

(No Model.)

B. B. MORGAN.

CAR COUPLING.

No. 376,335.

Patented Jan. 10, 1888.

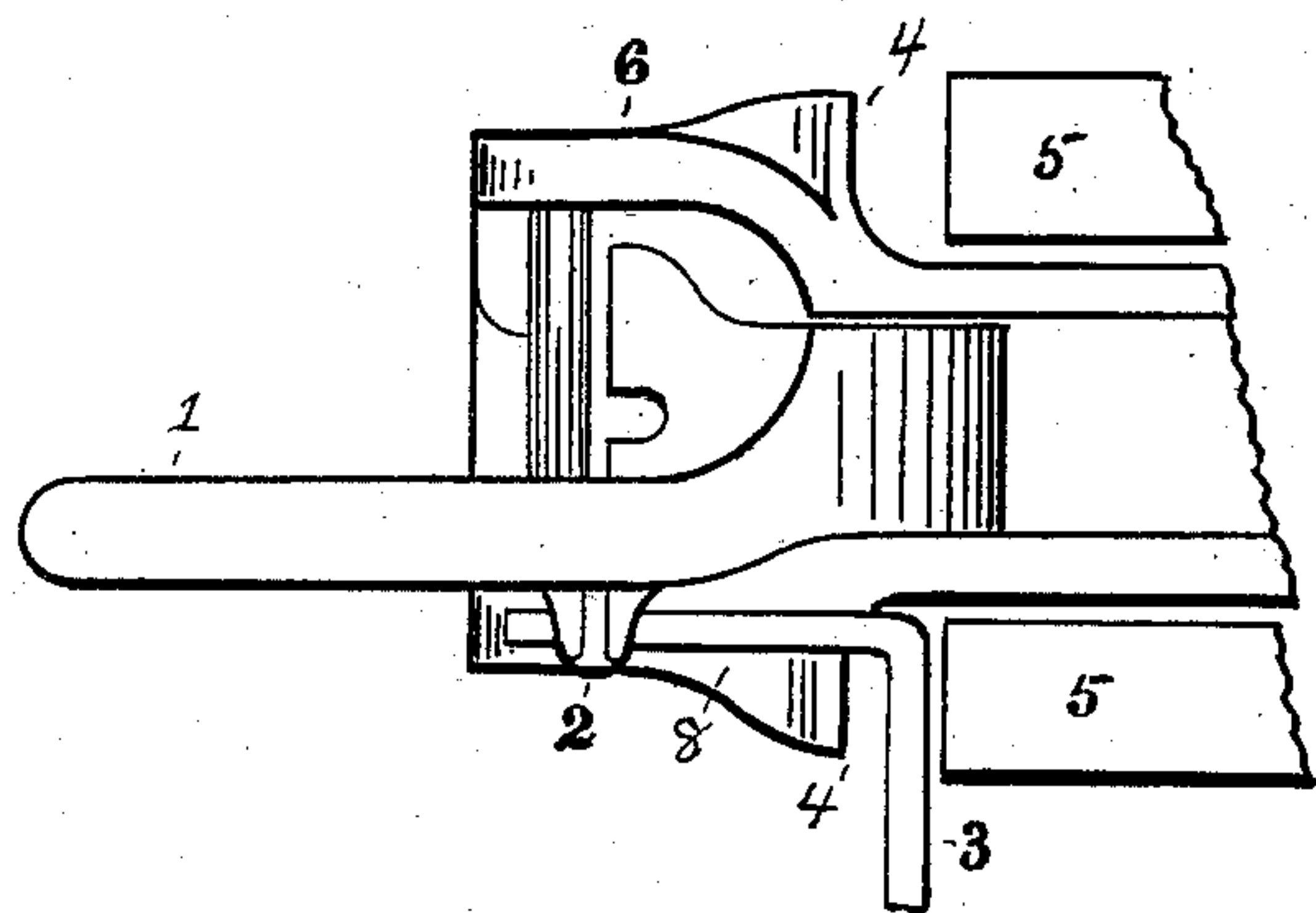


Fig. 2.

