

G. THOMAS.
Car-Couplings.

No. 152,533.

Fig. 1.

Patented June 30, 1874.

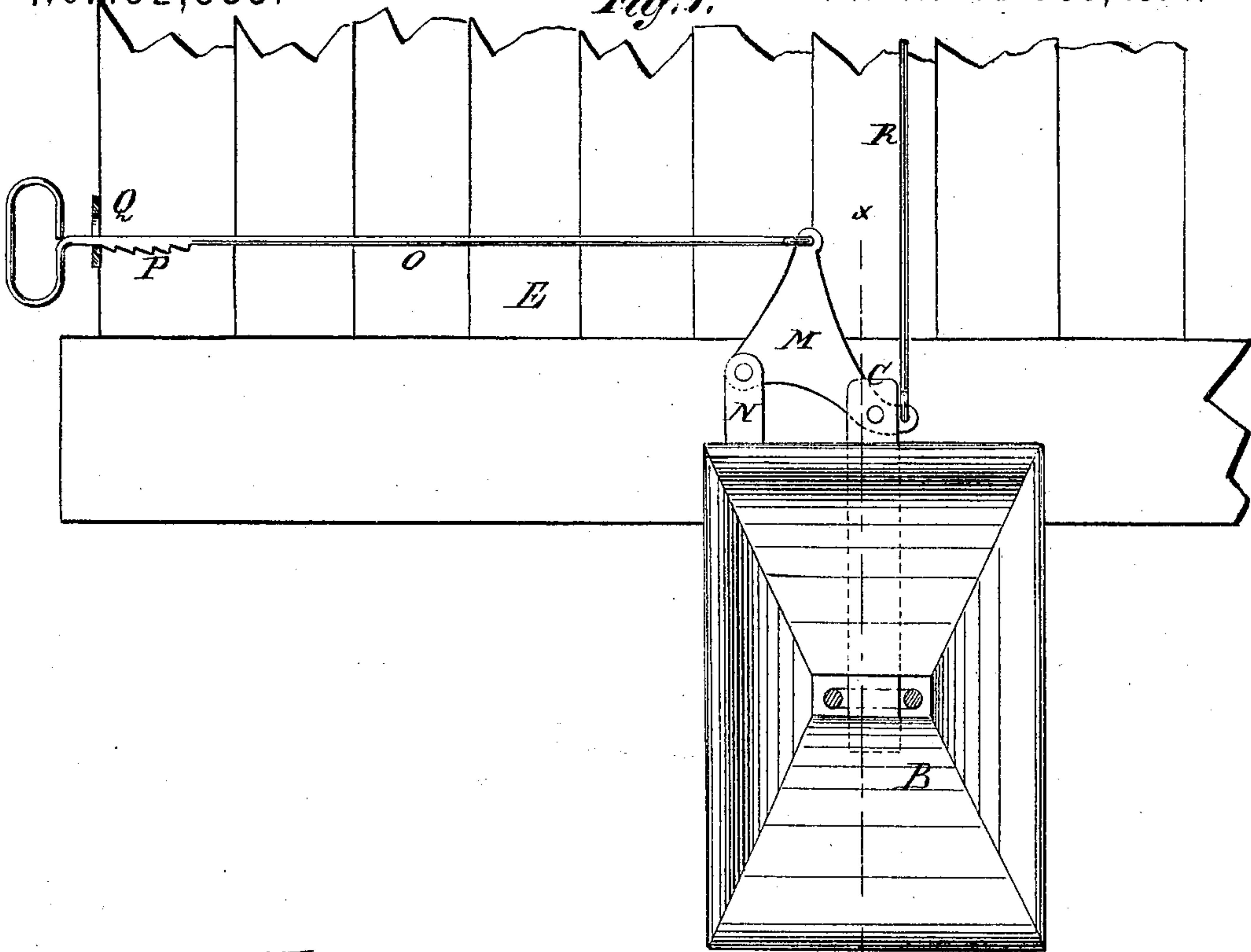
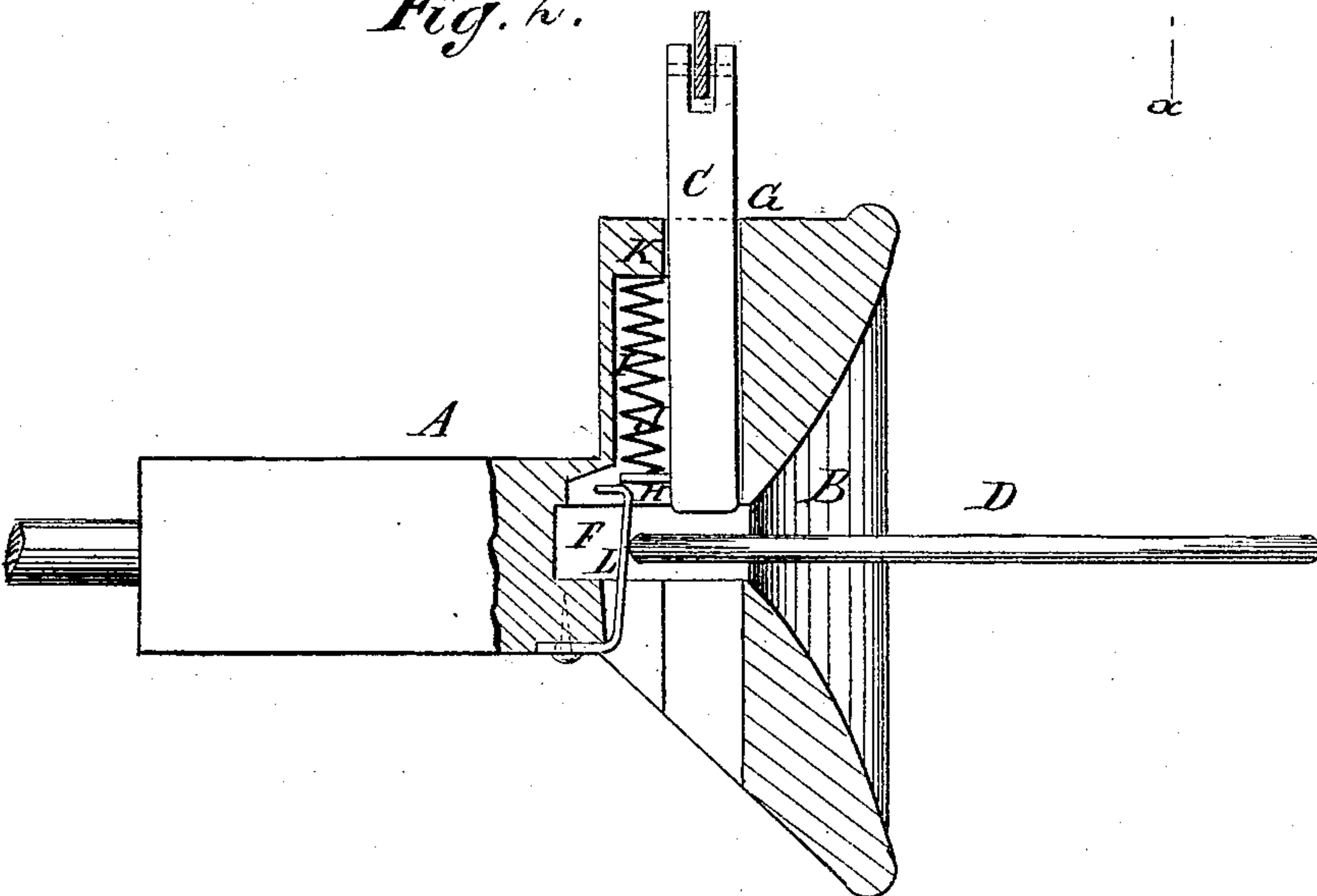


