H. M. ROSENBERG.

CAR COUPLING.

APPLICATION FILED DEC. 27, 1905.

899,438. Patented Sept. 22, 1908.

Fig. 1.

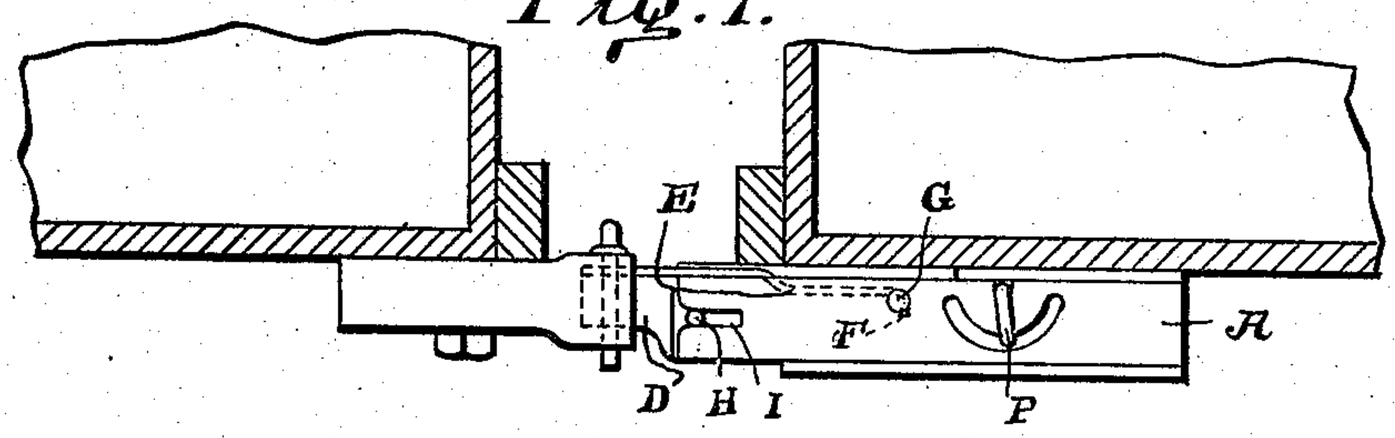


Fig. 2.

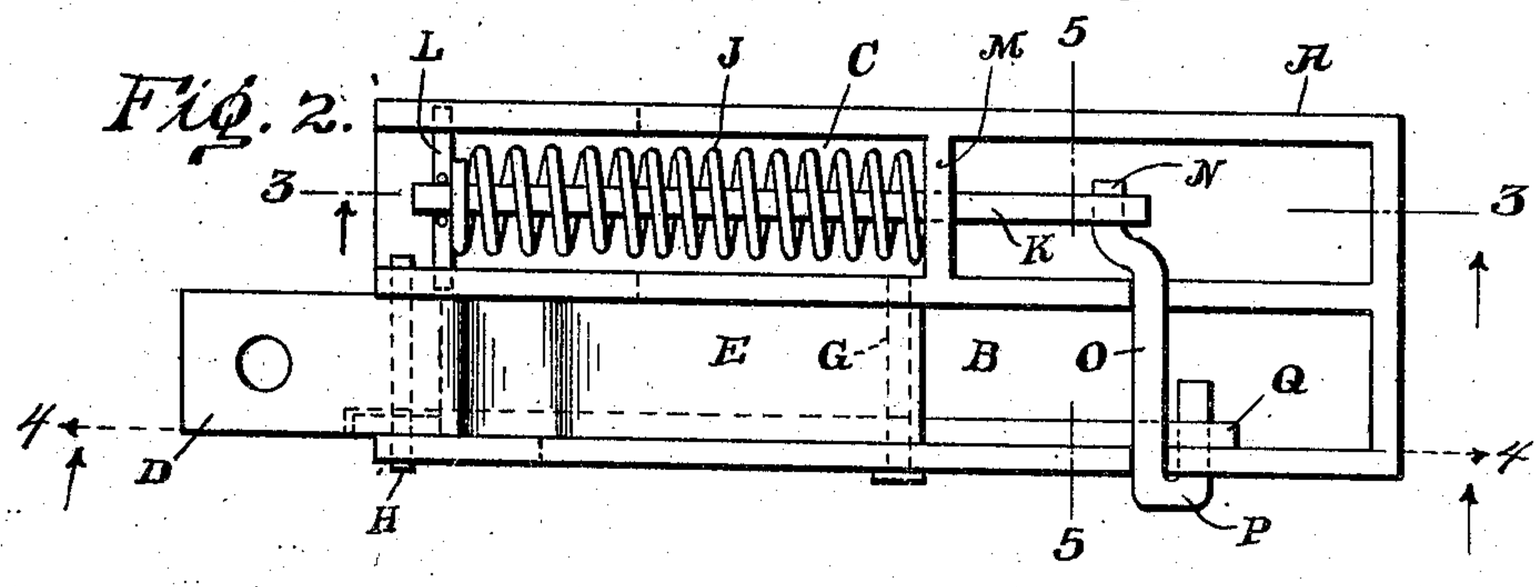


Fig. 3.

