

(No Model.)

J. KREHBIEL.
CAR COUPLING.

No. 475,573.

Patented May 24, 1892.

Fig. 1.

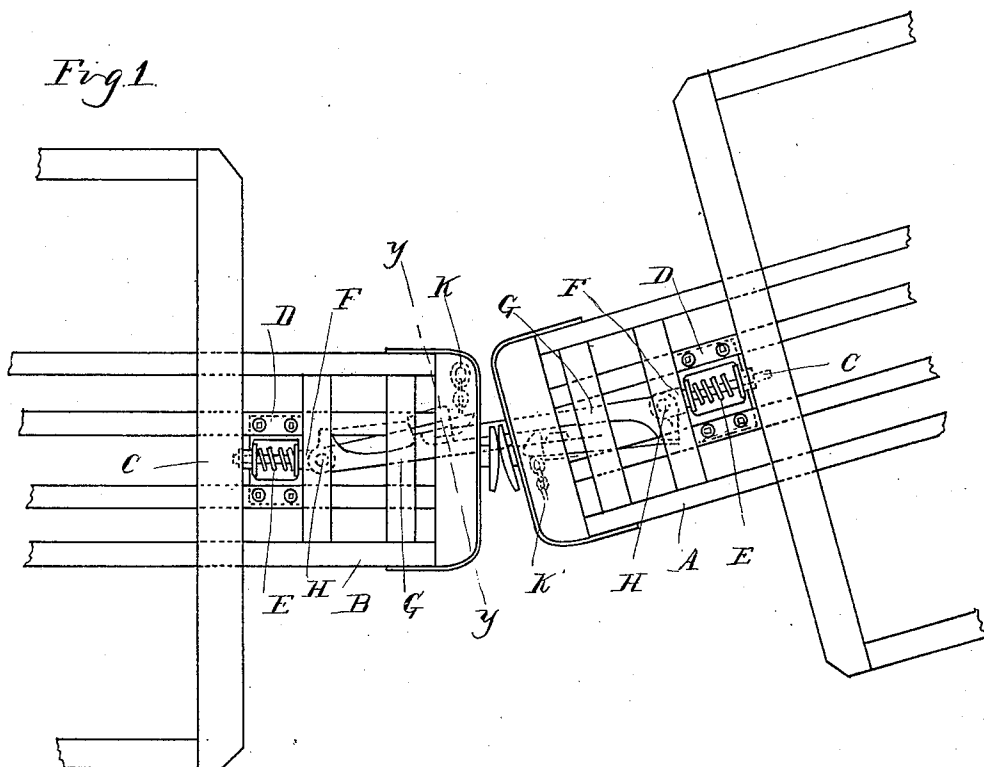


Fig. 2.

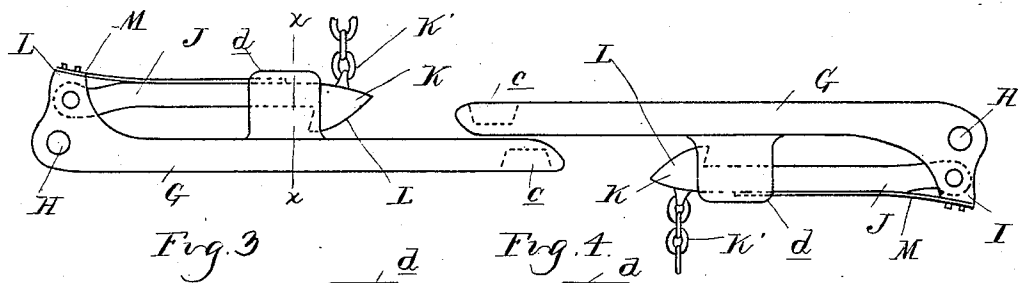


Fig. 3.

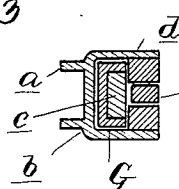
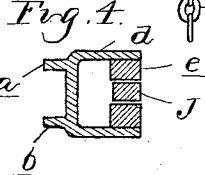


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN KREHBIEL, OF CLEVELAND, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 475,573, dated May 24, 1892.

