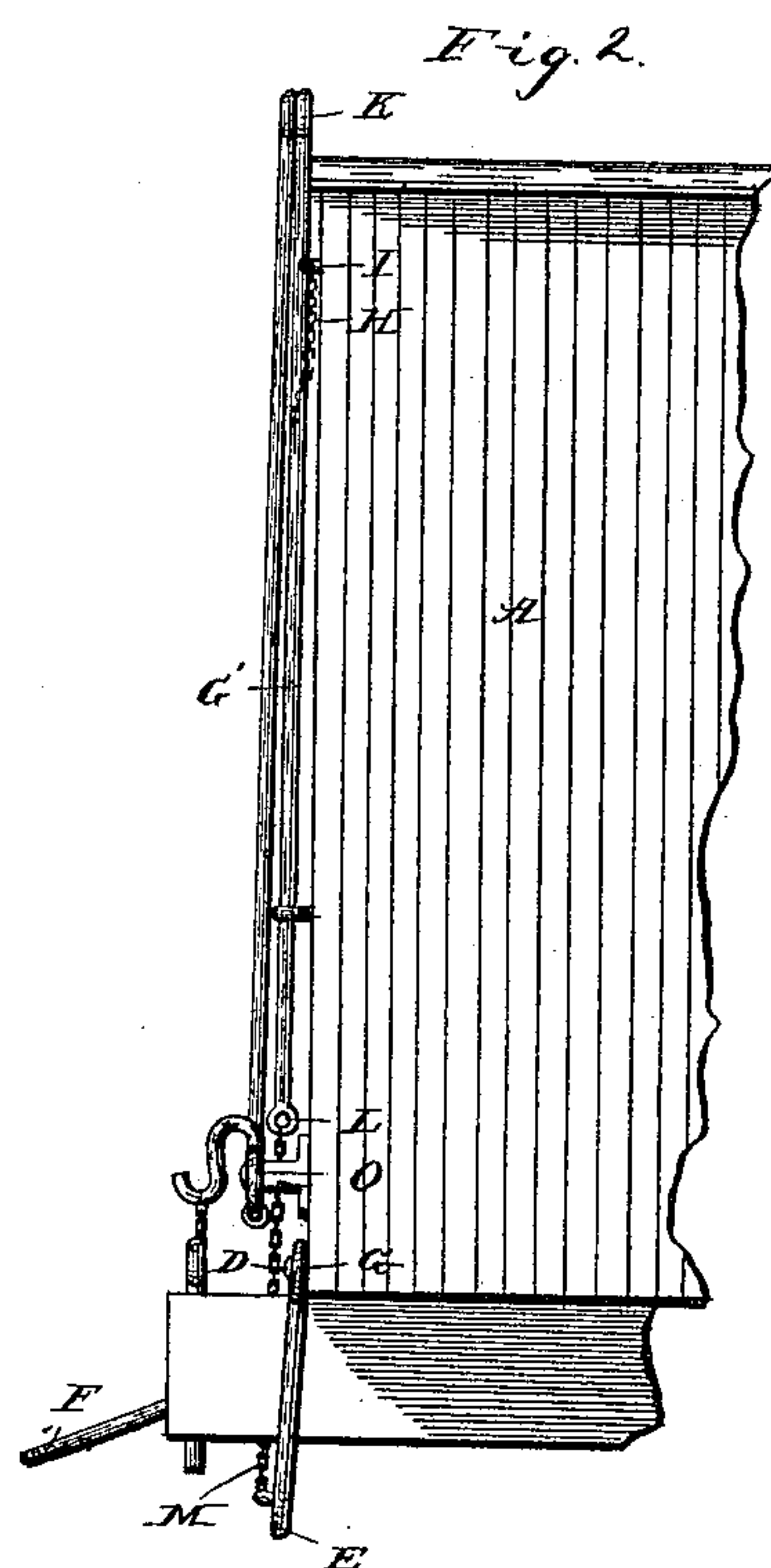
