A. LANGELLIER.

Car-Coupling.

No. 159,425. Patented Feb. 2, 1875.

Fig. 1.

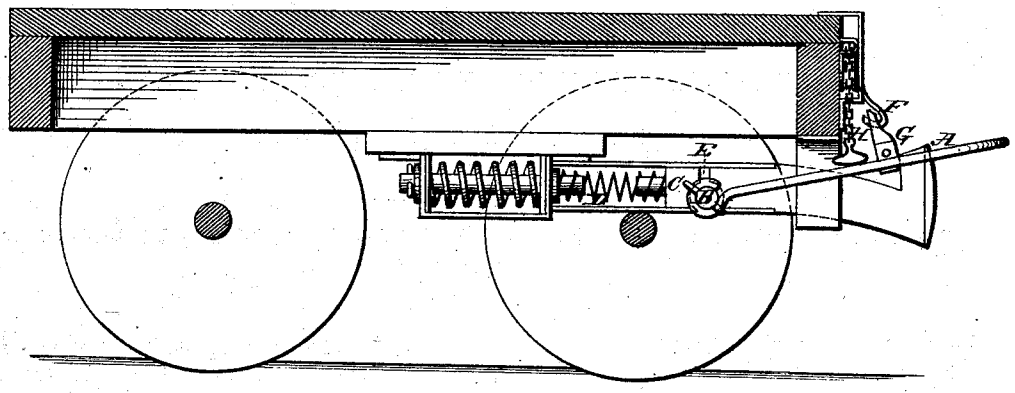


Fig. 2.

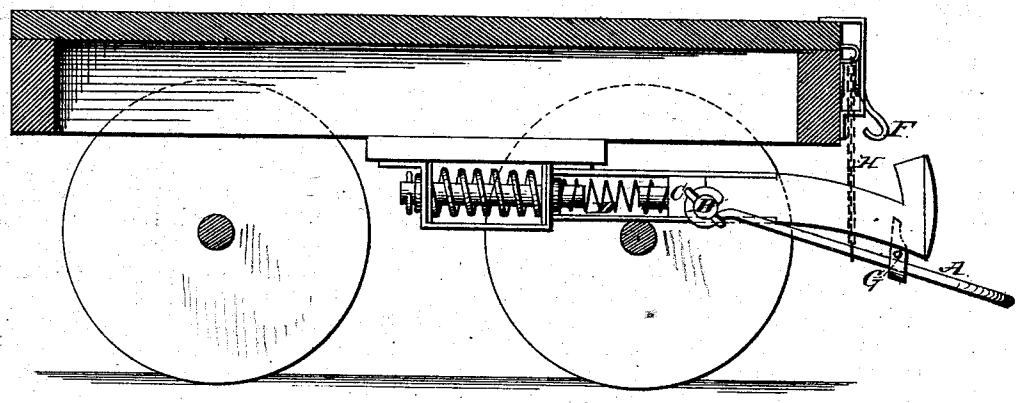
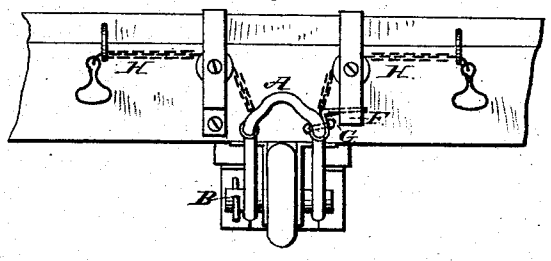


Fig. 3.



Attest:

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Joseph Wilcome.

Inventor:

Antoine Langellier.

UNITED STATES PATENT OFFICE.

ANTOINE LANGELLIER, OF CONCORD, NEW HAMPSHIRE.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **159,425**, dated February 2, 1875; application filed April 3, 1874.

To all whom it may concern:

Be it known that I, ANTOINE LANGELLIER, of Concord, in the county of Merrimack and State of New Hampshire, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification:

The device herein described is an improvement upon my coupling patented August 12, 1873, Letters Patent No. 141,648.

Figure 1 represents a side view of my invention, with the link in position for automatic coupling; Fig. 2, a similar view with the link in a different position, and Fig. 3 a front view.

A is the link. B is a pin passing through the draw-bar, to which the link is attached, as shown. The pin B is not round, but in section egg-shaped, as shown, with the large end of the section down. C is a sliding block of iron or metal, movable in a slot formed in the draw-bar. D is a spiral spring acting upon the movable block C, and pressing it forward against the pin B. F is a catch, and G a pawl which engages therewith when the link is raised up, and holds up the link. H H are chains passing over pulleys, by which the link may be raised from either side the car without passing between the cars. The link is shown in the drawings in the position which it occupies when the cars are coupled. The forward end of the sliding block C is made to conform in shape to the pin, against which it presses, and the portion of the draw-bar against which the pin acts is also made to conform to the shape of the pin. When the link is raised up the pin B is turned by the movement of the link, and the sliding block C forced back against the spring, so that when the link is released the spring D acts to force the link down again to its place, and to hold it down, thus preventing the cars from becoming uncoupled by jolting or sudden shocks.

In the coupling described in my patent above referred to, the pin to which the link was attached passed through the draw-bar at a fixed point, and it was found that the links were broken in case the draw-head or car should strike by accident against the forward end of the link. The spiral spring D in such case prevents this breakage by permitting the link to be forced back in such cases till the draw-head or bunters of the car receive the shock.

The link as employed in my former patent could have no lateral motion. By my present device, when not in use, the link is dropped down below the draw-head, where it hangs suspended by the chains H H, and can swing laterally, so as not to be broken by a blow or shock upon the side. The link is raised, when the cars are to be coupled, till the pawl G engages with the catch F and holds the link up. When the draw-heads meet, the shock releases the link, and it drops down and catches the draw-head of the approaching car, substantially as described in my former specification.

I claim—

The sliding block C, in combination with the pin B, spiral spring D, and link A, to operate as and for the purposes set forth.

ANTOINE LANGELLIER.

Witnesses:

CHAS. C. LUND,

JOSEPH WELCOME.