

(No Model.)

T. COURSER.
CAR COUPLING.

No. 462,113.

Patented Oct. 27, 1891.

Fig. 1.

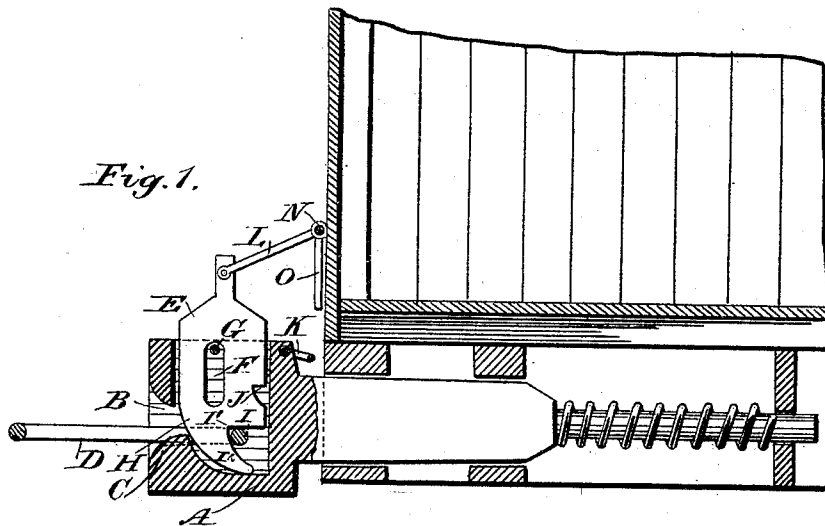


Fig. 2.

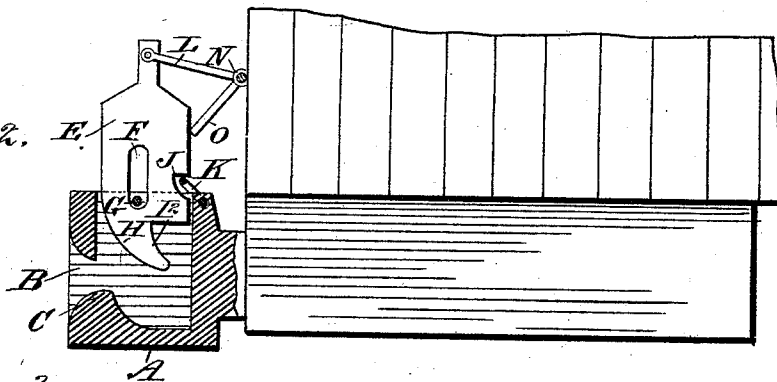
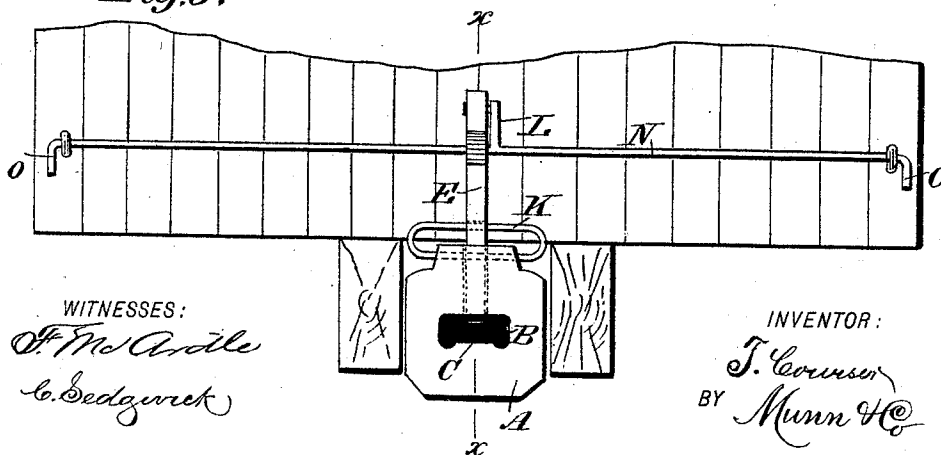


Fig. 3.



