(No Model.)

# C. B. SPENCER.

## CAR COUPLING.

No. 304,467. Patented Sept. 2, 1884.

Fig. 1.

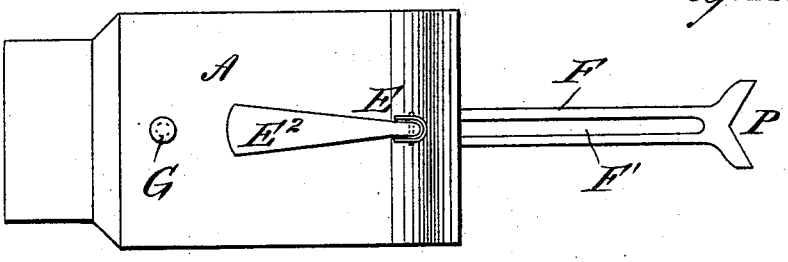



Fig. 2.

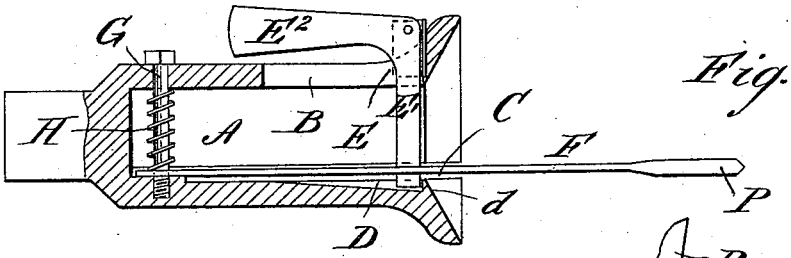



Fig. 3.

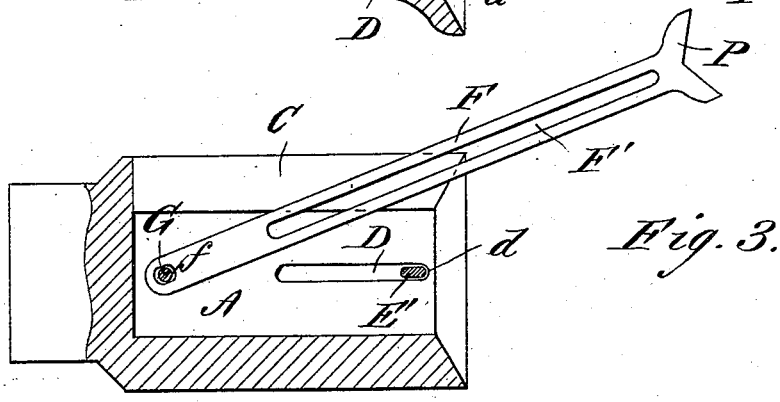
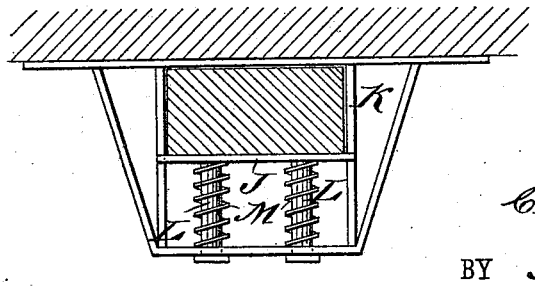



Fig. 4.

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# UNITED STATES PATENT OFFICE.

CHARLES BURRITT SPENCER, OF SPICELAND, INDIANA, ASSIGNOR OF ONE-HALF TO SETH G. HASTINGS, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 304,467, dated September 2, 1884

Application filed June 19, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES B. SPENCER, of Spiceland, in the county of Henry and State of Indiana, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The invention pertains to improvements in car-couplings; and it consists of the combination of parts and their construction, substantially as hereinafter fully set forth and claimed.

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

Figure 1 is a plan view of my improved car-coupling. Fig. 2 is a longitudinal sectional elevation of the same. Fig. 3 is a sectional plan view of the same. Fig. 4 is a cross-sectional elevation of the same, showing the manner in which it is held on the bottom of the car.

The draw-head A is provided with a longitudinal slot, B, in its top, and with a longitudinal slot, C, in one side, directly above the upper surface of the bottom of the draw-head. In the upper surface of the bottom of the draw-head a longitudinal groove, D, is formed, which decreases in depth from the outer to the inner end, and at the front end of which groove an offset or shoulder, *d*, is formed. An L-shaped coupling-pin, E, is pivoted between jaws projecting from the top of the draw-head at the front end of the slot B, the vertical shank E′ of the pin extending down to the bottom of the groove D, and the upper or horizontal shank, $E^2$, which is above the draw-head, is weighted. The link F has a longitudinal slot, F′, and is provided at its inner end with an aperture, *f*, through which a vertical bolt, G, passes at the inner end of the draw-head, the said bolt being surrounded by a spiral spring, H, which holds the inner end of the link on the bottom of the draw-head. On the outer or front end of the link two inclined horizontal prongs, P, are formed, which project in opposite directions, and at the outer end the link is made thicker than at the other parts. The inner end of the draw-head rests upon a cross-plate, J, held to slide vertically in a frame, K, secured to the under side of the car, and provided with two downwardly-projecting pins, L, surrounded by spiral springs M, which are held between the bottom of the frame K and the plate J, and press the latter upward.

Any suitable lever or lever-and-chain device can be used in connection with the coupling-pin E for uncoupling from the sides or roofs of the cars.

The operation is as follows: When a link enters a draw-head, the outer end of the link strikes the vertical shank of the pivoted coupling-pin E, swings the same inward, and when the end of the link has passed, the coupling-pin swings back again and through the slot in the link. The beveled or inclined prongs on the free ends of the link guide the end of the link centrally to the shank E′ of the coupling-pin. As only one link is to be used in coupling, and a link is held in each draw-head, one link must be swung out of the side of the draw-head through the slot C, as shown in Fig. 3. The spring H holds the link in the desired place. If the draw-head is to be connected with a car having one of the usual draw-heads, a link is used which has one end formed like a link of the usual kind, and has the other end forked, as shown, the forked end being arranged to enter my improved draw-head. The springs M press the bar J against the bottom of the draw-head, thus holding the same in place and permitting the same to work up and down within the frame K, to suit draw-heads of different heights on the opposite cars.

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

1. The combination, with the draw-head A, having the side slot, C, of the link F, the upright bolt or pin G, on which the link F swings, and of the spring H, surrounding the pin G and exerting a downward pressure on the inner end of the link, substantially as herein shown and described.

2. The combination, with the draw-head A, having the longitudinal top slot, B, and the longitudinal side slot, C, of the L-shaped coupling-pin E, pivoted in the slot B, and of the coupling-link F, pivoted in the draw-head to swing laterally, substantially as herein shown and described.

CHARLES BURRITT SPENCER.

Witnesses:
O. H. NIXON,
S. B. LANE.