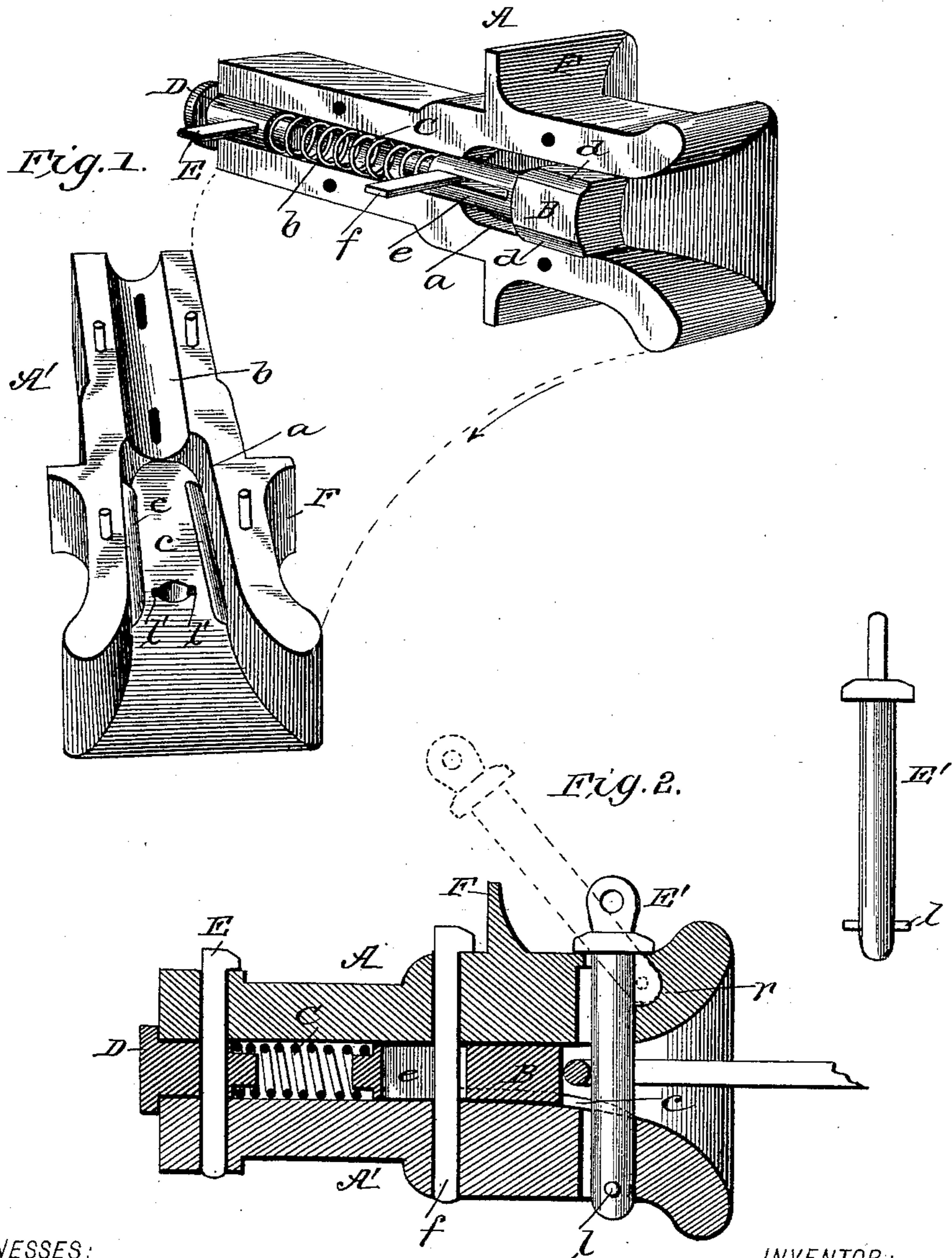


(No Model.)

J. RIGBY & G. W. REED.  
CAR COUPLING.

No. 427,908.

