J. G. WILSON.

Car-Coupling.

No. 162,449. Patented April 20, 1875.

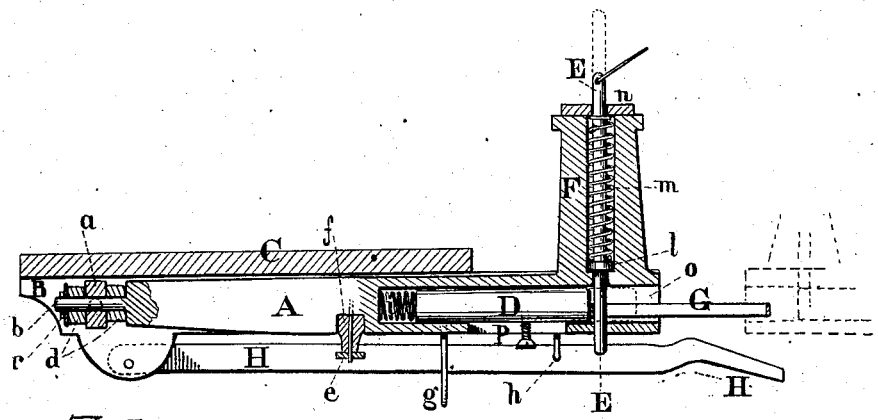

Fig 1 (Vert. sec. along line a a. fig 2.)

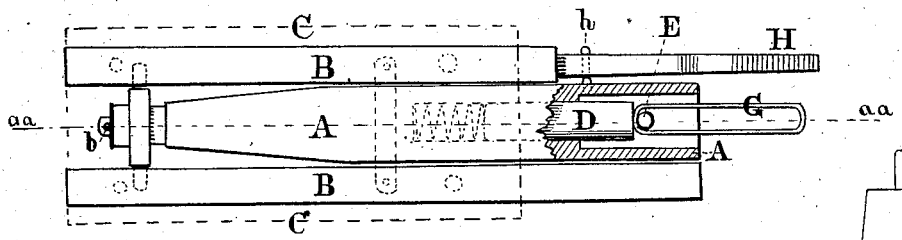

Fig. 2. (Sectional plans)

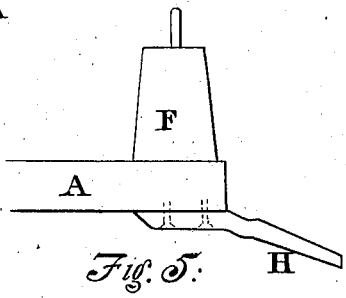

Fig. 5.

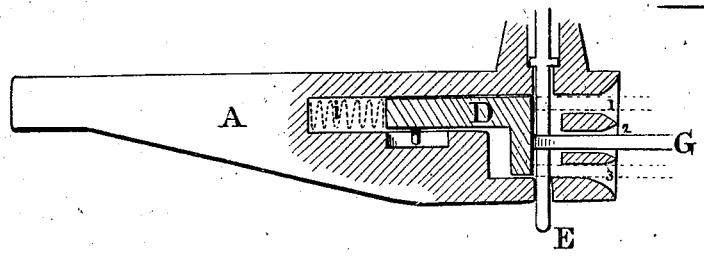

Fig. 3.

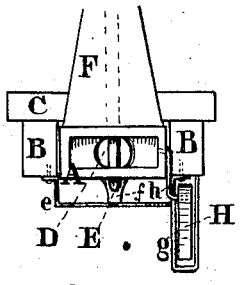

Fig. 4.

Witnesses.
Clarence Thurlow
John Adamson

John G. Wilson (by E. Thurlow 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-COUPLINGS.

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 C. 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 attached 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.