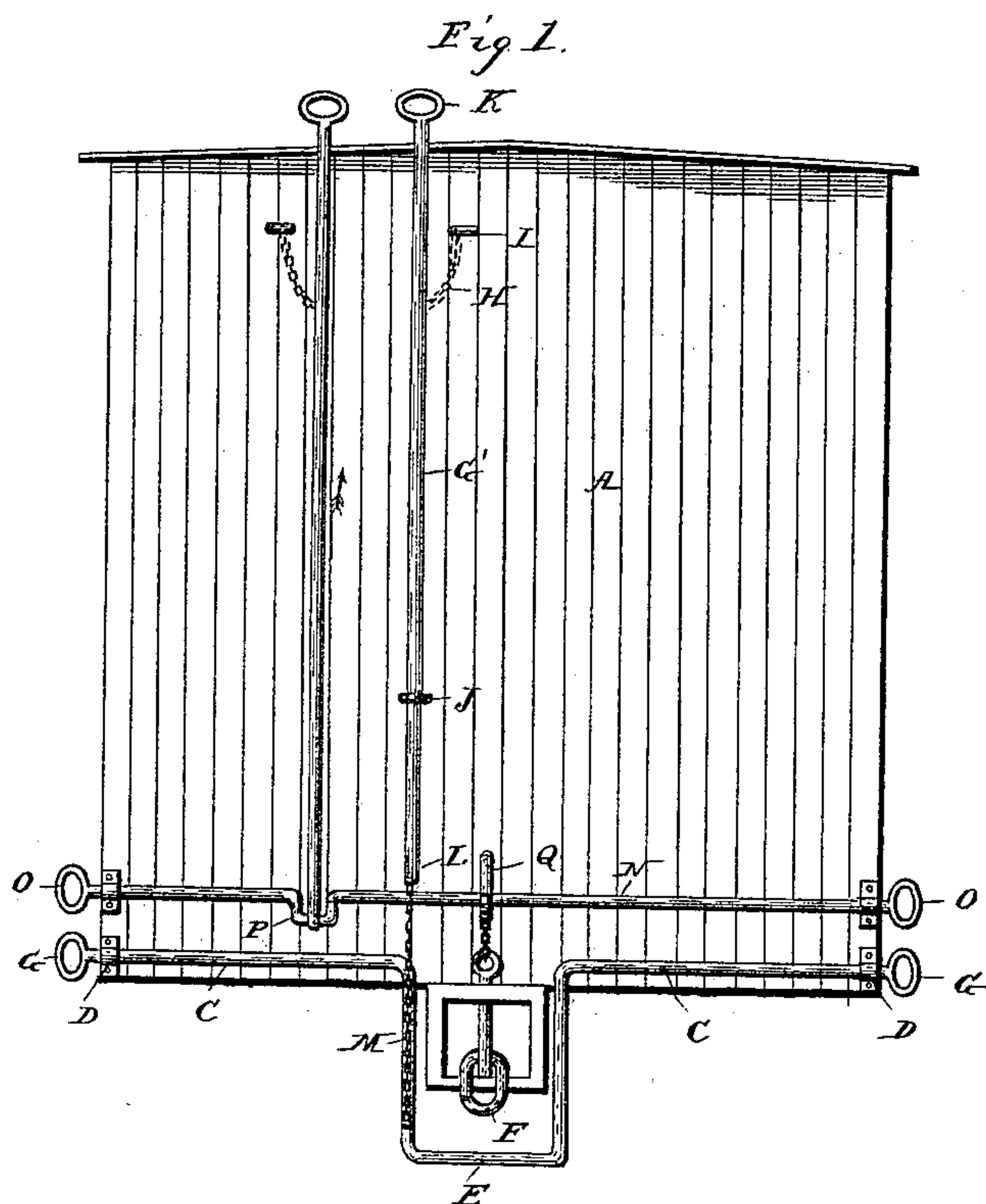


