(No Model.)

J. J. KENNEDY.

CAR COUPLING.

No. 342,608. Patented May 25, 1886.

Fig. 1.

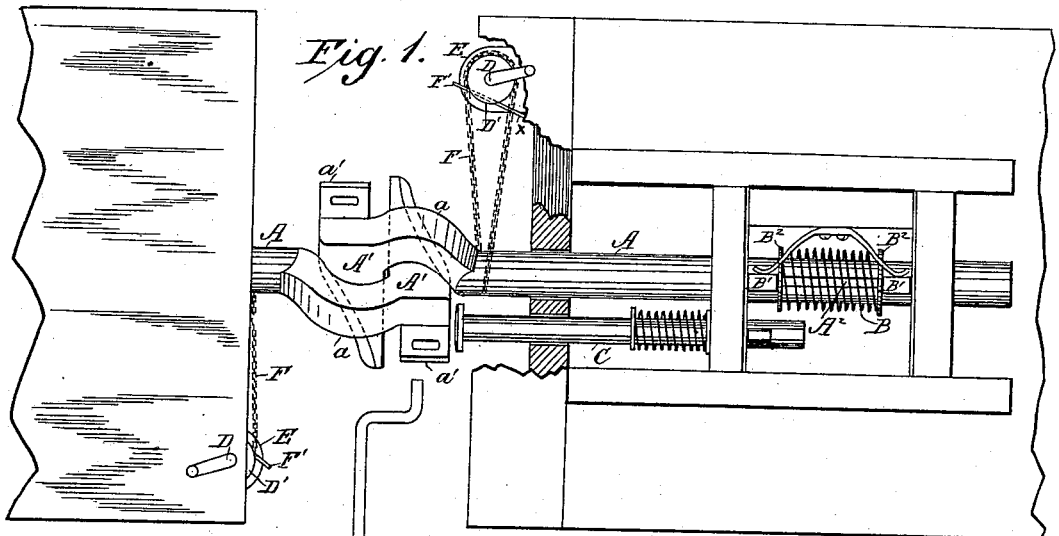


Fig. 2.

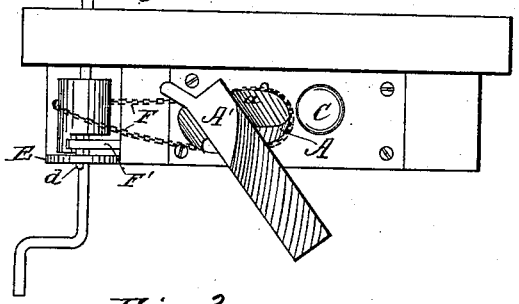


Fig. 3.

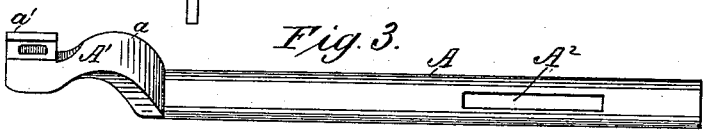


Fig. 4.

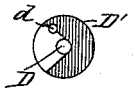


Fig. 5.

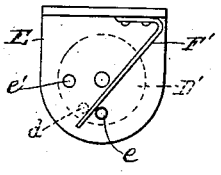
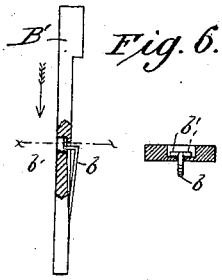


Fig. 6.



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UNITED STATES PATENT OFFICE.

JACKSON J. KENNEDY, OF CLEVELAND, TENNESSEE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 342,608, dated May 25, 1886.

Application filed July 25, 1885. Serial No. 172,690. (No model.)

To all whom it may concern:

Be it known that I, JACKSON J. KENNEDY, a citizen of the United States, residing at Cleveland, in the county of Bradley and State of Tennessee, have invented certain new and useful Improvements in Car-Couplings, of which the following is a description.

This invention relates to car-couplings, and is an improvement on the coupling for which Patent No. 262,433 was granted me August 8, 1882.

The invention seeks to simplify the construction shown in said patent, and to so arrange and construct the several parts that the coupling may be made at a small cost, and the operation will be easier and better, as presently set forth.

In the drawings, Figure 1 is a plan view of two couplings engaged and constructed according to my invention, one end sill being broken away to show the shaft-connection with the draw-bar. Fig. 2 is a front view of my coupling. Fig. 3 is a detail plan view of the draw-bar. Fig. 4 is a bottom end view of the shaft. Fig. 5 is a detail plan view of the latch-plate, the shaft and its pin being represented in dotted lines; and Fig. 6 is a detail view of the key.