Patented May 13, 1890.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOSEPH RIGBY AND GEORGE W. REED, OF SEATTLE, WASHINGTON.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 427,908, dated May 13, 1890.

Application filed January 11, 1890. Serial No. 336,704. (No model.)

*To all whom it may concern:*

Be it known that we, JOSEPH RIGBY and GEORGE W. REED, of Seattle, in the county of King and State of Washington, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

Our invention relates to car-couplings of that class in which a spring-seated block is arranged to slide in the throat of the draw-bar and to hold the pin up until the block is forced in by the entering link, at which time the pin drops through the link and couples the cars.

Our invention consists in certain peculiarities of construction and arrangement whereby the proper action of the parts is secured with greater smoothness and certainty and the coupling is made to act or not act, as may be desired.

Figure 1 is a perspective view of the two halves of the draw-head separated from each other and viewed from their inner or adjoining faces, and Fig. 2 is a vertical central longitudinal section.

A A' represent the two sections or halves of the draw-bar, which are joined together in a horizontal plane, so as to be readily cast as one piece and put together with the necessary working parts. These sections of the draw-bar are each formed with a tapering mouth, a throat part *a*, and a semi-cylindrical groove *b*. In the bottom part of the throat of the draw-bar there are formed two ribs or guide-rails *c c*, which lie at the lower side corners between the bottom and sides of the throat. These ribs, and also the floor of the throat portion, have an incline or fall from the inner end of the throat to the mouth. These ribs or guide-flanges form rails for the block to slide on and reduce its friction and cause the block to work more freely. The incline also causes the block to move out more sensitively from the action of the spring behind it, and serves also to drain out all water that may drive into the throat, thus preventing it from freezing the block tight and obstructing its action.

B is the sliding block which fits easily the cross-section of the throat and has upon its lower side near its edges grooves *d d*, that fit

upon the guide flanges or rails *c* in the bottom of the draw-bar. This block has a stem *e*, that projects into the cylindrical portion of the draw-bar, and this stem is slotted vertically to receive a key *f*, that extends vertically through the draw-bar and the stem of the block and holds the latter against coming out. The slot in this stem is long enough to give full play to the sliding block.

In the rear of the stem of the sliding block is arranged the spiral spring C, and in rear of this spring is an abutment-pin D, which is locked in position behind the spring by a key E, extending through a slot in the said pin. By means of these two keys the sliding block may be readily removed without disconnecting the draw-bar.

In the front part of the draw-head there is a vertical pin-hole, in which is arranged the coupling-pin E. This coupling-pin is designed never to come entirely out, and for this reason has at its lower end a short transversely-projecting lug *l* on each side, that moves in channel-ways *l' l'*, formed in the sides of the pin-hole. These channel-ways do not extend all the way to the top of the draw-bar, and hence the pin cannot be lifted entirely out. Near the upper end of the pin-hole, however, and on the front side of the same there is formed a hollow chamber or recess *r*, which constitutes a seat for the lower end of the pin whenever the pin is raised and tilted to the rear, as shown by the dotted lines. In this position the pin is held aloft and cannot fall, and the coupling in this position is inoperative—i. e., when the cars come together they are not coupled, as is frequently desired in pushing a car up to position.

F is a flange formed around the draw-head to strengthen the same and form a bearing against the timbers of the car.

The draw-bar may be attached to the car by straps or by any other suitable means.

Having thus described our invention, what we claim as new is—

1. A draw-bar for cars having its throat framed with an inclined bottom and inclined side rails or ribs *c c*, in combination with a spring-seated sliding block B, with grooves and ways *d d*, adapted to move upon the

guide-rails, and a coupling-pin, substantially as shown and described.

2. The combination of the draw-bar, the sliding block B, with slotted stem, the key  
5 passing vertically through the same, the spiral spring arranged behind the block, and an abutment-pin with slot and key arranged be-

hind the spring, substantially as shown and described.

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Witnesses:

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