

J. G. WILSON.
Car-Coupling.

No. 162,449.

Patented April 20, 1875.

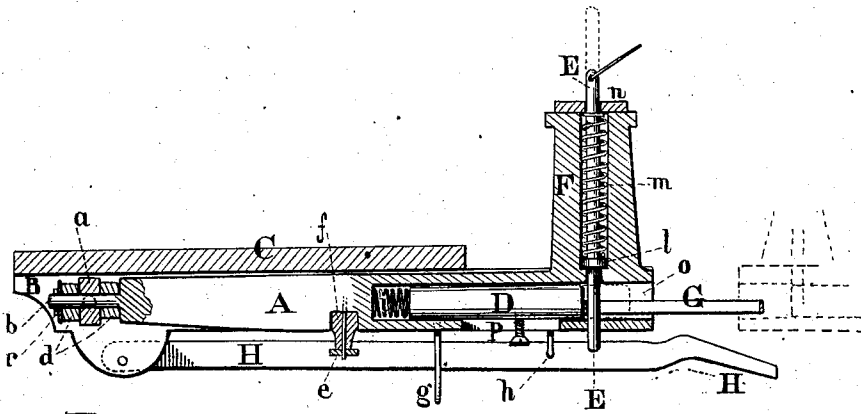


Fig. 1 (Vert. sec. along line aa. fig. 2.)

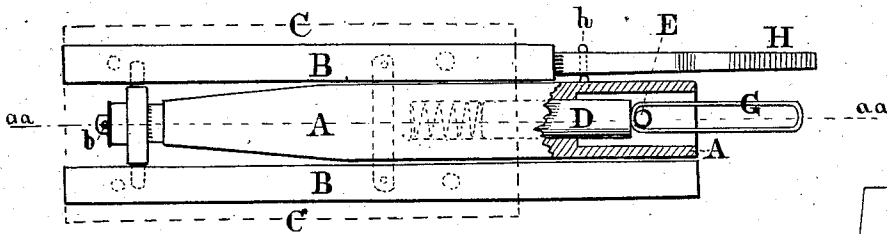


Fig. 2. (Sectional plan)

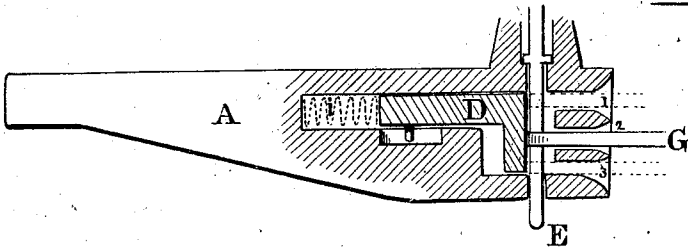


Fig. 3.

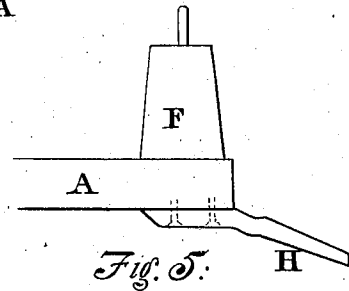


Fig. 5.

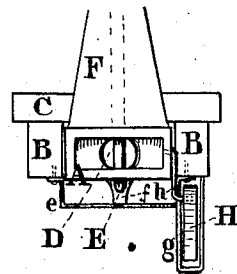


Fig. 4.

Witnesses.
Clarence Shulow
John Adanson

John G. Wilson (by E. Shurtzke his atty-in-fact)

UNITED STATES PATENT OFFICE.

JOHN G. WILSON, OF COATESVILLE, INDIANA, ASSIGNOR OF ONE-FOURTH HIS RIGHT TO CHARLES W. ELROD, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPINGS.

Specification forming part of Letters Patent No. 162,449, dated April 20, 1875; application filed December 30, 1874.

