

SAMUEL C. MOORE.

Improvement in Car-Couplings.

No. 128,237.

Patented June 25, 1872.

Fig. 1.

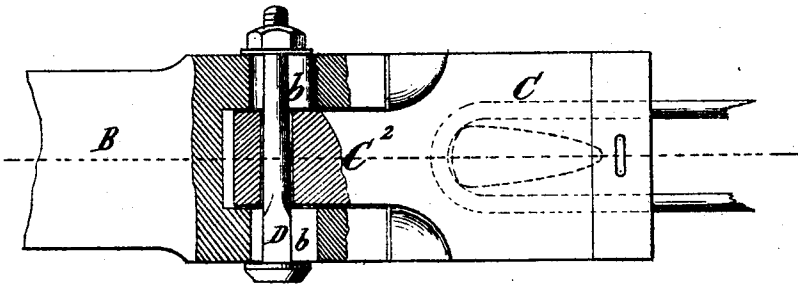


Fig. 2.

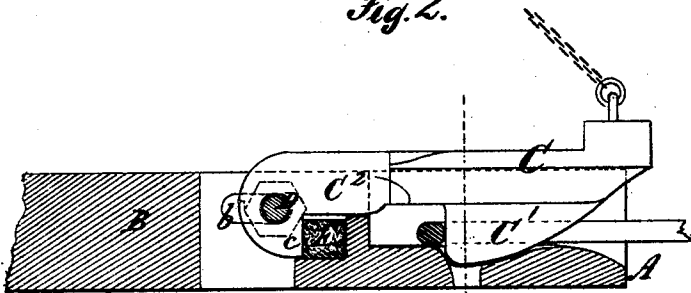
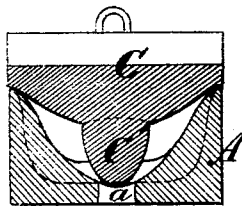


Fig. 3.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

SAMUEL C. MOORE, OF LAST CHANCE, IOWA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 128,237, dated June 25, 1872.

Specification describing a certain Improvement in Car-Couplings, invented by S. C. MOORE, residing at Last Chance, in the county of Lucas and State of Iowa.

This invention relates to that class of car-couplings which are so constructed that they may couple cars together automatically; and my improvement consists in the employment of draw-heads composed of a stiff lower jaw, the rear end of which is secured or connected to the duffer-spring in the usual manner, and an upper jaw, which is provided with a hook-formed projection on its interior or under surface for holding the link, and is pivoted to the stiff lower jaw to permit it to oscillate and allow the link to be inserted, the connection between the jaws being made yielding and elastic to relieve the pivotal pin of the sudden shocks, as well as to hold the jaws closed.

Figure 1 represents a plan view, partly in section, of my improved car-coupling. Fig. 2 is a longitudinal sectional elevation thereof. Fig. 3 is a transverse section in a plane indicated by the broken line *xx* in Fig. 2.

The same letters of reference are employed in all the figures in the designation of identical parts.

The lower jaw A of the draw-head has a rearwardly-projecting bar, B, with which it is to be connected to the frame-work of the car and to the buffer-spring in any approved manner. The cavity in the top side of this lower stiff jaw extends from its outer end to where it merges into the bar B, and is made flaring, as usual, to facilitate the entrance of the link into the head. It is perforated at *a* to let rain-water and snow run out of it, it being depressed around this aperture for the reception of the point of the hook C<sup>1</sup> on the under surface of the upper and movable jaw C. The back of the hook C<sup>1</sup> is beveled, permitting the link of an approaching car to lift the upper jaw automatically and pass with its end behind the hook, which then, by the dropping of the jaw, catches and holds the link. The movable jaw is constructed with a shank, C<sup>2</sup>, extending into a corresponding groove in the

bar B of the lower jaw, to which it is pivoted by means of the horizontally-disposed bolt D. The latter fits the hole bored through the shank C<sup>2</sup> pretty neatly, but is seated in elongated holes *b* in the bar B, which permit the bolt to move some little distance longitudinally with the upper jaw. The shank C<sup>2</sup> terminates in a downwardly-projecting lug, *c*, which bears against a stiff spring, E, of rubber or other suitable material inserted upon an offset on the bar B of the lower jaw in the manner clearly illustrated in Fig. 2, where it is shown as compressed by the pull of the link upon the hook of the upper jaw to such an extent as is permitted by the bolt D, which has reached the forward ends of the slots in the bar B. The pivotal bolt D, being thus permitted to slide in the bar of the stiff lower jaw, is relieved of the sudden shocks consequent upon starting the cars and inequalities of the road by the said spring; and the latter also aids in holding the movable jaw closed, as it reacts upon a short lever-arm of the shank C<sup>2</sup> thereof in manner best seen in Fig. 2. The groove in which the shank C<sup>2</sup> plays terminates at the rear end in an aperture extending vertically through the bar B for draining off rain-water, &c. The upper jaw is provided with a chain, by which it may be lifted.

What I claim as my invention, and desire to secure by Letters Patent, is—

A draw-head composed of the stiff jaw A and oscillating jaw C C<sup>1</sup> *c*, in combination with the bolt D playing in slots *b*, and the spring E, which is disposed in relation to the projection *c* on the oscillatory jaw, as specified, performing the twofold function of giving longitudinal elasticity to such jaw and holding down its forward hooked end.

In testimony whereof I have hereunto signed my name in presence of two subscribing witnesses.

SAMUEL CHRISTOPHER MOORE.

Witnesses:

SAMUEL ALEXANDER HITT,  
RUFUS CALDERIN PARTON.