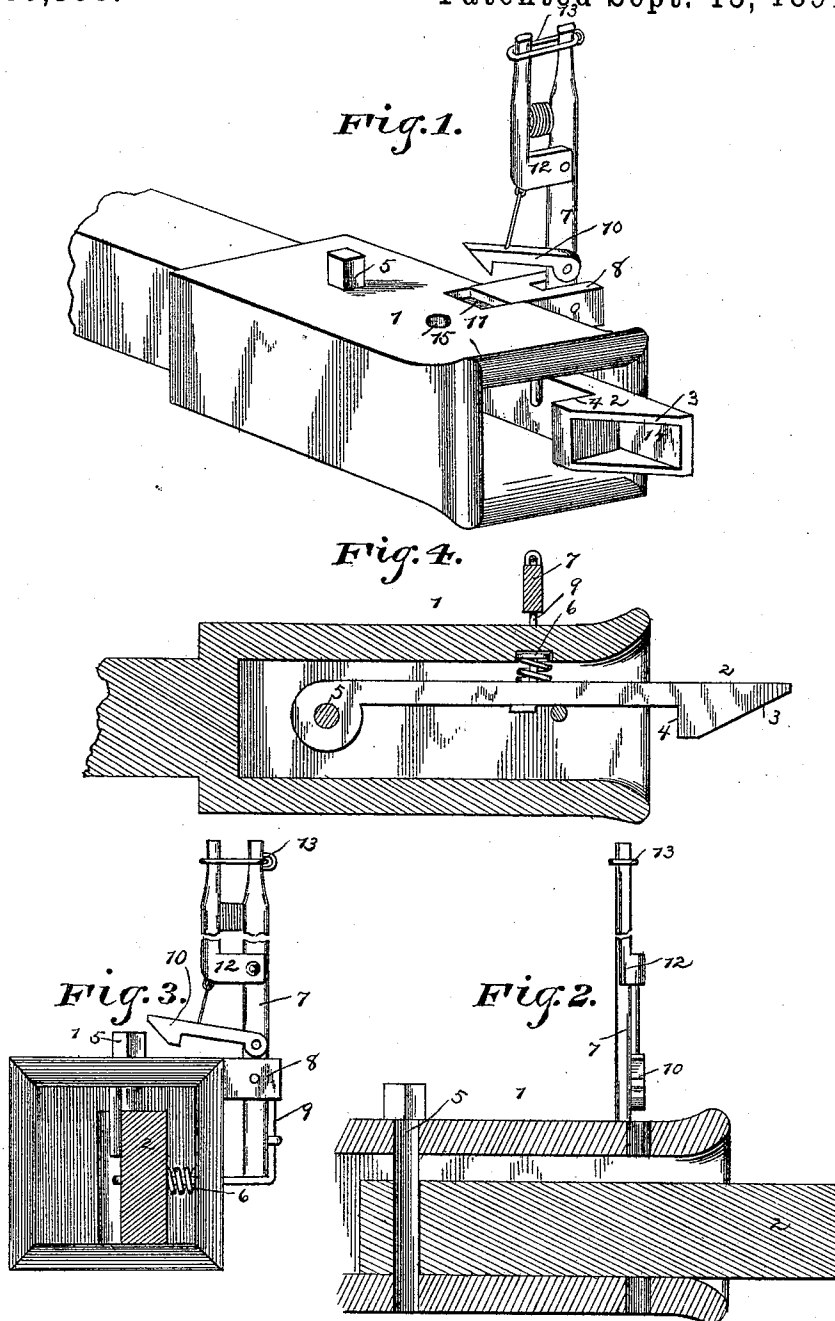


(No Model.)

J. GINGRICH.
CAR COUPLING.

No. 459,398.

Patented Sept. 15, 1891.



Witnesses

B. S. Ober
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UNITED STATES PATENT OFFICE.

JOHN GINGRICH, OF AURORA, NEBRASKA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 459,398, dated September 15, 1891.

Application filed April 29, 1891. Serial No. 390,894. (No model.)

To all whom it may concern:

Be it known that I, JOHN GINGRICH, a citizen of the United States, residing at Aurora, in the county of Hamilton and State of Nebraska, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car-couplings.

The object of the present invention is to simplify and improve the construction of twin-jaw car-couplings and provide an efficient one adapted to couple automatically when cars come together and capable of being readily uncoupled without necessitating a person passing between the cars.

The invention consists of the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a car-coupler constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a horizontal sectional view.

Referring to the accompanying drawings, 1 designates a coupler-head, which is rectangular in section and constructed of suitable metal and provided with a longitudinal opening and adapted to be suitably secured to a draw-bar of a car. Arranged in the opening of the coupler-head is the shank of a jaw 2, which is provided with a beveled face 3 and a shoulder 4, and is adapted to engage a similar jaw, whereby cars are coupled together. The inner end of the shank is enlarged and provided with an opening, and is secured to the coupler-head by a pin 5, which is arranged in perforations at the top and bottom of the coupler-head. The jaws are held into engagement with each other by a spiral spring 6, which is interposed between the jaw and the adjacent side of the coupler-head, and when the cars come together the springs are compressed until the heads of the shanks slip past each other and the shoulders 4 engage.

The cars are uncoupled by a lever 7, which is fulcrumed between arms 8, extending laterally from the draw-head and provided with perforations to receive the pivot-bolt. The

lower end of the lever 7 is connected with the shank of the jaw by a rod 9, and when the upper end of the lever is forced inward the jaw is drawn aside to uncouple. The jaws are held aside and out of position for coupling by a latch 10, which is pivoted to the lever 7 and extends inward over the coupler-head, and is adapted to engage a shoulder 11. The latch 10, which falls by gravity, is held out of engagement with the shoulder by a latch-lever 12, which is L-shaped and is pivoted to the lever 7, near the upper end thereof, and is connected by a wire, chain, or the like with the latch, and is adapted to have its free end engaged by a link 13, secured to the upper end of the lever 7. The jaws are hollowed out at 14 to increase the lightness of the parts and to lessen the cost of construction, and the recess 14 forms flanges, which strengthen the head and give sufficient strength to the parts. The jaws may be removed and the coupler-head be employed in connection with a link, and the coupler-head is provided with pin-openings 15 to receive a coupling-pin.

It will be seen that the car-coupling is simple and inexpensive in construction and is automatic in operation, and that cars may be uncoupled without necessitating a person passing between them.

The coupler-head is provided with a pin 16, which limits the movement of the jaw.

The pin-opening and the coupling-pin are to enable a car to couple to the front of an engine or to a car having the ordinary coupling.

What I claim is—

1. The combination of the coupler-head having an opening, the spring-actuated jaw pivoted in the opening, the arms extending laterally from the coupler-head, and the lever pivoted between the arms and provided with latch mechanism adapted to hold the jaw to one side of the opening, substantially as described.

2. The combination of the coupler-head having an opening and provided on its upper face with a shoulder, the spring-actuated jaw pivoted within the opening, the arms extending laterally from the coupler-head, the lever 7, pivoted between the arms and having its lower end connected with the jaw, the latch

pivoted to the lever and arranged to engage the said shoulder, the L-shaped latch-lever pivoted to the lever 7 and connected with the latch, and the link arranged to engage the
5 latch-lever, substantially as described.

3. The combination of the coupler-head and the spring-actuated jaw pivoted in the coupler-head and having its outer end or head beveled and provided with a shoulder and

having a recess 14, forming flanges, substantially as and for the purpose described. 10

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN GINGRICH.

Witnesses:

H. A. SCOTT,
M. W. WALSH.