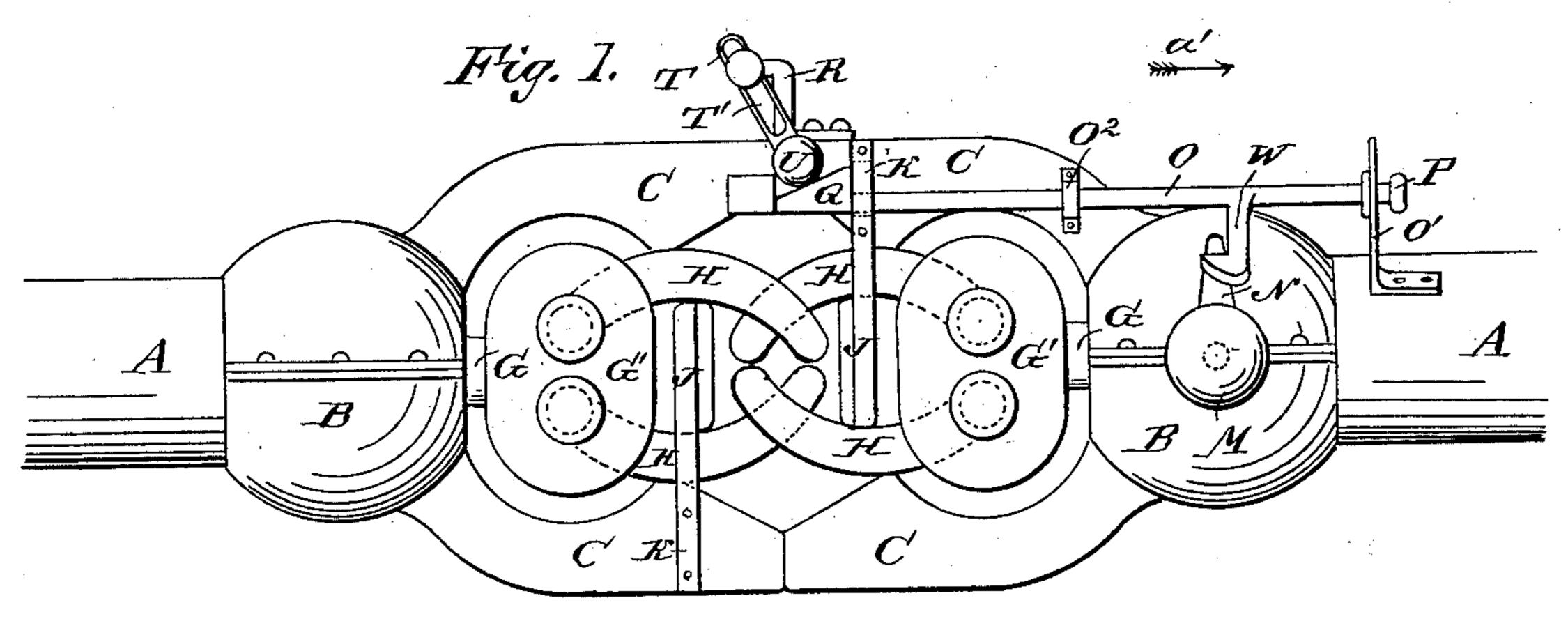
J. HAMPL & D. JACOBS.

CAR COUPLING.

No. 318,184.

Patented May 19, 1885.