Fig. 2.



WITNESSES.

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IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **152,533**, dated June 30, 1874; application filed
March 28, 1874.

To all whom it may concern:

Be it known that I, GABRIEL THOMAS, of Reno, in the county of Washoe and State of Nevada, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

Figure 1 is an end view of a freight-car having my improved coupling attached. Fig. 2 is a vertical section of Fig. 1, taken on the line *x x*.

Similar letters of reference indicate corresponding parts.

A is the draw-head. B is the mouth of the coupling. C is the coupling-pin. D is the link. E represents the car. F is the link-opening, and G the coupling-pin opening, in the draw-head. H is a small plate, attached near the lower end to the back of the coupling-pin. I is a spiral spring, placed in a recess, J, behind the pin, which bears downward on the plate with a constant pressure, and reacts against the shoulder K, to throw the pin downward. L is a vertical bracket-spring, attached to the under side of the draw-head, extending up through the link-opening, with its end under the plate, so that it will naturally support the pin when the latter is raised, as seen in Fig. 2.

When the cars come in contact with each other, the end of the link strikes this spring and pushes it from the plate, and the pin is forced down through the link, thus coupling

the cars automatically, and rendering it unnecessary to endanger life or limb by going between the cars when coupling them. For uncoupling the cars, the pin is raised by means of the bell-crank M, which is pivoted to its top end and to the stand N.

O is a rod, which extends laterally from the bell-crank to the side of the car. This rod has a series of ratchet-teeth, P, which catch on the plate Q, (through which the rod passes,) by which means the pin may be held up without the supporting-spring L. R is a rod, (which is also attached to the bell-crank,) which extends upward, by means of which the cars may be uncoupled from the top. This rod is also provided with the ratchet-teeth, and passes through a fixed plate (the same as the other) for holding up the rod. By releasing these rods from the plates, the coupling-pin is forced down through the link.

Neither for coupling or uncoupling is it necessary to go between the cars. This coupling, therefore, answers all the conditions required for an effective and safe car-coupling.

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

The combination of pin C, having rear projection H, with springs I L, as and for the purpose specified.

GABRIEL THOMAS.

Witnesses:

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