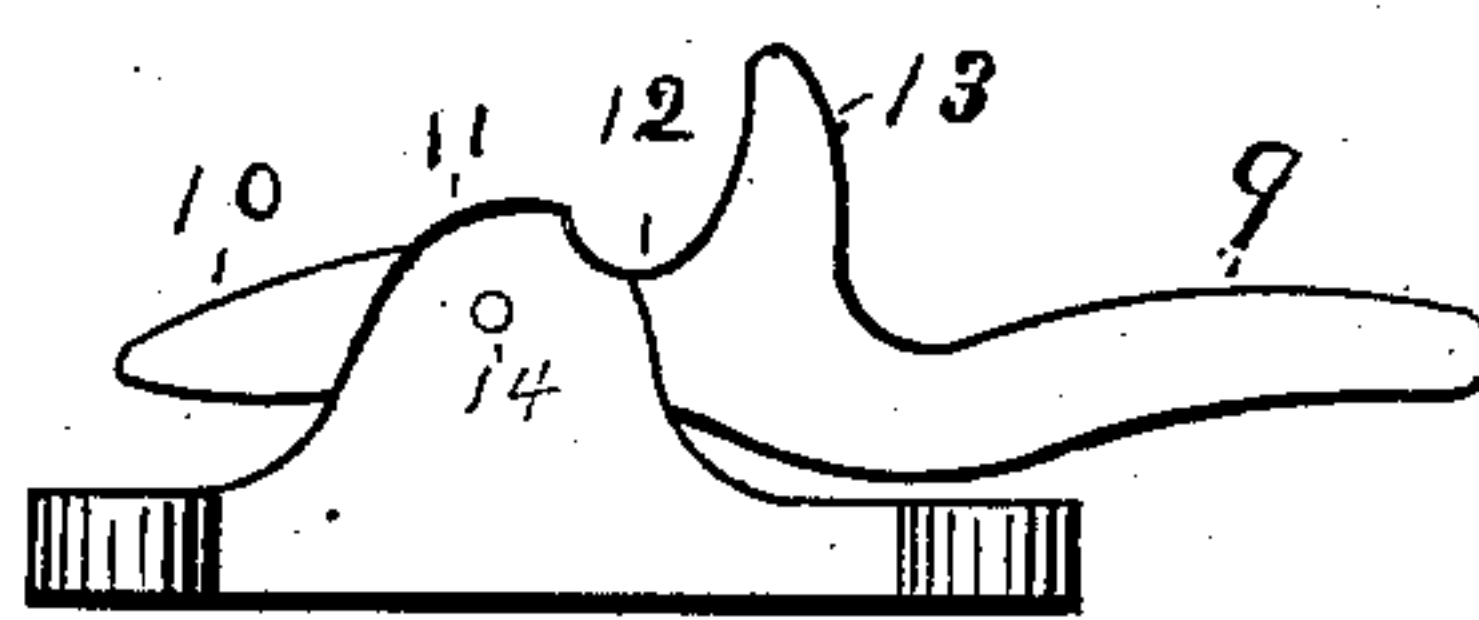


Fig. 3.

