

Carl L. Horack's Imp^t in Car Couplings.

No. 119,359.

Patented Sep. 26, 1871.

Fig. 1.

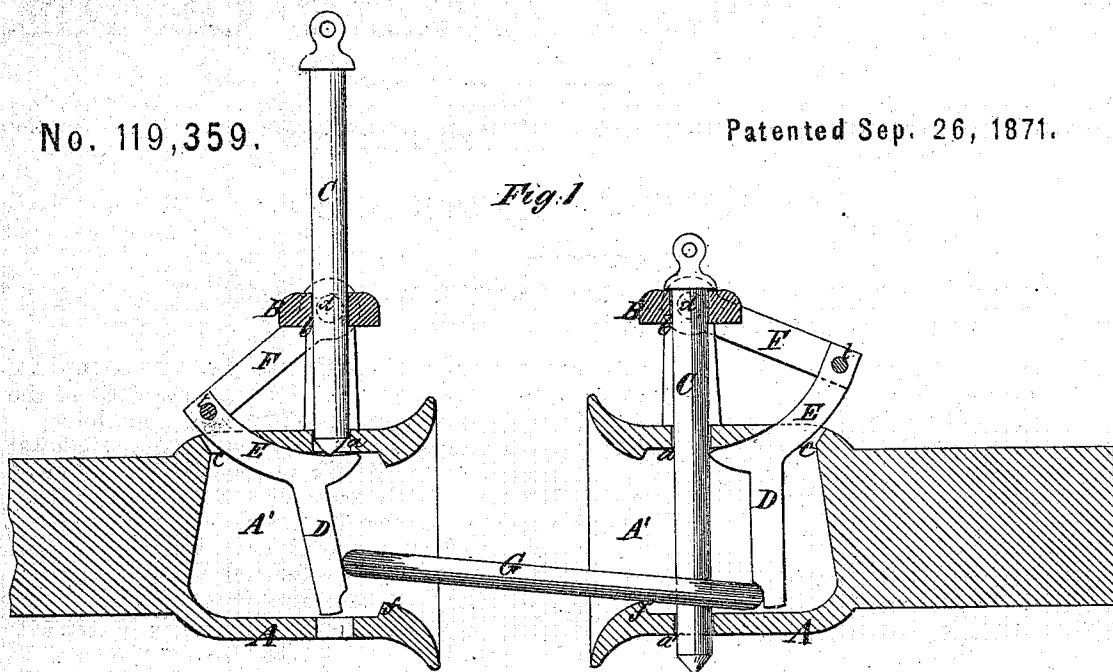
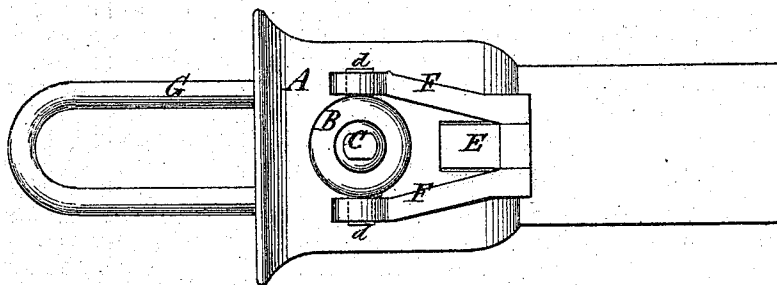


Fig. 2.



Witnesses:
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CARL L. HORACK, OF HASTINGS, MINNESOTA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 119,359, dated September 26, 1871.

To all whom it may concern:

Be it known that I, CARL L. HORACK, of Hastings, in the county of Dakota and State of Minnesota, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of two car-couplings constructed according to my invention, and showing the connecting-link secured to one draw-head in the act of entering the other. Fig. 2 is a plan of the same.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in the novel construction and arrangement, within a draw-head, of a swinging bar and locking-bolt, whereby a very simple and self-acting car-coupling is obtained.

To enable others to construct car-couplings according to my invention, I will proceed to describe the same with reference to the drawing.

Both couplings being of a similar construction it will be sufficient to describe one of them. A is a cast-iron draw-head, which, in its general outlines, is of the ordinary form. The front end of this draw-head is formed with a spacious cavity, A', and with two vertical openings, a a', opposite each other. On top of the draw-head, right above said openings, an upright standard, B, is firmly secured or cast to the same. Through the top of said standard a vertical opening, b, is formed in line with the openings a a'. C is a locking-bolt, the upper end of which is formed with a head to prevent it from dropping through the standard B. D E F is a swinging bar, which consists of a straight portion, D, curved portion E above said portion D, and a forked upper portion, F. This is pivoted, by its forked portion F, to pivots d d, provided on the upper portion of the standard B. The portion E forms an arc concentric with the pivots d, and works through and opening, c, in the top of the draw-head. The

forked portion F of the said bar may be made of two separate pieces and rigidly attached to the part E by means of a screw-bolt, t, and nut.

The operation of this car-coupling is as follows: The sectoral portion E of the swinging bar, actuated by gravity, assumes such a position within the cavity A' when the bolt C is withdrawn therefrom, as shown in the left-hand draw-head in Fig. 1, as to prevent the latter from entering said cavity till the connecting-link G is entered into the cavity A' and pushed against the straight portion D of the swinging bar, till the sectoral portion E has entirely receded from under the opening a, when the locking-bolt C will drop through the cavity A' and opening a', as shown in the right-hand draw-head, thereby locking the link G. To insure the centering of the link in the cavity of the draw-head of the other car, the lower end of the straight portion of the swinging bar D E F is recessed so as to receive the end of the link, while the mouth of the cavity A' is formed with a projection, f, thus forcing the link G to assume a slanting position with the outer end upward, as shown in Fig. 1. To uncouple, it is only necessary to withdraw the bolt C as far as to clear the cavity A', when the bar D E F by its own weight will swing forward to the position shown in the left-hand draw-head, in which it will support the bolt; and in so swinging forward it will push the link out of the cavity in the draw-head. Thus a very simple and reliable self-coupling for cars is obtained.

What is here claimed, and desired to be secured by Letters Patent, is—

The curved and forked swinging bar D E F, pivoted on the standard B, and arranged in combination with the draw-head A and bolt C, as shown and described.

CARL L. HORACK.

Witnesses:

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