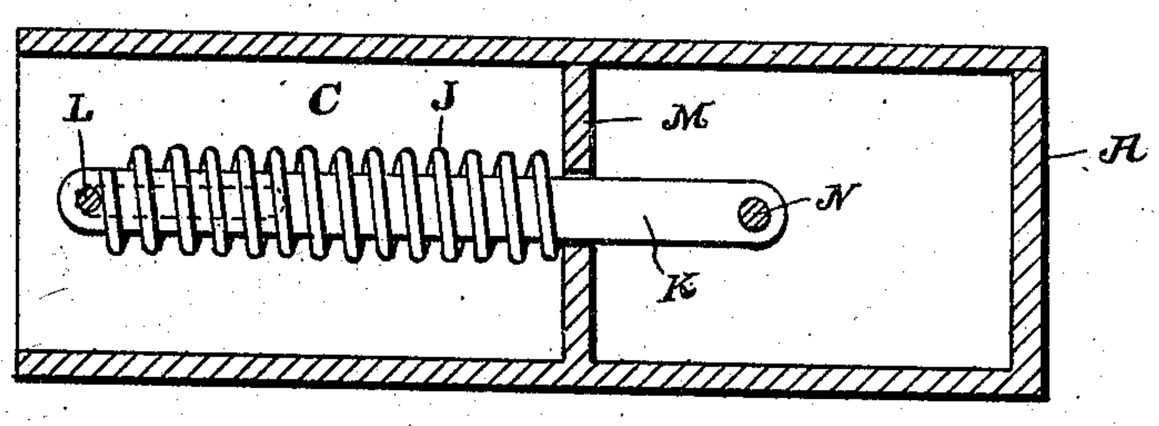


Fig. 4.

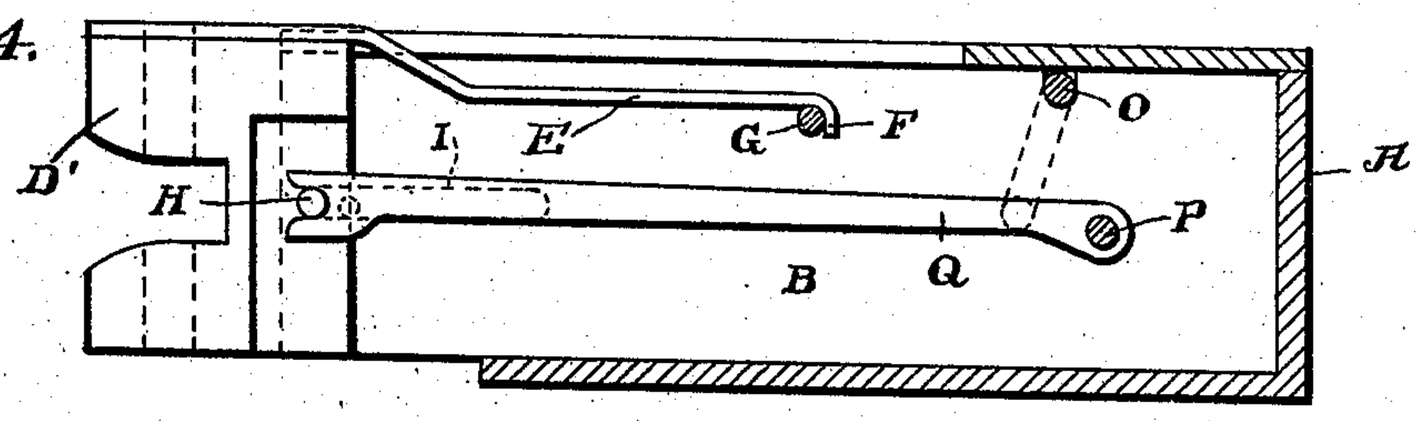
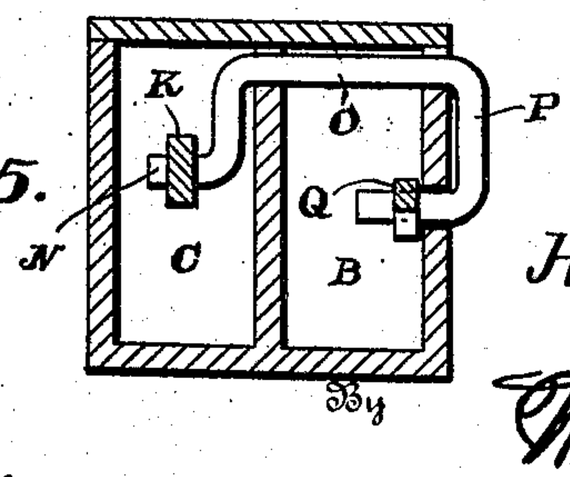


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

No. 899,438. Specification of Letters Patent. Patented Sept. 22, 1908.