Application filed August 18, 1891. Serial No. 402,996. (No model.)

To all whom it may concern:

Be it known that I, JOHN KREHBIEL, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in car-couplers; and the invention consists in the peculiar construction of the draw-bar hinged to the draft-rod and a hook for engaging with the draw-bar of the adjoining car, pivoted to its draw-bar and extending parallel thereto, all so arranged that there is no lateral strain upon the parts when the cars assume an angular position to each other, and whereby the cars may be coupled or uncoupled in such angular relation without difficulty.

The invention further consists in the peculiar construction; arrangement, and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a plan view of the platforms of two adjoining cars to which my couplers are attached. Fig. 2 is a plan view of the coupler, showing them as in the act of coupling. Fig. 3 is a cross-section on line *yy* in Fig. 1. Fig. 4 is a cross-section on line *xx* in Fig. 2.

A and B are two car-platforms of adjoining cars adapted to be coupled together. Each car is provided with a coupler of similar construction, and a description of one will suffice for both.

C is the draft-rod slidingly secured in the draft-frame D and drawing against the draft-spring E. At its forward end it is provided with the head F, to which is hinged a draw-bar G by means of the vertical pivot H. This draw-bar extends some distance beyond the end of the platform and is preferably formed of channel-iron having the flanges *a b* extending outwardly—that is, upon the sides opposite the locking-hook. At its outer end it is provided with a latch-block *c*, formed between the flanges *a b*. Midway of its length are formed the overhanging guide-bearings *d*. At the rear end of this draw-bar is formed an

offset I, to which is pivoted a spring-actuated arm J, provided at its outer end with a hook K, which passes between the lips *e*, formed on the inner faces of the guide-flanges *d*. Suitable unlocking-chains K' are attached to the rear face of the hook upon each car. The parts being thus constructed, if two cars thus equipped approach each other, each draw-bar G being guided between the hook K and the draw-bar, the inclined face L on the hook will cause it to move away from the draw-bar and allow the draw-block *c* to be engaged by the hooks, the spring M holding it in engagement therewith. In this position it is evident that the cars will be firmly coupled together and the draft will be equally distributed between the two draw-bars, which overlap each other, and thus always maintain them in parallelism without lateral strain.

If the cars assume an angular position to each other, as shown in Fig. 1, the draw-bars will turn upon the pivots I to take up such movement without any lateral strain upon the parts.

To uncouple, the hooks K are disengaged from the draw-bars, when the cars readily separate.

By this construction of coupler I am enabled to couple or uncouple the cars on any curve, be it great or small, and there is little danger of breakage of the coupler, as no lateral strain is possible. The draft is always imparted directly to the draw-bar and spring.

What I claim as my invention is—

1. A car-coupler comprising a draft-rod, a draw-bar hinged thereto free to oscillate laterally, and a hook secured to the draw-bar and extending beside the same, substantially as described.

2. In a car-coupler, the combination, with the draft-rod, of a draw-bar hinged thereto free to oscillate laterally, an offset at the rear of the draw-bar, a hook hinged to said offset, and a latch-block at the forward end of the draw-bar, substantially as described.

3. In a car-coupler, the combination, with the draft-rod, of the draw-bar hinged thereto by a vertical pivot, guide-flanges on the side of the draw-bar at or near the middle, a latch-block at the forward end of the draw-bar, and

a hook pivoted to the side of the draw-bar, having its hook portion between the guide-flanges, substantially as described.

4. In a car-coupler, the combination of the
5 draw-bar G, having the flanges *a b* upon its outer face, the draw-block *c*, formed between said flanges, the arm J, pivoted to the offset I at the rear of said draw-bar, the hook K, formed at the forward end of said bar, the

overhanging flange *d*, the guide-plate *e*, and 10 the unlocking-chains K', substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN KREHBIEL.

Witnesses:

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