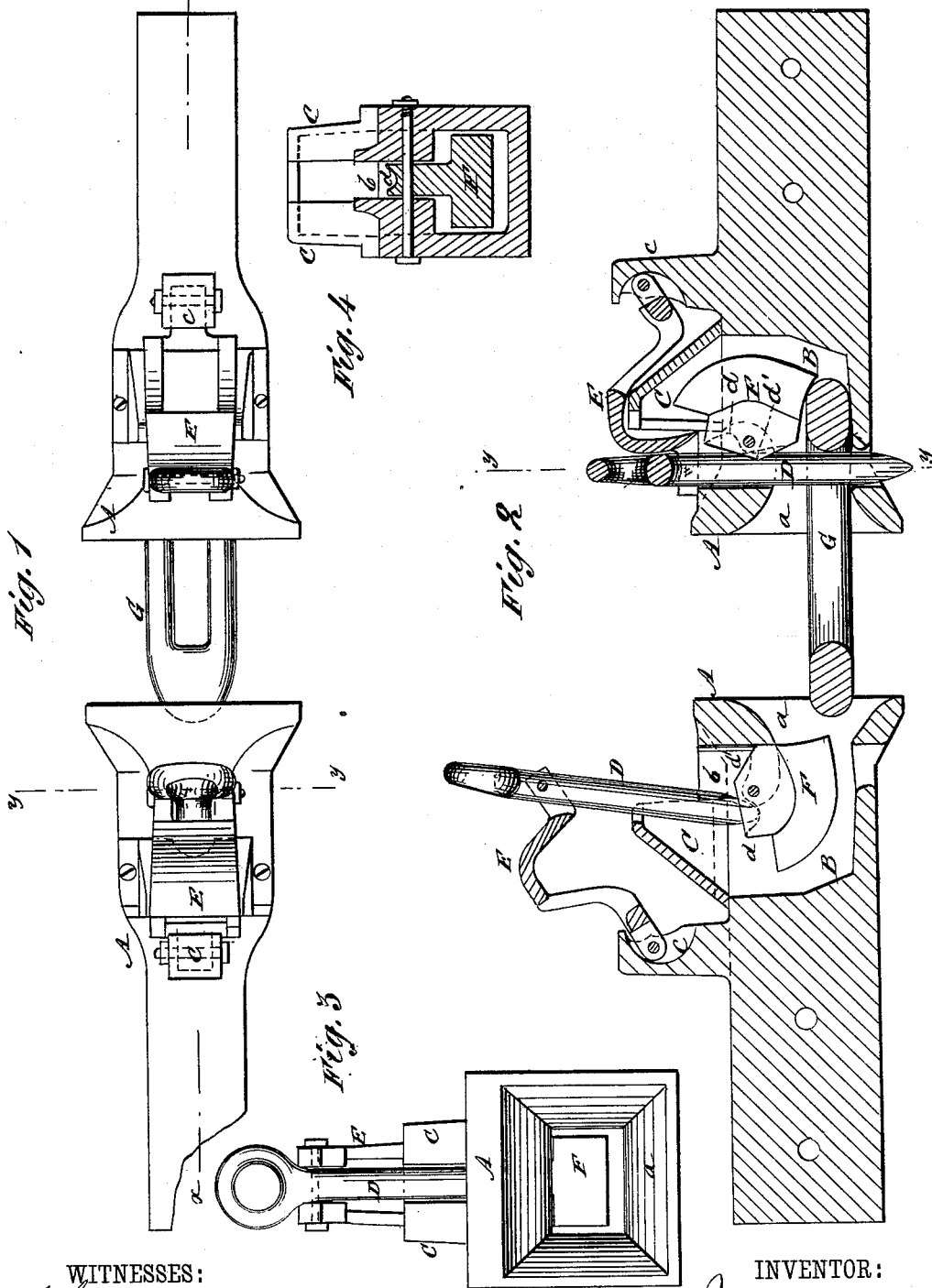


J. H. HORTON.
Car-Coupling.

No. 220,716.

Patented Oct. 21, 1879.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOHN H. HORTON, OF EAST POESTENKILL, NEW YORK.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **220,716**, dated October 31, 1879; application filed April 21, 1879.

To all whom it may concern:

Be it known that I, JOHN H. HORTON, of East Poestenkill, in the county of Rensselaer and State of New York, have invented a new and Improved Car-Coupling, of which the following is a specification.

This invention relates to car-couplings, and consists in the improvements in the construction of the same, as will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a top plan of two draw-heads provided with my improved coupling. Fig. 2 is a vertical longitudinal section of the same on line *x x*. Fig. 3 is a front view of one of the draw-heads, and Fig. 4 is a cross-section of one of the draw-heads on line *y y* of Figs. 1 and 2.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the draw-head, with a bell mouth, *a*, communicating with a cavity, B, opening out through the upper side of the draw-head. Over the cavity is placed a casing, C, leaving a slot, *b*, in front for the pin D to be inserted in.

E represents the link, adapted to fit over the casing C. The rear end of this link is pivoted in the standard *c*, and its front end is swiveled to the head of pin D.

Immediately under the slot *b* is pivoted in the cavity B a gravitating pawl, F, on the upper side whereof is a cavity or socket, *d*, to receive the end of the coupling-pin when the latter is in position for coupling the cars; and leading to the cavity or socket *d* from the front edge of the pawl is a guide-groove, *d'*, by means of which the point of the pin is guided to said socket or cavity as the pin is elevated.

Both draw-heads are made precisely alike, and are adapted to receive the link G or the ordinary bar-link.

In Fig. 2 one draw-head is shown engaging one end of the link, while in the other the pin is in position to engage the link when it enters. In the first, it will be observed, the pawl F is thrown up, but bears upon the end of the

link and holds it horizontal, so that it is in position to enter the draw-head of the next car, while the link E fits over the top of casing C, and permits the pin to enter through the cavity and hold the link. In the other draw-head the link is out of the cavity in position to drop forward of the pawl, which hangs down vertically. When the approaching end of the link enters the mouth *a* it strikes the face of pawl F, throwing it back and up into the position it occupies in the first case, and the end of the link passing over the pawl drops down through the link and thus couples the cars together.

The casing C covers the cavity B, and thus prevents snow, ice, and other material from entering it and interfering with the movements of the parts.

The action of the coupling is entirely automatic, and there is no necessity of entering between the cars to guide the link or operate the pins, as the latter can be arranged from the platform, while the former is always held in place by the gravitating pawl, so that it cannot fail to enter the draw-head of the car it is to be coupled to.

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

1. In combination with the gravitating pawl, the pin D, pivoted to the link E, and the slotted casing C, which serves as a support to hold the pin against lateral displacement when elevated, substantially as shown.

2. In combination with the draw-head of a car-coupler and the coupling-pin thereof, the gravitating pawl provided with a socket for the reception of the end of the pin and a guide-groove for guiding the pin into said socket or cavity, substantially as specified.

JOHN HENRY HORTON.

Witnesses:

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JOHN HENSSEY,
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