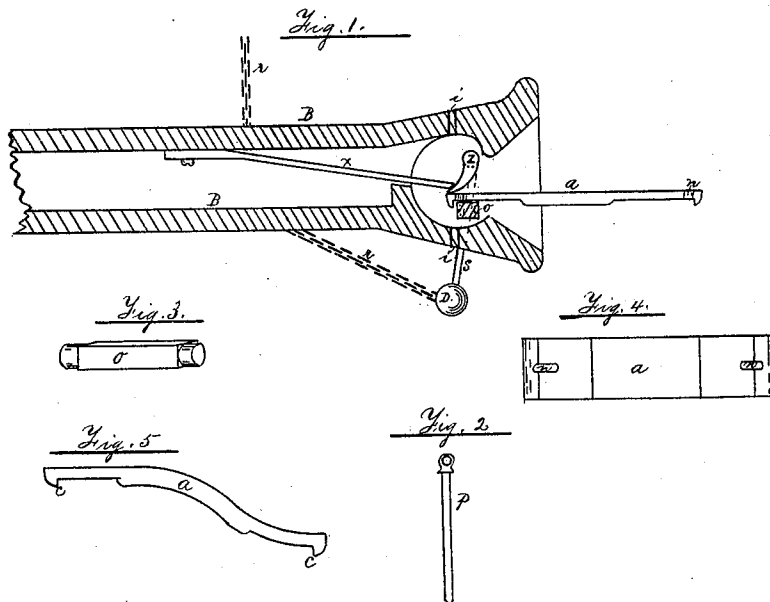


M. B. OGDEN.
CAR-COUPLING.

No. 179,216.

Patented June 27, 1876.



Witnesses

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MARSHALL B. OGDEN, OF JOLIET, ILLINOIS.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **179,216**, dated June 27, 1876; application filed August 31, 1874.

To all whom it may concern:

Be it known that I, MARSHALL B. OGDEN, of Joliet, Will county, Illinois, have invented an Improvement in Car-Couplings, of which the following is a specification:

The object of my invention is to furnish a more convenient and safe mode of coupling cars together, the construction and operation of which I will proceed to explain, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents a longitudinal sectional view of the device through the center of the same; Fig. 2, a perspective view of the coupling-pin P; Fig. 3, a perspective view of the coupling-roller *o*; Fig. 4, a plan view of the bottom of the coupling-link *a*; and Fig. 5, a side view of the crooked coupling-link *a*.

Referring to the drawings, B, Fig. 1, represents a longitudinal view of the bumper, constructed with a flaring mouth to easily receive the coupling-link, as in the ordinary manner. *z* is a cam which rolls in its journals at either end in the walls of the bumper, having at one end, on the outer side of the bumper, the lever *s*, with the weight D attached at the extreme end, to hold that end of the lever down. *o* is a square roller, having its position immediately below the cam *z*, just far enough from it to admit the flat coupling-link *a*.

In its operation the coupling-link *a* is shoved in between the cam *z* and square roller *o* (the cam rising up to let it in) far enough to let the hooked point *c* fall down over the square roller *o*. It is then ready for operation, and no ordinary amount of strain can break the parts or uncouple the link. The weight D on the end of the lever *s* serves to hold down the cam *z* in the position shown in the drawing. The spring *x* is used to hold down the inner end of the link *a*, so it will lie in a horizontal position, as shown, so it will readily enter the opposite bumper. The spring *x* is also used to assist in holding the cam *z* down to its work, and bring it back in place after being lifted up to let out or receive the coupling-link *a*.

One of the principal advantages of this device is that the cars may be uncoupled while the cars are in motion and while there is a

heavy pull on the coupling-link *a*. This may be done by means of pulling on the chain *r*, which is attached to the weight D. This chain *r* may run up the end of the car to the top, if necessary, or to any convenient place to facilitate its use. However, any other convenient device or means may be used to lift the lever *s*, so as to roll the cam *z* when desired.

The coupling-link *a* is constructed in the shape shown of a flat strip of metal, with the hooks *c* at each end to catch over the square roller *o*, as stated; and with the two holes *n* at each end, so a coupling-pin, P, may be used, if desired, which would pass down through the bumper B in the holes *i*, just at the rear side of the roller *o*. This link *a* may be bent, as shown in Fig. 5, so as to accommodate itself to any height corresponding with the opposite bumper.

The bumper B and its parts are so constructed that the ordinary elliptical link may be used where this kind of a bumper might be used with a common bumper, and be coupled with the pin P, as ordinarily used.

By the use of this device all danger is obviated from going in between the cars to uncouple them. This may all be done from the top of the car or from the platform, as stated.

There can be no voluntary uncoupling of the car, as the weight D will always hold the cam *z* downward on the link, so it cannot by any possibility get out.

The link, being constructed in this shape, is much more durable than the old kind, and answers the same purpose, the whole forming the most complete and durable car-coupling known.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

The car-coupling described, having the hollow bumper B, carrying the spring *x*, cam *z*, square roller *o*, (having attached to it the lever *s*, ball D, and chain *i*), and the flat link *a*, all arranged as and for the purposes described.

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Witnesses:

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