J. C. PUGH.

CAR-COUPLING.

No. 187,557. Patented Feb. 20, 1877.

Fig. 1.

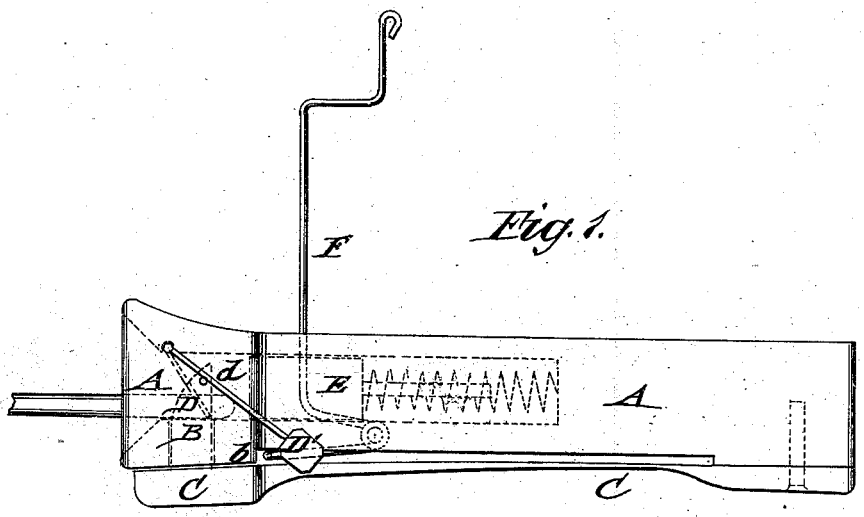

Fig. 3.

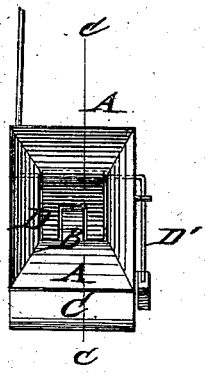

Fig. 2.

WITNESSES:

Francis McArdle.

John Goethals

INVENTOR:

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ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES C. PUGH, OF AMBIA, INDIANA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **187,557**, dated February 20, 1877; application filed August 14, 1876.

To all whom it may concern:

Be it known that I, JAMES C. PUGH, of Ambia, in the county of Benton and State of Indiana, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side view, Fig. 2 a vertical longitudinal section on line *c c*, Fig. 3, and Fig. 3 an end view, of my improved car-coupling.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved automatic car-coupling that may be uncoupled with great facility from the top, side, or platform of the car, and coupled in automatic manner, without danger of accidents.

The invention consists of a draw-head with recessed and weighted drop-gate that bears on the link, which is coupled by a spring-hook at the bottom of the car-coupling, the spring-hook entering through a recess at the bottom of the draw-head, as will be hereinafter more fully described.

In the drawing, A represents a draw-head of the usual shape, with curved or tapering mouth for guiding the coupling-link. B is a hook that is applied to a spring, C, secured to the bottom of the draw-head at the rear end, the front end swinging free, so that the spring-hook B enters through a bottom recess, *a*, of the draw-head, and projects into the cavity of the same. A drop-gate, D, is hinged to the top of the draw-head at the inside of the same, and centrally recessed to drop over the projecting hook. The drop-gate is provided with a weighted arm, D′, at the outside, that carries the gate down after the coupling-link has entered the draw-head and passed over the coupling-hook. The sides of the gate bear then on the link and prevent the accidental uncoupling of the same. A sliding and spring-acted block, E, bears on the entering link so as to cushion the same and hold it in contact with the coupling-hook.

A lever, F, is fulcrumed to the outer side of the draw-head, and made of sufficient length to extend to the platform top or side of the car. The lower part of the lever below the fulcrum is bent forward, and then at right angles, back of a bottom shoulder, *b*, across the under side of the draw-head.

When the upper part of the lever E is thrown forward, the lower part presses on the spring of the coupling-hook, as shown in Fig. 3, and withdraws the hook from the draw-head, producing, thereby, the uncoupling of the link.

The drop-gate is retained by an outside stop-pin, *d*, supported on the weighted arm, from swinging beyond a certain inclination and interfering with the ready uncoupling of the link on the lowering of the hook.

For coupling, the lever is released from the spring-hook, the link passing then over the same by raising the gate and coupling automatically by dropping back of the hook.

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

1. The combination of a draw-head having central bottom recess, with a spring-hook and swinging recessed drop-gate, for coupling the entering link, substantially as and for the purpose set forth.

2. The combination of draw-head A, spring-hook B C, weighted drop-gate D, and spring-acted block E, substantially as described.

3. The drop-gate D, having weighted outer arm, in combination with outer stop-pin *d* of draw-head, to prevent gate from swinging beyond a certain inclination, for the purpose set forth.

JAMES CRAWFORD PUGH.

Witnesses:

GEORGE D. STELLE,
DENNIS HOLDEN,
CHARLES L. ROSENQUEST.