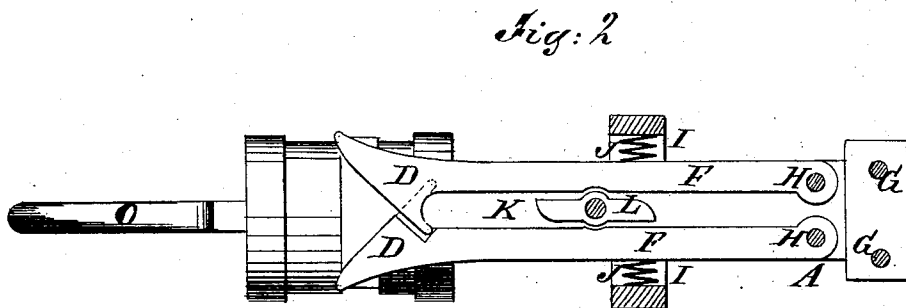
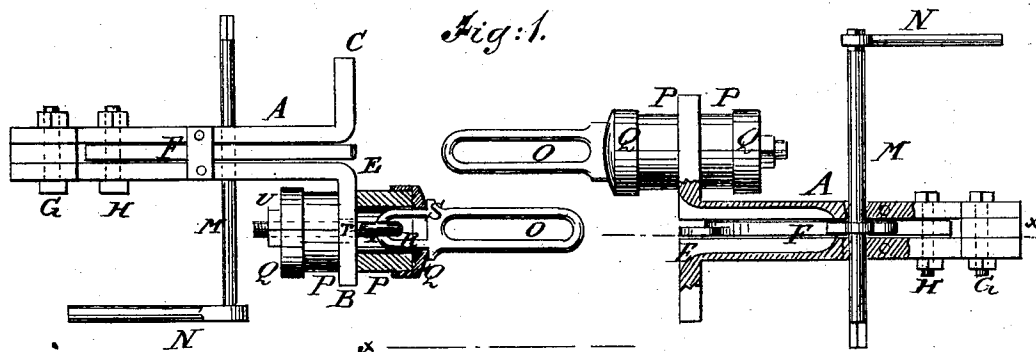


J. CARPENTER.

Car-Couplings.

No. 155,422.

Patented Sept. 29, 1874.



WITNESSES:

Chas. Nida
Edgwick

INVENTOR:

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UNITED STATES PATENT OFFICE.

JOHN CARPENTER, OF MARINER'S HARBOR, NEW YORK.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **155,422**, dated September 29, 1874; application filed June 27, 1874.

To all whom it may concern:

Be it known that I, JOHN CARPENTER, of Mariner's Harbor, in the county of Richmond and State of New York, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification:

This invention relates to new and useful improvements in apparatus for coupling railroad-cars; and consists in the construction and arrangement of parts hereinafter described.

In the accompanying drawing, Figure 1 represents a top view, showing the coupling of each car when about to be coupled together. Fig. 2 is a longitudinal section of Fig. 1 on the line *x x*, showing the jaws and springs and the spreading-bar or opener.

Similar letters of reference indicate corresponding parts.

A is the draw-head, which is attached to the front of the car by means of the right and left arms B C. D D are two jaws, with which the coupling-link engages. E is the mouth of the coupling. The jaws are on the ends of the two levers F F. The draw-head is made in two parts, fastened together by the bolts G G. The levers F F extend back between the parts of the draw-head, and are attached by means of the pivot-bolts H H. I I are springs, confined in the chambers J J, which bear with a constant pressure against the levers. The jaws D D lap past each other, as seen in the drawing; but a space, K, is left between the levers, in which is placed the opener or spreading-bar L. This opener is on the horizontal rod *m*, which passes through the draw-head. On the ends of this rod *m* are levers N, attached by square sockets, by means of which the rod and opener L are turned for spreading the jaws and uncoupling the cars.

By this means it will be seen that the cars may be uncoupled from either side; and, by a little different arrangement of the levers, the cars may be uncoupled from the platform.

O represents the coupling-link. This link is attached to the arm B, as seen in Fig. 1. P P are elastic springs of rubber or similar material, inclosed in the thimble Q Q, one on each side of the arm. The link has an eye, R, and shoulders S, and it is attached by means of the eyebolt T. These springs allow the link to be varied from the horizontal in either direction, up or down or laterally, as may be necessary, in entering the mouth of the opposing draw-head.

By means of the nut *u*, the link is kept sufficiently rigid to maintain it in a horizontal position when left free, so that it will always enter the jaws and couple the cars automatically when the cars come together.

The cars, it will be seen, are coupled by two links simultaneously, which enter the jaws and securely hold the cars until released by the spreaders for uncoupling.

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

1. The combination, with pivoted link O, of springs P P, to hold the link in a horizontal position, and yet allow it sufficient flexibility to enter draw-heads of different heights, as shown and described.

2. The combination of the jaws D D, springs I I, levers F F, link O, rubber springs P P, eye R, shoulders S, and eyebolt T, as and for the purposes described.

JOHN CARPENTER.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.