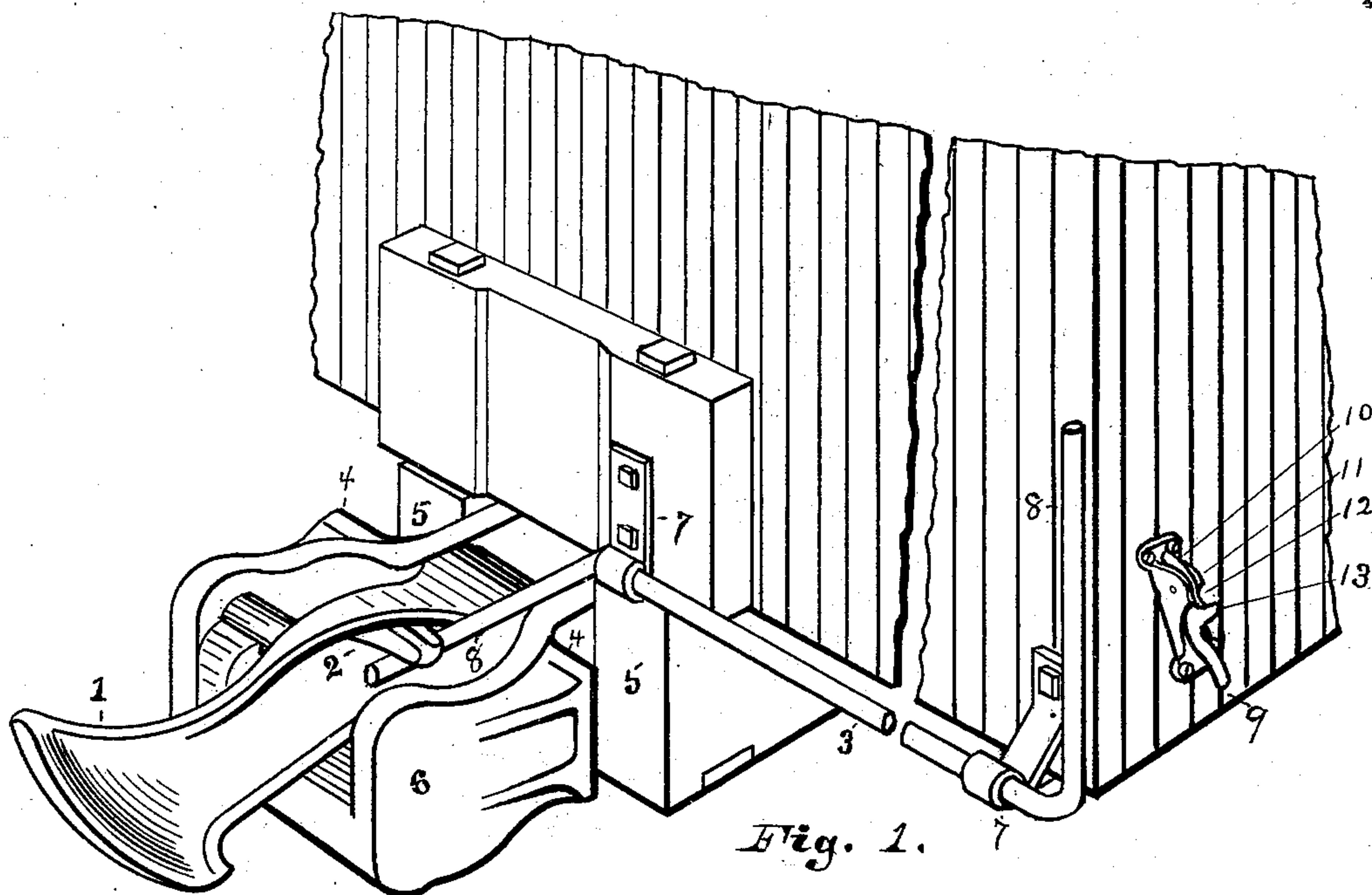


Fig. 1.

WITNESSES
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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 376,335, dated January 10, 1888.

Application filed May 27, 1887. Serial No. 239,592. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN B. MORGAN, of Ann Arbor, in the county of Washtenaw and State of Michigan, have invented a new and useful Improvement in Car-Couplers, of which the following is a specification.

My invention consists in an improvement in car-couplers, hereinafter fully described and claimed.

Figure 1 is a perspective of one end of a car with my invention attached. Fig. 2 is a plan view of part of the draw-bar, and Fig. 3 is a side elevation of the lock for the uncoupling-lever.

6 represents a draw-bar like that shown and described in my Patent No. 342,705, of May 25, 1886, except that the rear end of the draw-bar head is provided with shoulders 4, extending at right angles, or nearly so, from the shank of the draw-bar. The shank of the draw-bar lies between the draft-timbers 5, and is fastened to the car by the usual spring-connection. The shoulders 4 extend over the ends of the draft timbers 5 in such manner that when the draw bar is driven backward under the car by coming in contact with another car the shoulders 4 come in contact with the ends of draft-timbers 5 just before or as the limit of elasticity of the spring-connection is reached and prevent the spring-connection from being broken. This also prevents the draft-timbers from being wedged apart, as is liable to happen when a draw-bar with flaring head is driven backward, and it throws the strain of collision lengthwise on the draft-timbers, instead of crosswise on the cross-timbers at the end of the car, as is the case when a lug is formed on the top of a draw-bar.

1 represents a pivoted coupling-hook, like that shown and described in my patent above referred to. 2 represents a lug formed on said hook.

3 represents a rock-shaft journaled in bearings 7 7 on the front of the car.

8 8 represent levers on the ends of rock-shaft 3, one of which extends under lug 2, and the other stands at the side of the car.

When the rock-shaft is operated by means of

one lever, 8, the other lever raises the coupling-hook 1 by means of lug 2 in an obvious manner.

11 represents a bracket secured to the side of the car in the path of the outer lever, 8. It has an inclined upper surface, and just below its apex has a shallow notch, 12.

9 10 represent a lever lying in a slot in bracket 11 and pivoted thereto at 14. This lever has a notch in its surface to correspond with notch 12 in the bracket, and below this notch has a lug, 13, to limit the motion of lever 8. When lever 8 is moved to raise the coupling-hook, it passes over the inclined end 10 of the lever 9 10 and of the bracket 11, springing outward from the car a little to do so, and drops into notch 12, where it is held firmly enough to hold the hook 1 raised under ordinary circumstances; but should the draw-bar be connected by a link-coupling with another car and be pulled out the force thus exerted would spring lever 8 out of notch 12, and the rock-shaft would not be torn from the car.

By forcing end 9 of lever 9 10 away from the car, or end 10 of said lever toward the car, lever 8 is lifted out of notch 12, and the coupling-hook permitted to fall.

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

1. The combination, with a draw-bar, of a pivoted coupling-hook having the lateral lug 2, the rock-shaft 3, journaled on the car and having its ends provided with levers 8, projecting in opposite directions, one engaging said lug and the other standing at the side of the car, and a device on the side of the car for engaging the latter lever to hold the coupling-hook in an elevated position, substantially as described.

2. The combination, with a draw-bar, of a pivoted coupling-hook having the lugs 2 and the rock-shaft 3 journaled on the car, and having its ends provided with levers 8, which respectively project in different directions, one engaging the lug and the other standing at the side of the car, substantially as described.

3. In combination with the hook 1 and lug

2, the rock-shaft 3, levers 8, bracket 11, having therein notch 12, and levers 9 10, pivoted in said bracket, substantially as shown and described.

5 4. In combination with rock shaft 3 and levers 8, the bracket 11, secured to the side of a car and having the notch 12 therein,

and the lever 9 10, pivoted in a slot in said bracket and having thereon the projecting lug 13, substantially as shown and described. 10

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Witnesses:

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