Application filed December 27, 1905. Serial No. 293,440.

To all whom it may concern:

Be it known that I, HARRY M. ROSENBERG, a citizen of the United States, residing at Atlanta, county of Fulton, and State of Georgia, have invented a certain new and useful Improvement in Car-Couplers, of which the following is a specification.

My invention relates to a new and useful improvement in car couplers, and has for its object to provide an exceedingly simple and effective device by the use of which when a car jumps the track it will be automatically uncoupled from the rest of the train, thus avoiding the many serious accidents which now occur by one car when jumping the track pulling others after it, thus wrecking the whole train which might otherwise be saved.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawing forming a part of this specification, in which—

Figure 1 shows my improved coupling attached to a car and coupled with the ordinary coupling carried by another car. Fig. 2, a plan view of my improvement the top plate being removed so as to show the crank rod in place. Fig. 3, a section at the line 3—3 of Fig. 2. Fig. 4, a section at the line 4—4 of Fig. 2 showing a slightly modified form of draw-head. Fig. 5 a section at the line 5—5 of Fig. 2.

Referring to these drawings A represents the housing which is secured in any convenient manner to the under side of the end of the car, as shown in Fig. 1, and this housing is divided into two compartments B and C, the former having fitted therein the draw-head D provided with an extension shank E terminating in the hook F adapted to engage the cross-rod G. The housing A has an open top side in both compartments, the open side of the compartment B being partially closed by the shank E which is secured to the face of the draw-head adjacent the open-side of the housing.

In order that the draw-head may be guided in its back and forth movement a pin H is secured therein which extends through the slots I, formed in the sides of a housing A at the outer end thereof one of which is shown in Fig. 1. A coil spring J is located in the compartment C of the housing, and has running therethrough a bar K in which the pin L is secured so as to confine the spring J between this pin and the partition M. The inner end of the bar K is attached to the crank N of the crank-rod O, which latter is journaled crosswise of the housing, as clearly shown in Figs. 2 and 5 and has a second crank P upon its opposite end, the end of which extends inward through the side of the housing into the compartment B, and has connected therewith the bar Q. This bar extends forward and terminates in a slot adapted to engage the pin H by which means the draw-head is connected with the coil spring J in such manner that when the draw-head is forced backward it will compress this spring. as will be readily understood.

The draw head may terminate in any suitable form of coupler whereby it will be adapted to couple with either the ordinary link coupling or what is known as the automatic coupler.

Fig. 4, depicts a draw-head D′, which is of a modified type as compared with the form of draw-head shown in Figs. 1 and 2.

From the foregoing description the operation of my improvement will be obviously as follows: The draw-head when coupled up will sustain the pulling upon it by the hook F engaging with the cross-rod G, and thus serve all the purposes of the ordinary draw-head as long as the pull is even or on an approximately straight line. But should the car carrying this coupling jump from the track or fall over an embankment or trestle the first action would be to disengage the hook F from the cross-rod G, and when this is done the draw-head is free to slide from the housing and therefore would automatically uncouple this car from the rest of the train, thus avoiding pulling the rest of the train from the track. After the draw-head has been withdrawn from the housing it can at any time be replaced by simply placing it in position and engaging the hook F with the cross-rod G, the coil spring normally keeping the hook in engagement with the rod through the bar K, crank rod O and bar Q.

Having thus fully described my invention what I claim as new and useful, is—

1. In combination with a car, a housing secured thereto having two compartments, a

draw-head fitted to slide in one of said compartments, a shank formed with the draw-head, a hook formed upon the inner end of the shank, a cross-rod with which said hook is adapted to engage, a coil spring located in the other compartment of the housing, a rod passing through said spring, a pin secured in the outer end of the rod so as to bear against the spring, a crank-rod to which the first named rod is attached, a bar also attached to one of the cranks of the crank-rod, said bar having its outer end slotted to engage a pin carried by the draw head, as and for the purpose set forth.

2. A car coupler consisting of a housing, a draw-head fitted therein, a shank extending rearward from the draw-head, a hook formed upon the shank, a cross-rod secured in the housing with which said hook is adapted to engage and from which it will be disengaged should a car leave the track, as specified.

3. The herein described combination of a housing having two compartments therein, a draw-head fitted to slide in one of these compartments, a shank extending rearward from the draw-head, a hook formed upon the inner end of the shank, a cross-rod with which said hook is adapted to engage, a pin H secured in the draw-head and adapted to slide in suitable grooves formed in the housing, a bar having a slotted end adapted to engage with the pin H, a crank-rod having two cranks formed thereon to one of which cranks the bar is attached, a rod K attached to the opposite crank of the crank-rod, the said housing being formed with a partition a pin L secured to the outer end of the rod K and a coil spring confined between the pin L and the partition of the housing, as and for the purpose set forth.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

HARRY M. ROSENBERG.

Witnesses:

M. J. BERNARD,

M. G. WHITE.