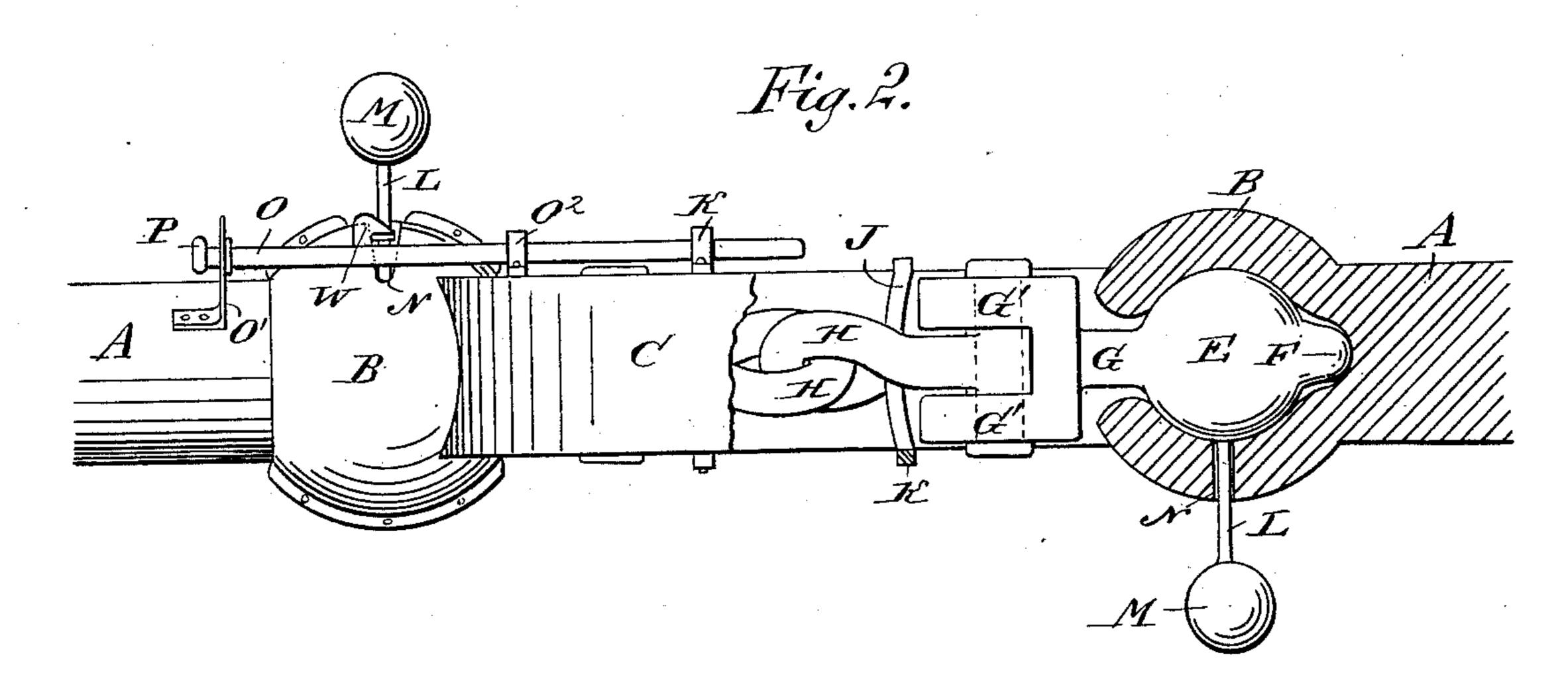