The draw-bar A is journaled centrally between the sides of the car, and is provided at its forward end with a goose-neck or hook, A′, which is formed similarly to the hook shown in my patent before referred to. Immediately in rear of this hook the draw-bar is bent laterally at *a*. The object in this bend is to permit the draw-bars to be journaled centrally between the sides of the car, so that the draft may be true in the center of the car, and all side-draft will be avoided. This, obviously, is an important feature. This lateral bending of the draw-bar effects another desirable end, in that by reason of the crank or eccentric arrangement thus given the goose-neck such part will rest normally in the proper inclined position for engagement by an approaching goose-neck.

On the head of the hook A′, I form a perforated lug, *a′*, to which may be fastened the link from an adjacent car having the common coupling. Near its rear end the draw-bar is slotted longitudinally at A^2, and on the bar, over such slot, is placed a coil-spring, B, which is held by keys B′, passed through the slot A^2 on opposite sides of the spring. These keys are provided near their lower ends with spring-latches *b*, which may be compressed and inserted through the slot of the draw-bar, and when below such bar will rebound and retain the keys in place, and prevent the same from jarring out in operation. To remove the key it is only necessary to compress the spring-latch, when it will seat itself in the groove and present no obstruction to the withdrawal of the key. Friction-washers B^2 may be interposed between the keys and the ends of the spring. This spring eases the draw and push on the draw-bar. A spring-supported buffer-bar, C, is arranged alongside of the draw-bar in position to receive the stroke of the approaching bar, and so prevent any jamming of said approaching bar, as will be understood.

In order to adjust the draw-bar rotarily to its locked or unlocked position, I employ a shaft, D, journaled in suitable supports, and which has a drum portion, D′, the under side of which may be provided with a pin or stud, *d*, which engages one or the other of perforations *e e′* in a latch-plate, E. A connection, F, extends between the shaft and the draw-bar. This connection may be a pitman connecting such parts; but it is preferably a chain, as shown, passed around and secured to the shaft and the draw-bar. By this construction the turning of the shaft in one direction will adjust the goose-neck to its coupled position, and the reverse movement of the shaft will move the goose-neck to its uncoupled position. The shaft, it will be seen, is movable longitudinally in its bearings, so that the stud *d* may be adjusted into the perforations *e* or *e′*, to secure the goose-neck in the locked or unlocked position. To prevent the shaft from being jarred into the perforation *e*, and so secure the goose-neck in its coupled position, I provide a spring, F′, as shown most clearly in Fig. 5; but such spring may be placed elsewhere—as, for instance, in the framing, as shown at *x*, Fig. 1, where it would be better protected—and perform the same office. This spring prevents the pin from adjusting into the perforation *e′*, except by the forcible turning of the shaft, as will be understood. The shaft, it will be seen, is provided at its upper and lower ends with cranks, so that it may be operated from the top of the

car or from the ground. It will be noticed that the spring-latches *b* have their upper bent ends inserted through the key and bent to form shoulders *b'*, which prevent the latches from being forced away from the keys under unusual strain.

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

1. The combination of the draw-bar having a hook at its forward end, and provided near its rear end with a longitudinal slot, a spring placed on said bar over such slot, and keys passed through said slot on opposite sides of the said spring, substantially as set forth.

2. The combination, with a rotatable draw-bar having a hook at its forward end, a latch-plate, and a shaft connected with the draw-bar and adapted to engage the latch-plate, of a yielding stop, whereby the draw-bar may be held from accidental adjustment into locked position, substantially as set forth.

3. The combination of a rotatable draw-bar, a perforated latch-plate, a shaft journaled and movable longitudinally in suitable supports, and provided with a projection whereby to engage the latch-plate, a spring, F', arranged to be engaged by said projection, and connections between the shaft and the draw-bar, substantially as set forth.

4. The combination, with a rotatable draw-bar, of a perforated latch-plate, a shaft journaled and movable longitudinally in suitable supports, and provided with a pin or stud arranged to engage the perforation in the latch-plate, and connections between such shaft and the draw-bar, substantially as set forth.

5. The car-coupling herein described, consisting of the rotatable draw-bar having its forward end bent laterally and provided with a hook, the shaft journaled alongside of said draw-bar, and having cranks at its opposite ends, the connections between the shaft and the draw-bar, and latch devices whereby the shaft may be locked in place, substantially as set forth.

6. The combination with the draw-bar having a slot, A^2, of the spring placed on said bar over such slot, and keys passed through said slot on opposite sides of the spring and provided with spring-latches *b*, substantially as set forth.

JACKSON J. KENNEDY.

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