(No Model.)

J. A. BROWN.

CAR COUPLING.

No. 342,681. Patented May 25, 1886.

Fig. 1.

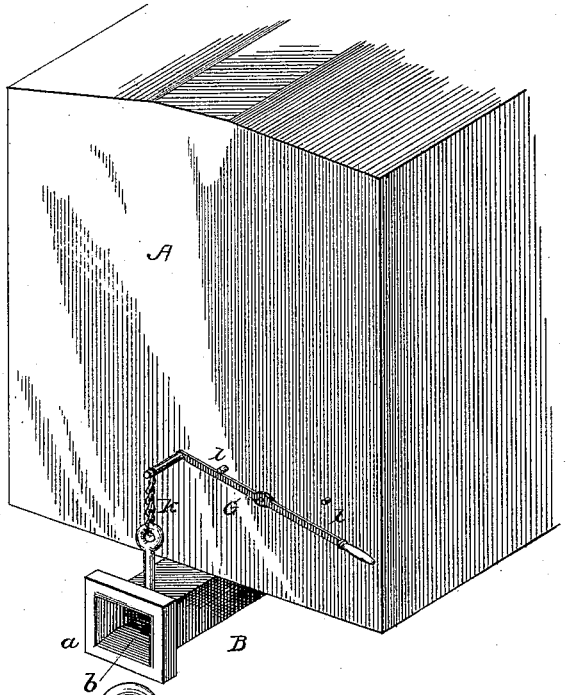


Fig. 2.

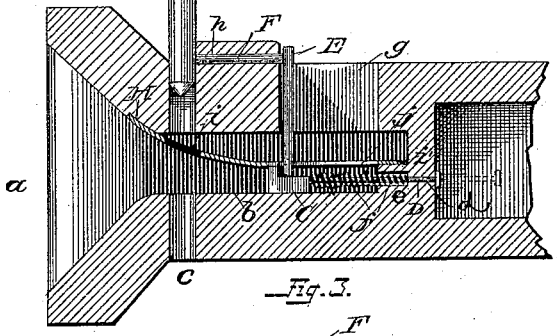
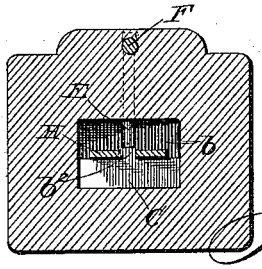


Fig. 3.



Witnesses:
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Inventor
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by
J. R. Littell,
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UNITED STATES PATENT OFFICE.

JAMES A. BROWN, OF CHESTER, SOUTH CAROLINA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 342,681, dated May 25, 1886.

Application filed March 1, 1886. Serial No. 193,656. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. BROWN, a citizen of the United States, residing at Chester, in the county of Chester and State of South Carolina, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to car-couplings, and more particularly to that class which act to automatically couple the cars when brought together; and the object of the invention is to provide a device of the character mentioned which shall be simple and inexpensive in its construction, effective in its operation, and strong and durable and not likely to get out of order, and which may, if any of the parts which render it automatic become broken, be used as an ordinary coupler.

With the above and other objects in view the invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a car-coupling embodying my invention. Fig. 2 is a central longitudinal vertical section of the same, and Fig. 3 is a transverse section.

Corresponding parts in the several figures are denoted by the same letters of reference.

Referring to the drawings, A represents a car carrying upon its under side a draw-head, B. The draw-head B is provided with the usual flaring mouth, *a*, and link-passage *b*, and is also provided with the usual passage, *c*, to receive the coupling-pin.

C represents a sliding block, which is located in the longitudinal passage *b* of the draw-head, and has an upwardly-extending rib, b^2. To the rear end of this block is secured, removably or otherwise, a headed rod, D, which extends through an opening, *d*, in a partition-wall, *e*, in the draw-head. Upon the rod D, between the partition-wall and block, is mounted a spiral spring, *f*, which serves to force and hold the block at about the middle of the draw-head.

E represents a bar extending upwardly from the sliding block C, and working in a longitudinal slot, *g*, formed in the upper side of the draw-head, and attached at or near the upper end of the bar E is a pin-support, F, working in a passage, *h*, and adapted to support the coupling-pin in a raised position. It will thus be seen that when the link enters the draw-head it will strike the sliding block C and overcome the force of the spiral spring on the rod attached to said block and move the latter to the rear end of the draw-head, which action will cause the pin-support to be moved rearwardly and from engagement with the coupling-pin, which will immediately drop by its own weight into engagement with the link, and thus serve to couple the cars.

To guide the link to the draw-head and hold it in place within the latter and prevent its slipping, I have provided a flat spring, H, which I attach to the inner upper side of the draw-head, near the front end of the latter. This spring is provided with an opening, *i*, through which the coupling-pin passes when it drops to engage the link. Said spring is also provided with a longitudinal slot or slit, *j*, in which the vertical bar E works, and in which the rib b^2 of the block slides, the rear end of the spring resting on a shoulder, *i'*, and allowing the block C to slide freely under it.

Pivoted to the front of the car is a lever, G, to the inner end of which is attached a chain, *k*, connected at its other end to the head of the coupling-pin.

Projecting outwardly from the car are stop-pins *l*, which are adapted to limit the upward movement of the inner end of the pivoted lever, and also the fall of said inner end. By this arrangement, when the cars are uncoupled the pin is not raised out of engagement with the passage for it in the draw-head, but sufficiently high to allow the pin-support to slide under its lower end.

From the above description it will be seen that my improvements are simple and inexpensive in their construction, effective in their operation, strong and durable, and not likely to get out of order.

Having thus described my invention, what I claim is—

1. In a car-coupling, the combination, with a draw-head, of a sliding spring-actuated

block, a bar attached thereto and extending upwardly through a slot in the draw-head, a pin-support secured to said bar and extending through an opening to the pin-passage, and a spring secured to the inner upper side of the draw-head, and having a slot and opening, as set forth.

2. The combination, with a draw-head, of a sliding spring-actuated block having the rib b^2, of the flat spring resting on the shoulder i' at its rear end, and having a slot to receive the rib b^2, and an opening for the passage of a coupling-pin, substantially as set forth.

3. The combination, with a draw-head, of a sliding spring-actuated block having a rib, b^2, a flat spring having a slot and pin-opening, the bar E, extending from the block, and the support F, working in a passage, h, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES A. BROWN.

Witnesses:
JNO. T. ELLIOTT,
R. W. SANDERS.