S. J. KEIM.

Car-Coupling.

No. 200,311. Patented Feb. 12, 1878.

Fig. 1

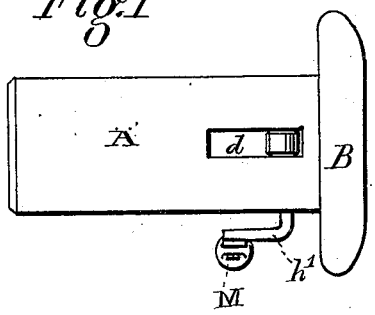


Fig. 2

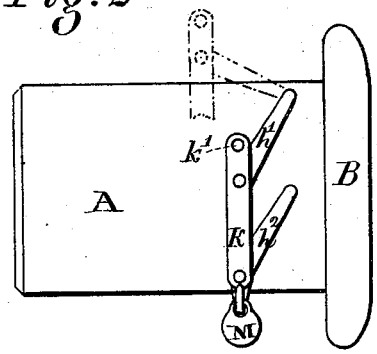


Fig. 4

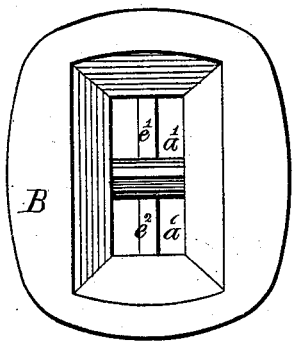
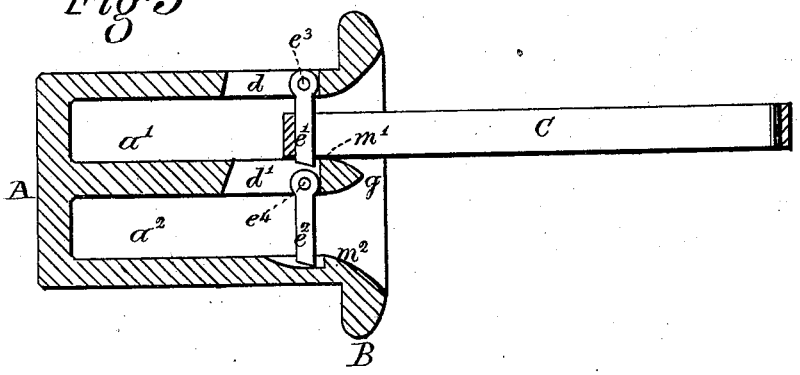


Fig. 3



Witnesses.

Clark W. Farland, Jr.

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Inventor.

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UNITED STATES PATENT OFFICE.

SIMON J. KEIM, OF CATASAUQUA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM YOUNGER, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **200,311**, dated February 12, 1878; application filed March 27, 1877.

To all whom it may concern:

Be it known that I, SIMON J. KEIM, of Catasauqua, Lehigh county, Pennsylvania, have invented a new and useful Improvement in Car-Coupling, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a plan. Fig. 2 is a side elevation. Fig. 3 is a longitudinal section. Fig. 4 is a front-end view.

The object of my invention is to make the railway-cars self-coupling, so that by simply pushing the cars in contact they will become securely fastened without any assistance from the brakeman.

A is the draw-head; B, the buffer; C, the draw-bar. The draw-head is made double, having an upper recess, a^1, and a lower recess, a^2, or there may be several recesses, so that in the event of two cars coming together having draw-heads of different heights there will be no difficulty in coupling them.

A falling bolt or tongue, e^1, is pivoted to the shaft e^3, which passes through the draw-head above the recess a^1, and a similar bolt, e^2, is pivoted to the shaft e^4, which passes through the middle web of the draw-head. Each of these shafts has a lever-arm attached. (Shown in Fig. 2, and lettered h^1 h^2.) These arms are connected on the outside by a link, K, which is weighted at the bottom by a ball, M, or the link itself may be heavy enough to act as a weight. An eye, k', is made at the top of the link, into which a chain may be hooked, and the bolt or tongue operated from the platform of the car.

The bolt e^1 is held vertically in the position shown by the weighted levers, and as soon as the cars are forced together for coupling the end of the draw-bar C forces the bolt e^1 into its recess d, and as soon as it has passed the bolt falls and the pull of the draw-bar brings the toe of it in contact with the stop m^1 on the lower side of the recess a^1. The operation of the upper and lower bolts e^1 e^2 is the same, and the movement of one is communicated by the link K to the other. When the bolt e^1 is forced into the recess d the lever h^1 takes the position shown by dotted lines, Fig. 2.

The buffer B is made with two funnel-shaped mouths, corresponding with the recesses a^1 a^2, and the central web is pointed at g, so as to facilitate the entrance of the draw-bar C into one or the other recess.

I claim—

1. The combination, in a draw-head, of a series of bolts pivoted on shafts one above the other, levers at the ends of said shafts, and a weighted link uniting said levers, substantially as and for the purposes specified.

2. The combination in the draw-head A of the two recesses a^1 a^2, the falling bolts e^1 e^2, the stops m^1 m^2 on the lower side of the recesses, the levers h^1 h^2, and the weighted link K connecting them, as herein described.

SIMON J. KEIM.

Witnesses:
SIMON KEMP,
R. CLAY HAMERSLY.