

(No Model.)

W. V. BROWN & T. S. POOLE.

CAR COUPLING.

No. 287,619.

Patented Oct. 30, 1883.

Fig. 1.

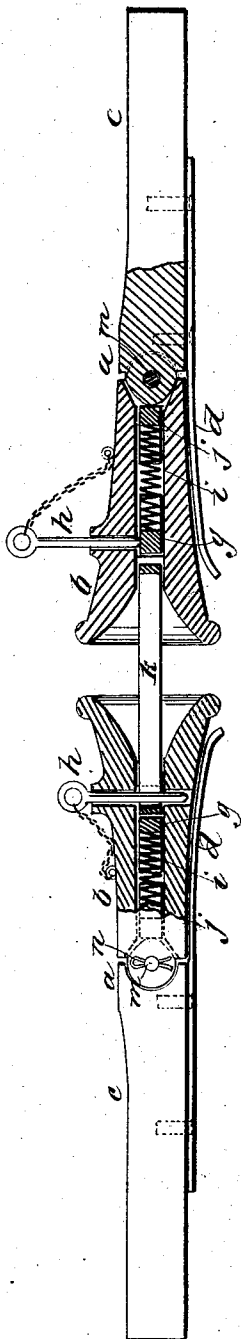


Fig. 2.

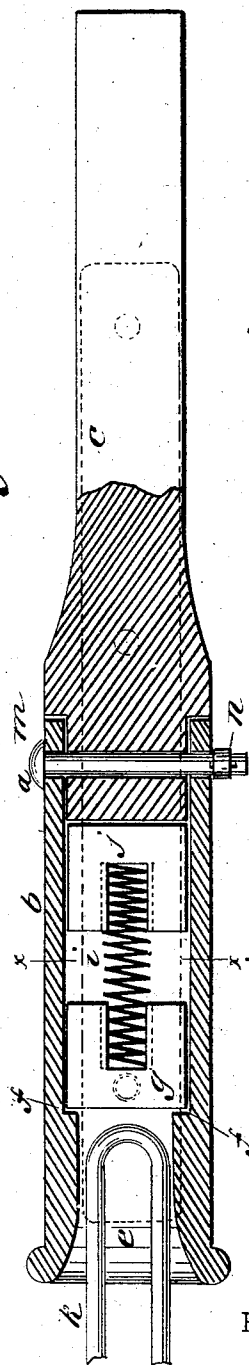
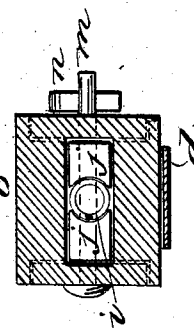


Fig. 4.



Fig. 3.



WITNESSES:

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WILLIAM V. BROWN AND THOMAS S. POOLE, OF ARCADIA, NOVA SCOTIA,
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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 287,619, dated October 30, 1883.

Application filed April 10, 1883. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM V. BROWN and THOMAS S. POOLE, of Arcadia, Yarmouth county, Nova Scotia, Canada, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The nature of our invention is such that cars or other vehicles fitted with our improved coupler can be expeditiously, conveniently, and securely coupled together without manual intervention, thereby effecting a saving in time and labor and avoiding danger to life and limb. The said improved coupler can be readily applied to and advantageously used upon or in connection with cars of varying heights. It can also be used in connection with many of the couplers at present in use, and with more ease and safety than most couplers, especially in going around curves or up and down gradients in the road-bed. It may be used with a link or a bar, and works with less risk of breaking or straining the link or bar than others. It is strong, durable, simple, cheap, and easily repaired or replaced in case of being damaged, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of our improved car-coupler. Fig. 2 is a horizontal section of one of the draw-bars. Fig. 3 is a transverse section of Fig. 2 on line *x x*. Fig. 4 is a perspective view of a coupling-bar that may be used instead of the ordinary link.

We make a joint in the draw-bar at *a*, by which we connect the front or socket part, *b*, to the shank *c*, that is to be connected to the car in any approved way, the joint being so that part *b* may swing up and down to accommodate the coupler to cars of different heights, and we arrange the spring *d* to hold up part *b* level with part *c*, the spring being so attached to the under side of the latter, and projecting from it midway, or thereabout, along under

part *b*, that it will not raise it above said part *c*; but the joint is so that it may rise higher when coupled with a higher car.

The link-socket *e* is extended through part *b*, and is a little wider from the shoulders *f* back than forward, so that the block *g*, inserted from behind to hold up the pin *h* for self-coupling, and pressed forward by a spring, *i*, will be arrested by said shoulders to hold up the pin. The spring is confined in a notch in said block and a notch in a corresponding block, *j*, which rests against the forward end of the part *c* of the draw-bar, to cause the spring to slide block *g* forward under the coupling-pin when it is lifted. The pin is then let fall back on the block to be set, as represented at the right hand of Fig. 1, for self-coupling, when the link *k* or coupling-bar *l* of the other coupler enters and pushes the block back from under the pin to allow it to fall through the link. When the pin is down and the link is coupled, the spring presses the link forward against the pin to hold it in the position for entering and tripping the pin in the other draw-bar.

The flare of the bell-mouth of the link-socket allows the link sufficient lateral play, while the vertical play of joint *a* allows the required vertical play of the link at the same time that it is held up level for self-coupling. The pivot-bolt *m* of the joint *a* is secured by the split key *n*, to prevent it from being lost out.

It will be seen that the joint *a* affords a simple means of adjusting the coupler to cars of different heights; also, it enables the blocks *g j* and spring *i* to be readily and securely applied.

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

1. In a car-coupler having a pin setting and tripping device, and being arranged to hold the coupling link or bar up level for self-coupling, the draw-bar having the joint *a*, and the spring *d*, to allow vertical play of the link, and to hold the part *b* of the draw-bar level, substantially as described.

2. In a car-coupler having the pin-setting block *g* and the spring *i* for setting the pin, the said block and the spring, and the spring-holding block *j*, in combination with a draw-bar having a joint, *a*, and the part *b* of the draw-bar, having the link-socket extended through it to receive said spring and block from behind, and being provided with the shoulders *f*, substantially as described.

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Witnesses:

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