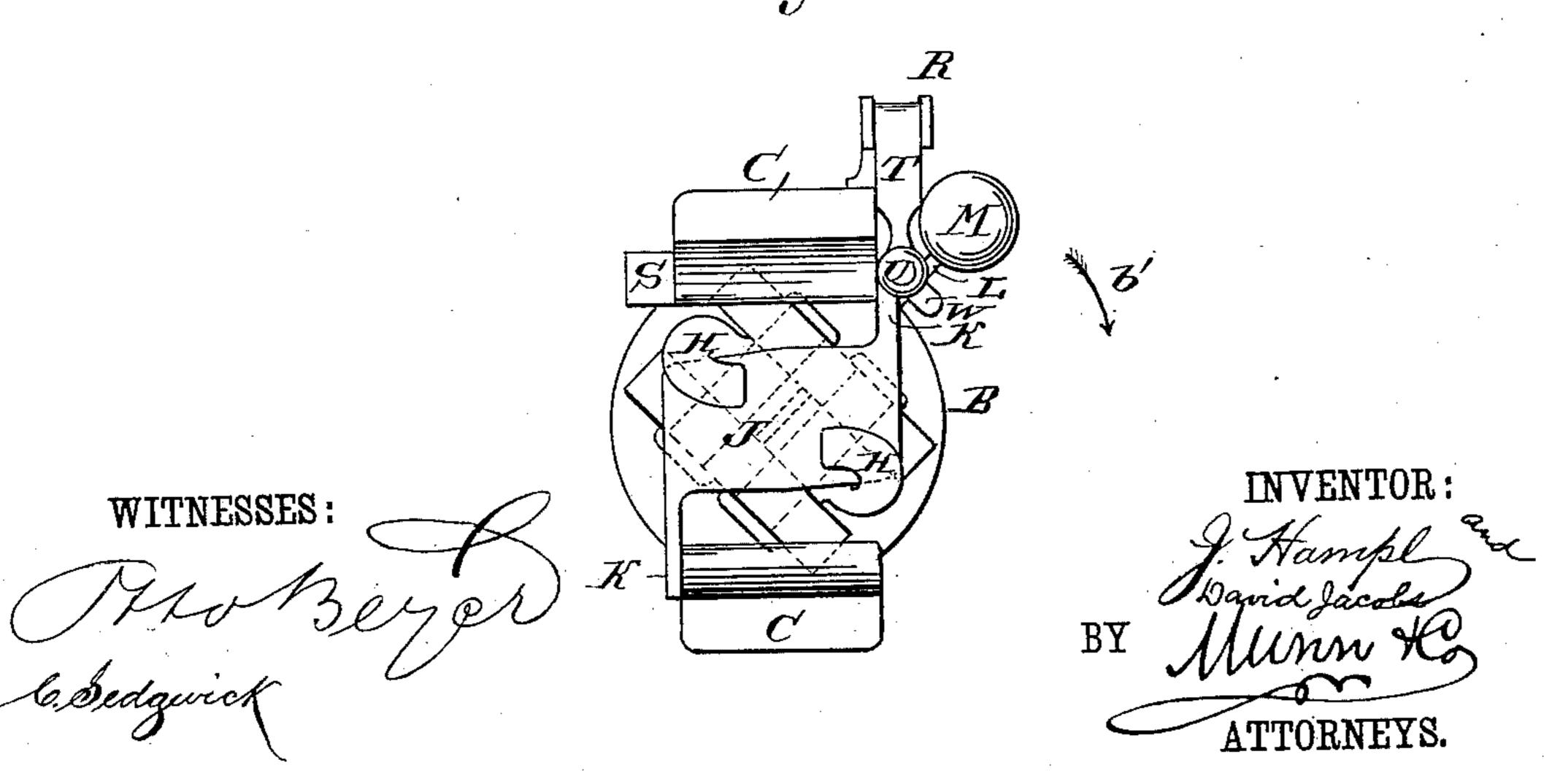