WITNESSES:

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THOMAS COURSER, OF LAKE CITY, FLORIDA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 462,113, dated October 27, 1891.

Application filed June 22, 1891. Serial No. 397,246. (No model.)

To all whom it may concern:

Be it known that I, THOMAS COURSER, of Lake City, in the county of Columbia and State of Florida, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved car-coupling which is simple and durable in construction, self-coupling, and arranged to hold the free end of the link level to guide it easily into the opposing draw-head, and which also serves to hold the link in a locked position to prevent accidental uncoupling.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement as applied, and on the line *xx* of Fig. 3. Fig. 2 is a like view of the same with the pin in a raised position, and Fig. 3 is a front view of the improvement.

The improved car-coupling is provided with the usual draw-head A, formed with the front opening B, provided in its bottom at the front with the usual inwardly-curved projection C, over which passes the ordinary link D to enter the rear part of the opening B.

In the draw-head A is arranged to slide vertically the pin E, preferably made in the shape of a plate and formed with a vertical slot F, through which passes a fixed pin or rod G, held in the draw-head and serving to guide the pin in its up-and-down movement and to prevent accidental displacement when struck by the entering-link. The front lower edge of the pin E is rounded off at H, extending downward and rearward, as plainly shown in the drawings, so that the link D in entering the opening B presses on the rounded-off end H, thus lifting the pin E in order to couple. In the rear lower part of the pin E is formed a notch I, adapted to engage the inner end of the coupling-link, as plainly shown in Fig. 1. The top I' of the notch I extends horizontally and rearwardly, and when the pin E is in a lowermost position the said top is in line with the top of

the link D. The back of the notch I' forms with the rounded-off end H a tooth I², extending through the link D and to the rear of the latter, as plainly shown in Fig. 1. The top of the notch I' holds the link D in a level position to properly guide the link into the opposing draw-head. The tooth I² locks the link D in position and prevents accidental displacement. On the rear edge of the pin E above the notch I is arranged a second notch J, adapted to be engaged by a loop K, mounted to swing on the draw-head and serving to hold the pin E in a locked uppermost position, so as to prevent coupling. The extreme upper end of the pin E is pivotally connected with an arm L, projecting from a shaft N, extending transversely on the front of the car and mounted to turn in suitable bearings in the same, the outer ends of the shaft being formed with handles O for conveniently turning the said shaft, so as to raise the pin E whenever it is desired to uncouple the cars. By the use of the shaft N and connection with the pin E the operator need not step between the cars to uncouple them, but can accomplish this from either side of the car. When the pin E is in a lowermost position and the link D enters the opening B of the draw-head, then the entering end of the link, by striking against the rounded-off end H of the pin E, lifts the latter to permit the link to enter the rear part of the opening B. The entering end of the link slides under the tooth I² until finally the end of the tooth is passed, after which the pin E drops by its own weight, so that the end of the link is engaged by the notch I, the top of the latter resting on top of the end of the link. The cars are then coupled, the link is held in a level position, and is locked in place by the pin.

To uncouple, the cars are backed up, the operator turns the shaft N, so as to raise the pin E to bring the tooth I² out of engagement with the link D, so that the two cars can be drawn apart. When it is not desired to couple, the pin E is locked in an uppermost position by the operator engaging the loop K with the notch J, as plainly shown in Fig. 2.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a car-coupling, the combination, with

a pin mounted to slide vertically in the draw-head and formed at its rear edge with a notch, of a loop pivoted on the draw-head and adapted to engage the said notch to lock the said pin in
5 an uppermost position, substantially as shown and described.

2. In a car-coupling, the combination, with the draw-head having a vertical opening intersecting its link-opening, of the pin E, fitted to slide in the vertical opening of the draw-
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head and provided with the curved tooth I² and the notch J, the loop K, pivoted to the draw-head and the transverse shaft N on the front of the car provided with the handles O, and the arm L, to which the link is pivoted, 15 substantially as herein shown and described.

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Witnesses:

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