(Model.)

N. M. HALE.

CAR COUPLING.

No. 266,138. Patented Oct. 17, 1882.

Fig. 1

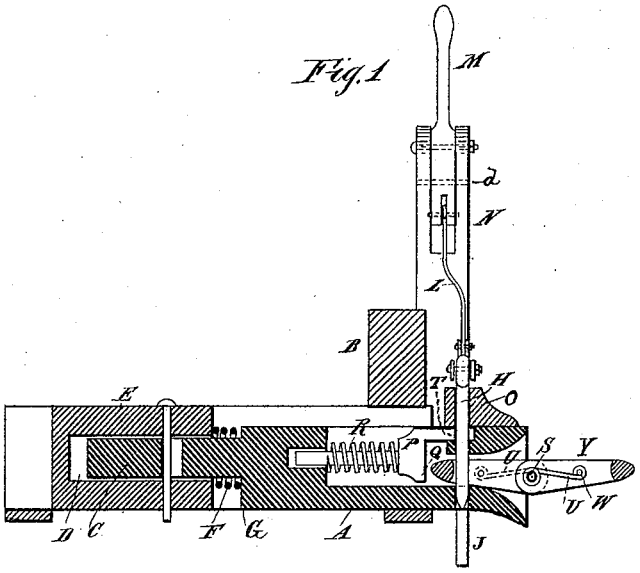


Fig. 2

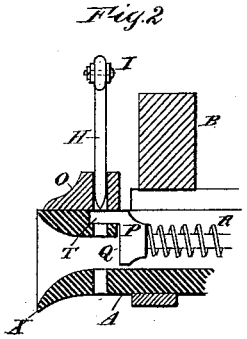


Fig. 3.

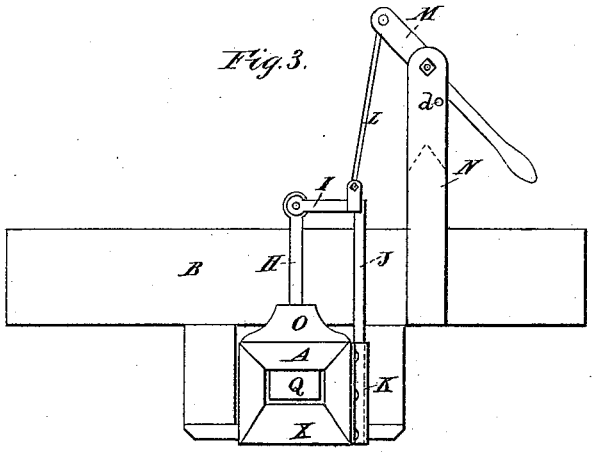
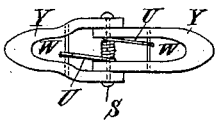


Fig. 4.



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UNITED STATES PATENT OFFICE.

NATHAN M. HALE, OF GRAND VIEW, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 266,138, dated October 17, 1882.

Application filed April 18, 1882. (Model.)

To all whom it may concern:

Be it known that I, NATHAN M. HALE, of Grand View, in the county of Johnson and State of Texas, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

My invention relates to improvements in car-couplings; and it consists in the peculiar construction and arrangement of parts, as hereinafter more fully set forth.

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 longitudinal sectional elevation of my improved car-coupling with the link coupled. Fig. 2 is a sectional elevation with the pin set for coupling. Fig. 3 is an end elevation of the draw-bar and coupling devices except the link, and Fig. 4 is a plan of the link.

A represents the draw-bar and buffer, which is fitted, about the same as usual, under the platform B, with a stem, C, at the rear, sliding in and out of the socket D of the string-block E, firmly secured in the bed-frame of the car behind the platform, and having a strong buffer-spring, F, behind its shoulder G to ease the shocks of the colliding cars. The coupling-pin H is connected by an arm, I, to a guide-rod, J, fixed in a guide-clip, K, on the side of the draw-bar to slide up and down, and is connected by rod L with a lever, M, pivoted in the top of a standard, N, and arranged so that it can be reached from the side of the car to raise the pin for uncoupling the car without going between them. The sweep of the lever is limited by stop-pin *d*, so that the pin does not rise wholly out of the top of the draw-bar, said top having an extension, O, to retain the point of the pin, so that it will always be ready to fall into its place through the link for coupling.

P represents a setting device, arranged within the draw-bar to slide forward under the point of the pin whenever said pin is raised and hold it up ready for coupling until the link enters, and by pushing on shoulder Q slides said setting device P back and allows the pin to fall. The spring R, coiled around the stem of said setting device P, presses the end T constantly against the pin, ready to thrust it forward under the point of the pin as soon as said pin is raised.

In order that the link shall always point upward sufficiently to enter the mouth of the draw-bar properly when approaching the draw-bar for self-coupling, I make it in two sections, Y, connected by a transverse joint-pin, S, and arrange a spring, U, with each section, so as press upwardly on a pin, U, and thereby sufficiently elevate the point of the link when projecting from one draw-bar to insure its entry properly into the draw-bar of the car to be coupled on; and as a further means of certainty in the matter I construct the mouth of the draw-bar with a larger flare of the lower lip, X.

The coupling-pin H may have an attached cord or chain leading to the top of the car; or the rod L, connected to pin H, may be extended to be connected with a lever, M, suitably mounted at the top of the car, so that the coupler may be as effectively worked from the car-roof as from the ground. It will be seen that by this contrivance of the coupling the dangerous practice of going between the cars may be wholly avoided; also, that the whole business of coupling and uncoupling may be attended to without requiring the brakeman to descend from the top of the car; also, that not so many brakemen will be required; and, also, that the coupling-lever of the car next to the tender may be under the command of the engineer by means of a cord extending from it to the cab and arranged over suitable guides; and it will also be seen that by suspending the link with a chain to the top of the car or elsewhere, or by a proper fastening to the lever to prevent the link from falling, the cars may be "bumped" around the yard as much as may be desired without coupling.

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

1. The combination, with a coupling-pin, H, of the arm I, rod J, clip K, rod L, and lever M, all arranged as shown and described.

2. The combination, with a draw-bar having the extension O, of a lever limited by the stop-pin *d*, as shown and described.

3. In car-couplings, the coupling-link, made in two U-shaped parts, pivoted together at S, and sustained in coupling position by spring or springs U, substantially as shown and described.

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