

UNITED STATES PATENT OFFICE.

BELTON MICKLE, OF HOLLY SPRINGS, MISSISSIPPI.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 166,622, dated August 10, 1875; application filed June 14, 1875.

To all whom it may concern:

Be it known that I, BELTON MICKLE, of Holly Springs, in the county of Marshall and State of Mississippi, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a vertical longitudinal section; Fig. 2, an end view of a car, showing devices for elevating the pin from the top or sides.

The invention relates to certain improvements in car-couplings; and it consists in the combination of a gravity-catch having a slotted hole, through which a transverse pin passes to support it, and a draw-bar having a central longitudinal slot, in which the catch swings, and open recesses upon each side of said slot, in which the projecting ends of the transverse pin are supported.

In the drawing, A represents a draw-bar having a tapering mouth and a central longitudinal slot, in which is pivoted the gravity-catch B. Said catch has a slot, *a*, at the top, through which passes a short transverse pin, *b*, upon which the catch is suspended, the pin *b* being disposed in recesses *c c* in the side of the longitudinal slot, so as to allow the catch full play in the latter. C is the coupling-pin, which is of the usual form, and is supported upon a lip, *d*, of the catch, and is held in a vertical position by the extra thickness of the top part of the draw-bar. The front part or face of the catch is made inclined, so as to rise when the link enters, and allow the pin to fall from its support and couple the cars. After the link has been inserted in one draw-bar the weight of the catch presses against the end of the link, and jams it in a triangular space between the bottom of the draw-bar, the coupling-pin, and the said catch, so as to hold the link in a horizontal position,

ready to enter the draw-bar of the next car. It will be seen, also, from the arrangement shown, that the coupling-pin drops immediately after the link strikes the catch, so that short links may be used. The catch is made with a slot at *a*, instead of a round hole, for the purpose of adapting the devices to the vertical vibration and variation of the draw-bar, the said slot allowing the link to raise the catch integrally and with less frictional wear. By means of my central longitudinal slot, with its side recesses *c c*, the entire catch and its pin may be lifted out when necessary for repairs. The recesses also co-operate with the slot *a*, to allow the catch to adjust itself to the vertical vibration of the car, and prevent jamming.

In connection with my coupling devices, as thus described, I employ a chain, *f*, attached to the coupling-pin at one end, and to a lever-arm, *g*, at the other, which is attached to a rod, *h*, near the top of the car, which is provided with arms and chains, whereby the coupling-pin may be elevated either from the side or top of the car.

I am aware of the fact that it is not new to construct a gravity-catch in a car-coupling with a slotted bearing and a lip which supports the pin until struck by the entering link, and I therefore confine my invention to the terms of the claim, whereby the above-described advantages are secured.

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

The combination of the gravity-catch B, having a slot, *a*, with the transverse supporting-pin *b* and the draw-bar, having a central longitudinal slot with side recesses *c c*, as and for the purpose set forth.

BELTON MICKLE.

Witnesses:

ROBT. MCGOWAN,
A. F. BROWN.