

(No Model.)

S. B. MCPHEETERS.
CAR COUPLING.

No. 305,527.

Patented Sept. 23, 1884.

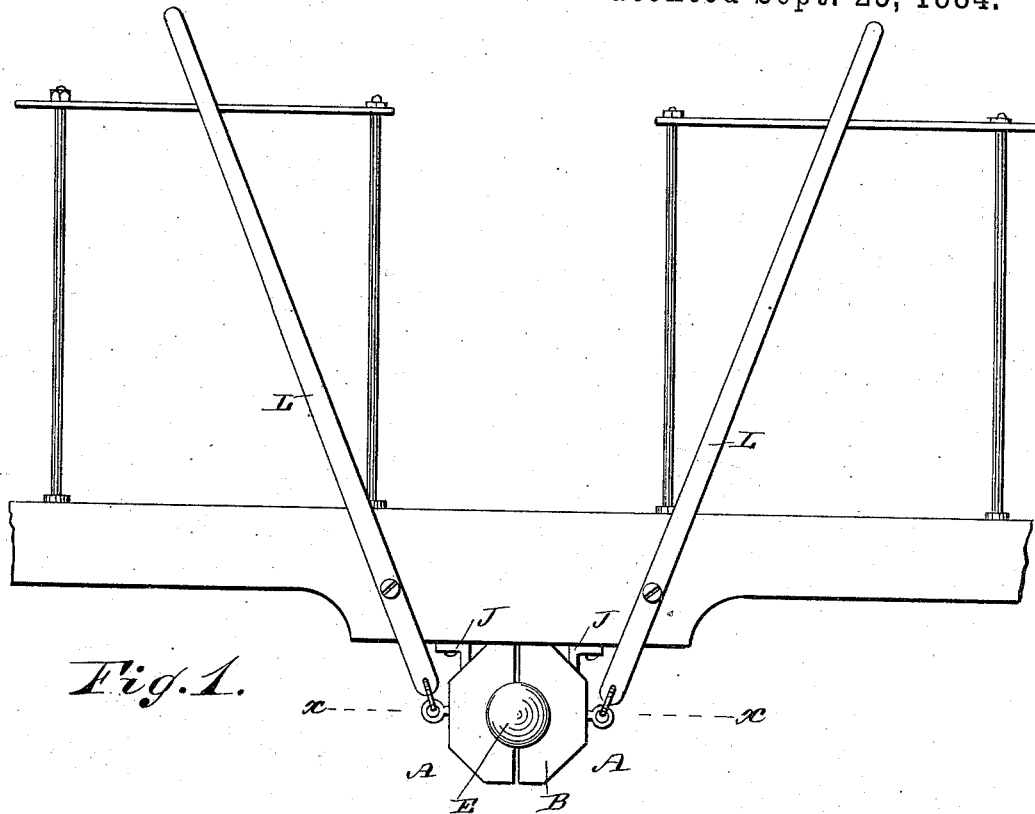


Fig. 1.

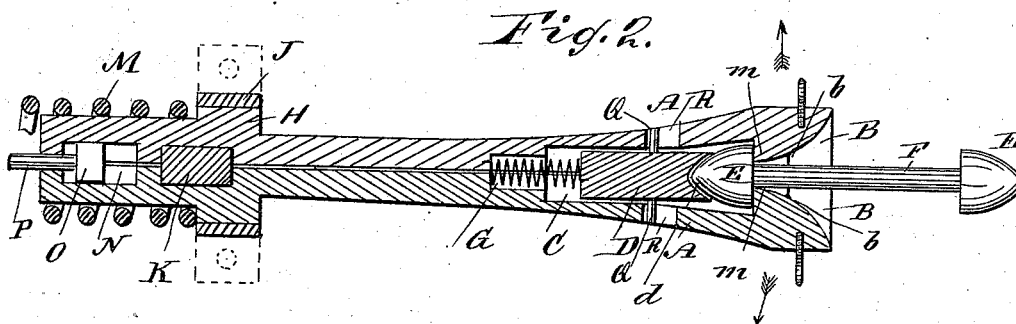


Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 305,527, dated September 23, 1884.