(No Model.)

W. C. LONG.
CAR COUPLING.

No. 372,545.

Patented Nov. 1, 1887.



WITNESSES
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WILLIAM C. LONG, OF ARCADIA, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 372,545, dated November 1, 1887.

Application filed April 16, 1887. Serial No. 235,038. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. LONG, a citizen of the United States, residing at Arcadia, in the county of Crawford and State of Kansas, have invented certain new and useful Improvements in Car-Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in car-couplers; and the object of the invention is to provide a coupler which shall be automatic in its action, and which, when it is desired to uncouple the cars, can be operated either from the top of the car, should the brakeman be on top of the car, or from the side, so that the limbs of the operator can in no way become mangled in the discharge of his duty.

In the accompanying drawings, forming a part of this specification, and on which similar letters of reference indicate the same or corresponding features, Figure 1 represents an end view of a portion of a car, showing my invention applied thereto; and Fig. 2 is a side elevation of a portion of the end of a car.

The letter A designates a car of the ordinary or any approved construction, the same being in the present instance of that class known as "box-cars," and provided on its ends with any of the known forms of pin-and-link couplers.

It is not in the particular description of the coupler that my invention so much consists as in the connections generally thereof.

The letter C designates a guiding rod or shaft securely fastened to the end of the car, at or near its lower end, in brackets or bearings D, and having its central portion bent into a U shape; or, more properly speaking, a rectangular portion or loop, E, which, when down, extends below the coupler, and which, when in a horizontal plane, extends beyond the coupler, but not beyond the link F, so that while it does not touch the coupler it will engage the link when it is moved upwardly.

The shaft C is at either end extended somewhat beyond the sides of the car and provided with handles G, so that it can be operated or turned from whichever side the operator may be upon.

The difficulty heretofore in coupling cars with the ordinary pin and-link coupling has been that the link sags or refuses to enter the opposite coupler unless it is directed, and it is in thus directing the link that the operators so frequently have their hands and arms mangled.

The object of the shaft C is to enable the operators to raise or lower the link, as the case may be, either from the side of the car or from the top, as will hereinafter appear, without danger.

The letter G' refers to a rod, which is securely fastened vertically to the end of the car by means of a chain, H, secured at one end to the rod and at the other to a staple, I. The rod is guided somewhat in its play by a bracket, J, and at its upper end is provided with a handle, K, while its lower end terminates in an eye, L, which receives one end of a chain, M, which is attached to the bend E of the guiding-shaft.

It will be observed that when the handle K is elevated it raises the bent portion of the guiding-shaft in the same manner exactly as though it were turned by the handles G at the side, so that if the operator should happen to be on the top of the car he need not descend to do his work, but can do so from the top.

The letter N designates the elevating-shaft, the same being mounted on the end of the car in a similar manner to the guiding-shaft, and having its end provided with handles O and a crank, P, near one end, and at its central or middle portion an S-shaped link, Q, which at its lower end is connected with the top of the pin by a chain or other flexible connection, S. This elevating-rod is attached to the car by a chain or cord in the same way as the guiding-rod, and is operated in the same manner when it is desired to uncouple the cars—namely, by elevating in the direction of the arrow.

It will be observed that by my invention the present cars do not have to be stripped of their couplers and new ones attached; but the same old couplers are or can be used, my con-

nections only being attached to the car, so that the expense is small.

Having thus 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 the guiding shaft having the rectangular portion E, handles G, and the bearings D, of the vertical rod G', the chain M, securing it to the guide-rod, and the chain H, securing the rod to the car, the eye L, and staples J I, substantially as specified.

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

the elevating-shaft N, connected to the car, and having the handles O and the crank P, of the vertical shaft or rod, the chain connecting said rod to the car, the S-shaped link Q, the flexible connection thereof, and the pin, substantially as specified.

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

WILLIAM C. LONG.

Witnesses:

JAMES M. SWAN,
A. J. BOST.