINSON, of Anna, in the county of Union and State of Illinois, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improvement, shown in position for coupling. Fig. 2 is a sectional plan view of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a front elevation of the same, partly in section.

The object of this invention is to facilitate the coupling of cars and promote security in such coupling.

The invention consists in a car-coupling constructed with a draw-head, provided with a bent plate, having a flange on its upper edge to support the coupling-pin, kept in place by guide-rods and pushed forward by springs, and the swinging apron hinged to the recessed forward end of the draw-head and resting against the forward ends of the guide-rods. The coupling-pin is held erect, when withdrawn from the coupling-link, by a bent plate attached to the top of the draw-head, as will be hereinafter fully described.

A represents the draw-head. B is the coupling-pin, and C is the coupling-link.

Within the cavity of the draw-head A is placed a plate, D, the end parts of which are bent outward and forward, and then outward, and upon the upper edge of its middle part is formed a flange, E, which projects forward beneath the pin-hole in the upper part of the draw-head, to serve as a rest for the end of the coupling-pin when the cars are uncoupled.

In the middle parts of the ends of the plate D are formed holes, through which pass the rear parts of the rods F, which also pass through holes in the ends of the guide-plate G, placed within the draw-head A at the rear end of its cavity. The rear ends of the rods F, at the rear side of the plate G, have nuts H screwed upon them. The middle parts of the rods F are bent twice at right angles, and the shoulders

thus formed rest against the forward side of the plate D, and are secured to it by rivets. The plate D and rods F are held forward by spiral springs I, placed upon the said rods F between the plates D G. The forward parts of the rods F pass along the bottom of the cavity of the draw-head A, and project through guide-holes in the side parts of the forward end of the said draw-head, and their forward ends rest against the apron or plate J, placed in a recess in the lower part of the forward end of the draw-head.

Upon the upper corners of the apron J are formed short upwardly-projecting arms K, which are hinged at their upper ends to the draw-head A, at the upper part of the sides of its mouth. With this construction, when the coupling-pin B is drawn upward the plate D and rods F will be forced forward, bringing the flange E beneath the pin-hole in the upper part of the draw-head A, and swinging the apron J forward into an inclined position.

When the cars are to be coupled, the pin B is placed in the pin-hole in the upper part of the draw-head A, with its lower end resting upon the flange E, where it is held in an erect position by the guide-plate L, which has a hole through its center to receive the said pin B, and its ends are bent downward and outward, and are attached to the top of the said draw-head. When the cars are run together, the link C of the adjacent car strikes the inclined apron J and is guided into the mouth of the draw-head A, where it strikes the plate D and pushes it back, withdrawing the flange E from beneath the pin B, and allowing the said pin to drop into place through the link C, coupling the cars. As the plate D is pushed back it carries the rods F with it, and allows the apron J to swing down into the recess in the forward end of the draw-head A.

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

1. A car-coupling constructed substantially as herein shown and described, and consisting of the draw-head provided with a bent plate having a flange on its upper edge to support the coupling-pin, kept in place by guide-rods and pushed forward by springs, and the swing-

ing apron hinged to the recessed forward end of the draw-head and resting against the forward ends of the guide-rods, as set forth.

2. In a car-coupling, the combination, with
5 the draw-head A and the coupling-pin B, of the bent plate D, having top flange, E, and the guide-rods F, and springs I, substantially as herein shown and described, whereby the coupling-pin is supported and is allowed to
10 drop when the link of an adjacent car enters the draw-head, as set forth.

3. In a car-coupling, the combination, with

the recessed forward end of the draw-head A and the guide-rods F, plate D, and springs I, of the hinged apron J, substantially as herein
15 shown and described, whereby the said apron is raised into an inclined position when the cars are uncoupled, to guide the entering link into place, as set forth.

ABEL WESLEY ROBINSON.

Witnesses:

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JOHN W. HESS.