

UNITED STATES PATENT OFFICE.

CHARLES BOWMAN, OF HANOVER, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **161,671**, dated June 2^d, 1875; application filed May 10, 1875.

To all whom it may concern:

Be it known that I, CHARLES BOWMAN, of Hanover, in the county of York and State of Pennsylvania, have invented a certain new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, in which—

Figure 1 is a side view of a car-platform and draw-head having my improvement applied thereto, and Fig. 2 is an end view of the same.

My invention relates to an improvement in self car-couplings, and consists in the combination of a locking-key, weighted lever-bar, arranged to rest upon the truck-frame, and suitable arms or levers, whereby the gravity of the weight will cause the key to interlock with the coupling-link, from which it will be disconnected either by pressure upon one end of the jointed lever-arm above the car-platform, or by an unusual motion of the car-truck frame upon which the weight rests, should said car and truck run off the track.

Referring to the drawings, A represents the car-platform, and B the draw-head secured thereto in the usual way. The bar *c*, which is pivoted in a forked arm, *d*, carries at one end the weight *e*, and at the other a pivoted key, *f*, which enters the draw-head through a slot in the under side thereof. This key, which is depressed by the action of the coupling-link against its outer beveled edge, will, after the link has passed over it, be forced into connection therewith by reason of the weight *e*, which, when it has reached its lowest limit, rests on the truck-frame, as shown by dotted lines in Fig. 2. To the lower end of rod *g*, which is located at one side of the draw-head,

is pivoted a bar, *h*, which operates upon the lever *c* just back of its locking-key, and is jointed at *h*¹ with a vertical arm, *h*², which passes up through the platform and terminates in a knob or handle, *i*. Under ordinary circumstances the cars may be uncoupled by simply depressing the lever-arms *h*² *h*, whereby the weight *e* will be elevated and the key *f* withdrawn from the coupling-link. Should, however, the car and truck jump the track, the unusual jolting or tilting of the truck-frame will raise the weight resting thereon a sufficient distance to perform the same function. By this arrangement of devices a simple and effective self-coupler and self-uncoupler is produced, and the danger of accidents greatly lessened.

I am aware that a self car-coupling operated by a spring is not new, but I am not aware that a weighted lever, constructed as described, and arranged to rest upon the truck-frame, has ever been constructed.

What I claim as my invention, and desire to secure by Letters Patent, is—

The herein-described self-coupling and self-uncoupling device, constructed with a lever-bar, *c*, carrying at one end the key *f*, and at the other a weight, arranged to rest upon the truck-frame, as described, whereby the said lever may be operated for the purpose of uncoupling-cars either by arms *h* *h*² or by an upward tilt of the truck-frame, substantially as shown and specified.

In testimony whereof, I have hereunto set my hand this 26th day of April, 1875.

CHAS. BOWMAN.

Witnesses:

DAVIS GARBER,
A. D. KOHLER.