Fig. 3.



United States Patent Office.

JOSEPH HAMPL AND DAVID JACOBS, OF FORT CLARK, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 318,184, dated May 19, 1885.

Application filed March 25, 1885. (No model.)

To all whom it may concern:

Be it known that we, Joseph Hampl and David Jacobs, both of Fort Clark, in the county of Bexar and State of Texas, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The invention consists in the combination, with a draw-bar having a socket and buffer10 prongs on its ends, of a ball in the socket, coupling-hooks pivoted between jaws connected with the ball, a weighted stem projecting from the ball, and a sliding latch-rod for engaging with the stem and automatically releasing it when the cars come together.

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

Figure 1 is a side view of two of our improved couplers interlocked. Fig. 2 is a plan view of the same, parts being in section. Fig. 3 is an end view of the coupling.

The draw-bar A has a socket, B, formed on its outer end, and from the open end of the said socket the top and bottom buffer-prongs, C, project. In the socket B a ball, E, is located, which has a stem or nipple, F, on its rear end, fitting in a suitable recess in the socket, to prevent the ball from swinging up or down or laterally.

A stem, G, projects from the ball through the open end of the socket, and the free end of the stem is forked or provided with the 35 jaws G', between which two S-shaped coupling-hooks, H, are pivoted to swing toward and from each other.

Between the buffer-prongs C a plate, J, is held by diagonally-opposite arms K, which are riveted to opposite sides of the prongs C. The said plate J is between the hooks H, and separates them in the act of uncoupling. A stem or rod, L, projects from the ball E, and on its outer end a ball or weight, M, is secured. The stem L passes through a slot, N, in the socket, the width of the slot increasing from the upper to the lower end.

A rod, O, is arranged to slide in the direction of the length of the draw-bar in the guide 50 O' on the draw-bar, the guide O² on the side of the top buffer-prong C, and in the top arm

or lug, K, of the plate J. The rod O has a stop-button, P, on its inner end and a beveled head, Q, on its front end, the top edge of the head having the bevel.

An angular arm, R, projects upward from the top buffer-prong C, and is secured on one side of the same, a lug, S, projecting from the opposite side of the buffer-prong. A link, T, having a longitudinal slot, T', is hung on the 6c upper end of the arm R, and has a ball, U, on its lower end. A hook, W, projects from the rod O. The draw-bar and socket are made of two sections bolted together.

The operation is as follows: When a car is 65 uncoupled, the jaws G' are diagonally in the draw-head, and are held in this position by the hook W on the bar O, which holds the weighted stem L, which projects upward at an angle of about forty-five degrees. The ball U 70 rests against the front end of the beveled head Q. When the cars come together, the lug S or one draw-bar strikes the ball U of the other draw-bar and pushes the rod O in the direction of the arrow a', Fig. 1, whereby the hook 75 W is disengaged from the stem L, thus permitting the weight M to swing the stem L downward in the direction of the arrow b', Fig. 3, whereby the ball E, the stem G, and the jaws G' are turned on the longitudinal 80 axis of the draw-bar, and the hooks H of the two couplings are interlocked. The ball U then slides upon the beveled top edge of the head Q. To uncouple, the stem L is raised, whereby the ball E, the stem G, the jaws G', 85 and the hook H are turned, and the hooks A opened by the disk J while turning. The stem L is engaged with the hook W, and the ball U slides down the bevel of the hook Q in front of the end of the hook.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a draw-bar having a socket on its outer end, of a ball in the 95 socket, a stem projecting from the ball, jaws formed on the end of the stem, and curved coupling-hooks pivoted in the jaws, substantially as herein shown and described.

2. The combination, with the draw-bar A, 100 having a socket, B, and buffer-prongs C on its end, of the ball E, the coupling-hooks H, piv-

oted in jaws connected with the ball, and the plate J, having lugs K, which are secured to the sides of the prongs C, substantially as herein shown and described.

5 3. The combination, with the draw-bar A, having a socket, B, and buffer-prongs C on its end, of the ball E, the coupling-hooks H, pivoted on jaws on the ball, the weighted stem L, and a rod provided with a hook for holding the stem L raised, substantially as herein shown and described.

4. The combination, with the draw-bar A, having a socket, B, of the ball E, coupling-hooks connected with the ball, the stem L, the sliding rod O, and the laterally-projecting hook W on the same, substantially as herein

shown and described.

5. The combination

5. The combination, with a draw-bar having a socket and buffer-prongs on its end, of the ball E in the socket, the hooks H, the

stem L, the sliding rod O, having a hook, W, and beveled head Q, the arm R on the top buffer-prong, the slotted link T, and the ball U on the lower end of the same, substantially as herein shown and described.

6. The combination, with the draw-bar having a socket, B, and buffer-prongs C on its end, of the lug S and the arm R on the top buffer-prong, the sliding rod O, having a hook, W, and beveled head Q, the slotted link T on 30 the arm R, the ball U on the end of the link, the ball E in the socket B, the coupling-hooks H, and the weighted stem L, substantially as herein shown and described.

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Witnesses:
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