Application filed June 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL B. MCPHEETERS, of Dublin, in the county of Barton and State of Missouri, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The invention consists in the combination, with two spring draw-head sections, each having a tapered recess at the front end, and having a recess at the rear of the tapered recess, of a sliding-block between the sections, a spring for pressing the sliding block toward the front end of the draw-head, a fixed block for preventing the sections from sliding longitudinally on each other, and of a band for holding the two sections together.

The invention also consists in details of construction of the parts of the draw-head, as will be hereinafter described and claimed.

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

Figure 1 is a front end view of my improved coupling. Fig. 2 is a sectional plan view of the same on the line *xx*, Fig. 1.

The draw-head *A* is formed of two longitudinal and like sections, *A*, in the outer end of each of which is a half funnel-shaped recess, *B*, forming, when the two sections are placed together, the link-opening, and behind the said recess *B* is a triangular recess, *C*, which recesses *C* form, when the sections are placed together, a chamber in which a buffer-block, *D*, is held to slide, which block is provided in its outer end with a recess, *d*, adapted to receive one of the rounded tapered heads *E* on the ends of a link-rod, *F*. A spiral spring, *G*, arranged behind the buffer-block, presses the said block toward the outer end of the draw-head.

Near the rear end of the draw-head a fixed collar, *H*, is formed, which is surrounded by a band or stirrup, *J*. This band is suspended from the bottom of the car, and serves to hold the two sections *A* together at that point, and also as a support for the inner end of the draw-head. The rear part of the draw-head behind the collar *H* is surrounded by a powerful

buffer-spring, *M*. A key, *K*, is held in grooves in the inner sides of the sections to prevent the sections from moving longitudinally on each other.

Near the rear end of the draw-head a recess, *N*, is formed in the sections *A* to receive the head *O* of a rod, *P*, attached to the bottom of a car for limiting the longitudinal movements of the draw-head. A flat bar or a pin, *Q*, extends from the outer side of each section *A* into a slot, *R*, in said section to retain the duffer-block *D* in place when the sections *A* are spread apart. Two levers, *L*, are pivoted on the end of the car, one on each side of the draw-head, which levers have their lower ends pivoted to the outer surfaces of the sections *A* at the outer ends. The levers *L* can be arranged in any suitable manner to suit the car or its platform, and can be extended to the roof of a box-car. The inward convex curve of the recesses *B*, forming the link-opening from the end of the draw-head, is such that a ridge is virtually formed at *b* in said opening, against which the link *F* will take in case a car is derailed, and thereby spread the sections *A* apart, allowing the head *E* of the link to come out of the draw-head.

The operation is as follows: One of the tapered rounded heads *E* is forced into the funnel-shaped mouth of the draw-head, and forces the two sections *A* apart, and the head *E* passes into the front part of the chamber formed by the recesses *C*. The end of the head strikes the block *D* and the spring *G* breaks the shock. As soon as the wider end of the head *E* has passed the shoulders or offsets *m* at the inner end of the funnel-shaped mouth, the two sections *A* spring together, the offset *m* being in front of the wider end of the head *E*, and thus holding the link-rod in place. If a car is to be uncoupled, the outer ends of the sections are swung from each other by means of the levers *L*, which releases the link-rod.

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

1. In a car-coupling, the combination, with

the draw-head sections A, having recesses B and C, of the band J, the sliding block D, the spring G, and the levers L, pivoted to the end of the car and to the sections A, substantially as herein shown and described.

5 2. A car-coupling consisting of the spring draw-head sections A, secured together by

the band J, recess N, head O, within said recess, rod P, and spring M, in rear of the band J, substantially as set forth.

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Witnesses:

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