To all whom it may concern:

Be it known that I, JOHN G. WILSON, of Coatesville, in the county of Hendricks, in the State of Indiana, have invented an Improvement in Car-Couplings; and do hereby declare that the following is a full, clear and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a longitudinal vertical section, through center of the draw-bar or coupling, along line *a a a a*, Fig. 2; Fig. 2, a plan view of the same, the wood-work C removed to show draw-bar clearly; Fig. 3, a vertical longitudinal section of a second form of slide D and draw-bar link-entrance; Fig. 4, end view of coupling; Fig. 5, a second form of lever for depressing the draw-bar.

This invention consists of a draw-bar for cars, capable of elevation and depression, and provided as usual with a hollow to receive the link to be retained by the usual vertical pin, but which I keep down by means of spiral spring coiled thereon. For the purpose of ready coupling of the link to another car, the link is held extended in a horizontal position by means of the abutment of a spring-slide against the inner end of the link, in such a manner as to retain it between said slide and the vertical coupling-pin. The draw-bar is elevated or depressed at its outer end to connect the link with other cars by means of a lever or handle on the side of said bar, the bar itself being supported on a short axle or pivot at its inner end and near its middle part, by a spring resting upon a cross-support beneath it, attached to side pieces independent of the draw-bar. The link-opening may be made with several entrances for the link at different levels, all opening upon the coupling-pin and sliding-block in the chamber behind, for the purpose of accommodating the draw-bar and link to the same parts of different cars.

In the drawings, which represent one of the forms in which I make my car-couplings, A is the draw-bar, supported at its inner end between the parallel side pieces B B, upon a short pivot-axle, *a*, its connection here with the latter being guarded against sudden jars

in direction of its length by the rubber blocks *d d*, or between the shoulder and the retaining-pin *r*, which keeps the end of the bar within its socket in said pivot-axle. Toward the outer end of the draw-bar it is supported by a spring, *f*, set in a socket upon the cross-bar *e*, attached to the side pieces B B, which are, in turn, fixed securely to the car or bottom thereof. D represents a sliding block, actuated in its socket in the axis of the draw-bar by a spring, *i*, behind it, so as to hold the coupling-link G out horizontally for ready coupling to another draw-bar, and also for the purpose of raising the pin E when the link is withdrawn ready for descent, when the next link, entering the draw-bar, forces this slide back onto its spring *i*. F represents a vertical socket or coupling-pin guard rising from the outer end of the draw-bar A, and inclosing said pin E, which passes completely through both this socket and the chamber of the draw-bar, (as in similar pin-connections,) when the link is retained by it, but can be withdrawn upward by the hand of the operator, to let the slide D support it, ready for the entrance of the link G, which, striking said slide, forces it backward, and the coupling-pin descends, shot downward on the instant into the link actuated by the coiled spring *m*, which abuts upon a collar on said pin and against the upper end of the socket. The link-receptacle *o* of the draw-bar I also construct with two to three openings, 1 2 3, each terminating in a common chamber behind, in front of the head of the sliding block D, which then is made hammer-headed, or extended beyond its stem at right angles to receive a link at either opening, (1 2 3, see Fig. 3,) or presented at different heights from promiscuous cars. This end of the draw-bar is, in addition to this, depressible for the same purpose by means of the lever or handle H, pivoted to one of the side pieces B, and attached, by a short rod, *h*, to the draw-bar, or else, as in Fig. 5, by a simple handle, H, attached to the outer end of the draw-bar itself.

The advantages of this coupling are that the coupling-link is held out horizontally for the facility of coupling to the next car; also, that when the link is withdrawn the sliding block

D holds this pin aloft for the entry of the link; also, that the link-entrance of draw-bar can be accommodated to the link of an approaching car, at different levels, in two different manners, *i. e.*, first, by the pressure of the hand on the lever H; secondly, by the provision of several openings or divisions of the link-entrance of the draw-bar.

What I claim as my invention is—

The lever H, and connecting-rod *h*, combined with the draw-bar A, having its rear end at-

tached to a pivot-axle, *a*, and provided with the usual spring sliding block D and guard F, constructed to operate substantially as set forth.

In testimony that I claim the foregoing car-coupling, I have hereunto set my hand this 17th day of December, 1874.

JOHN G. WILSON.

Witnesses:

JOHN A. PHILLIPS,
GABRIEL M. FIGG.