(No Model.)

J. P. EAKIN.

CAR COUPLING.

No. 340,298. Patented Apr. 20, 1886.

Fig. 1.

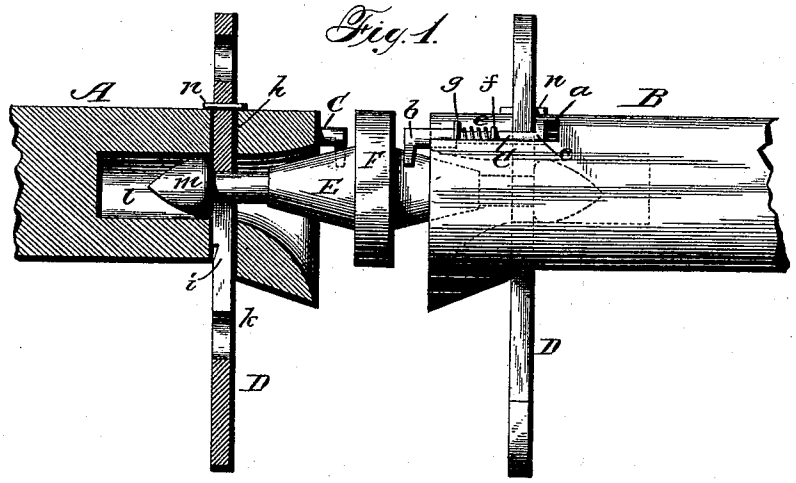


Fig. 2.

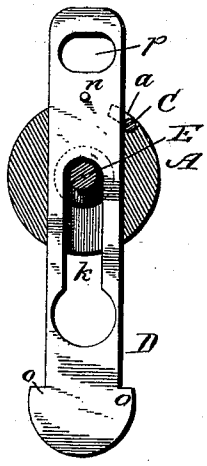


Fig. 3.

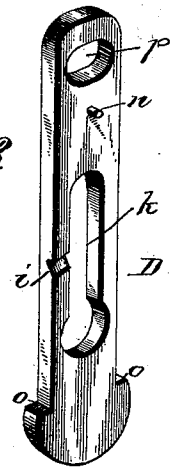


Fig. 4.

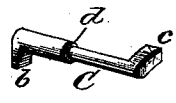
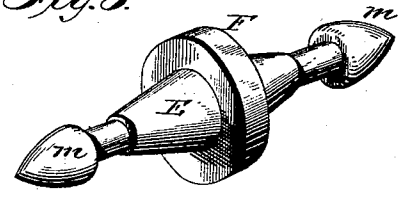


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN PIERCE EAKIN, OF JOLLYTOWN, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 340,298, dated April 20, 1886.

Application filed February 26, 1886. Serial No. 193,310. (No model.)

To all whom it may concern:

Be it known that I, JOHN PIERCE EAKIN, a citizen of the United States, residing at Jollytown, in the county of Greene and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side elevation of my invention with one of the draw-heads in section; Fig. 2, a cross-section of Fig. 1; Fig. 3, a detail view in perspective of the vertical coupling-link; Fig. 4, a similar view of the latch, and Fig. 5 a perspective view of the draw-bolt.

The present invention has for its object to provide a simple, effective, and easily-operating car-coupling, that will be automatic in its action, thus avoiding the danger in coupling the cars; and the invention consists in the details of construction substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A B represent the two opposing draw-heads of the railroad-cars, formed upon their exterior with L-shaped recesses *a*, in which are seated latches C. These latches consist of rods having at their extremities arms *b c*, disposed at right angles to each other, as shown in Fig. 4, a shoulder, *d*, being formed on the rods, against which bears one end of a spiral spring, *e*, coiled around the rod, and the opposite end of said spring abutting against a guide, *f*, through which the rod passes and is guided in its movement, a similar guide, *g*, being employed for the larger end of the rod.

To one side of the recess *a* and joining therewith is a vertical slot, *h*, extending entirely through the draw-head, to receive the vertically-sliding coupling-link D. The link D is formed on its inner face with a notch, *i*, with which engages the arm *c* of the latch, to hold the link elevated to couple with the opposing draw-head. The link D is provided with any suitable means for attaching to its upper end a chain, lever, or other device, whereby it may be raised from the top or either side of the car, and the link has a slot, *k*, enlarged in width at its lower end, so that when the enlarged portion of the slot is on line with the opening *l* in the draw-head it will allow the conical head *m* of the coupling or draw bolt E to pass through the slot in the link. The draw-bolt E is formed with a bumper, F, to operate the spring-latch C when brought against it, thus releasing the arm *c* with the notch *i*, and allowing the link to fall of its own weight, a pin, *n*, on the link forming a stop to prevent the link from falling too far through the draw-head, and shoulders *o* on the lower end of the link preventing it from being drawn too far up or out of the draw-head. The opening *l* in the draw-head is flaring at its outer end, in order to receive the draw-bolt E at any angle, and when the link D is in an elevated position and is held by the arm of the latch C, engaging with the notch *i*, it is ready for coupling with the opposite draw-head, carrying the draw-bolt E, the head *m* thereof as the two draw-heads come together entering freely the lower or enlarged end of the slot, and as the bumper F strikes against the arm *b* of latch C it forces the arm *c* out of engagement with the notch *i*, and immediately thereafter the link will descend of its own weight and firmly hold the bolt E in the contracted or narrow portion of the slot *k*. When uncoupling the draw-heads, one of the links is raised until the lower or larger end of the slot therein is on line with the opening in the draw-head, and when the notch in the link is opposite the inner arm of the latch the spring thereof will cause it to automatically engage with the notch and hold the link in a position ready for coupling.

To enable the coupling-link to be raised by hand, should it be so desired, the upper end is formed with an opening, *p*.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, the combination, with draw-heads provided with spring-latches and vertical slots through said heads, of vertically-sliding coupling-links having notches with which the latches engage, and slots enlarged at their lower ends, and a draw-bolt provided

with enlarged heads to engage with the links, and a bumper to operate the latches, substantially as and for the purpose set forth.

2. In a car-coupling, a draw-bar having enlarged heads and a bumper, and links provided with notches and stops and slots enlarged at their lower ends, in combination with suitable draw-heads provided with spring-latches consisting of rods having at their extremities arms, and a spring coiled around the rods, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN PIERCE EAKIN.

Witnesses:

JACOB CLOVIS,

A. E. CLOVIS.