

No Model.)

J. CALLANTINE.
CAR COUPLING.

No. 567,678.

Patented Sept. 15, 1896.

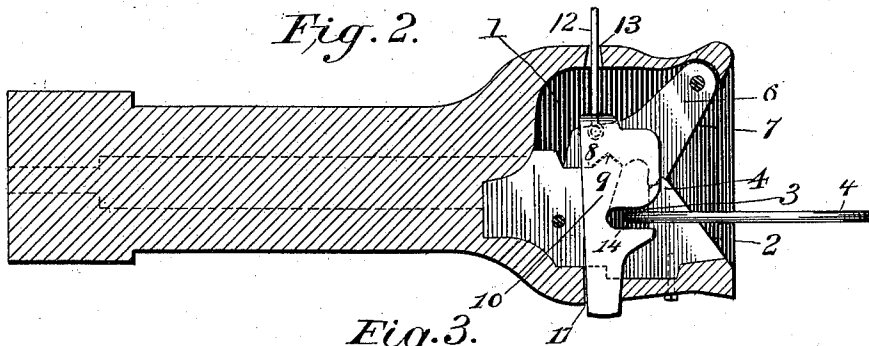
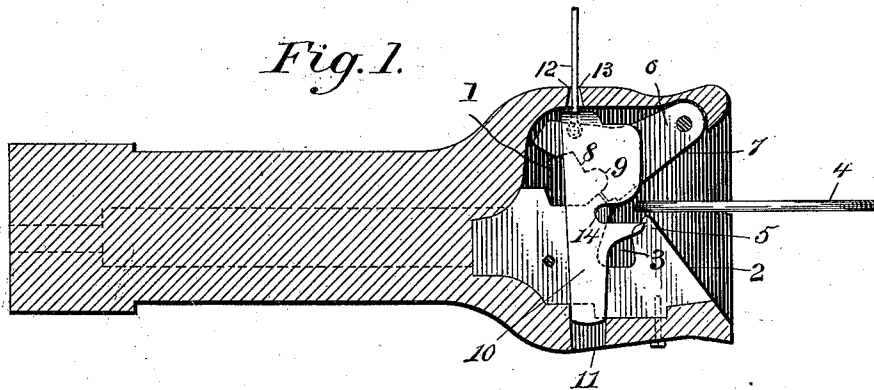
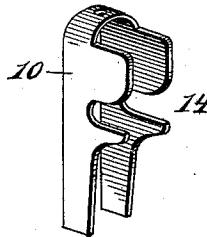


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH CALLANTINE, OF PERU, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 567,678, dated September 15, 1896.

Application filed September 8, 1894. Serial No. 522,523. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CALLANTINE, a citizen of the United States, residing at Peru, in the county of Miami and State of Indiana, have invented an Improvement in Car-Couplings, of which the following is a specification.

The invention relates to improvements in car-couplings.

The object of the present invention is to improve the construction of car-couplings and to provide a simple, inexpensive, and efficient one capable of coupling automatically and adapted to be readily uncoupled without going between cars.

A further object of the invention is to permit a link to have free vertical and lateral play to enable it to couple with cars having draw-heads at different elevations, and to provide means for holding a link in proper position for guiding it into the mouth of the draw-head to avoid going between cars and guiding the link by hand.

The invention consists in 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 vertical longitudinal sectional view of a car-coupling constructed in accordance with this invention, the parts being elevated preparatory to engaging a link. Fig. 2 is a similar view showing the position of the parts when in engagement with the link. Fig. 3 is a detail perspective view of the link-holder.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a draw-head having a link opening or cavity and provided at its bottom with a centrally-arranged rigid catch 2, presenting an inclined front face for guiding the link upward, and provided with a recess 3 for the reception of a link 4, which encircles the top or apex 5 of the front portion of the rigid catch. The rigid catch coöperates with a pivoted catch 6, depending from the top of the draw-head, at the front thereof, secured to the same by a transverse pin and inclining downward and rearward. The front edge 7 of the pivoted catch is adapted to be engaged by the link 4, which swings the pivoted catch

upward and rearward and drops into the recess 3 of the rigid catch, and the bottom portion of the pivoted catch closes the top or mouth of the recess 3 and is provided with a notch 8, which interlocks with a triangular projection 9 of the rigid catch to limit the downward and forward movement of the pivoted catch. The front edge of the pivoted catch, at the bottom thereof, conforms to the configuration of the apex of the front portion of the rigid catch, and the bottom of the pivoted catch is also provided with a curved recess or arched portion arranged directly over the mouth of the link-receiving recess 3.

The link is engaged by a substantially U-shaped link-holder 10, which straddles the catches and has the lower portions of its sides arranged in slots or openings 11 of the bottom of the draw-head, at opposite sides of the rigid catch. The top of the link-holder rests upon and is supported by the rear portion of the pivoted catch and is provided with a perforation through which passes a rod 12, extending through a perforation 13 of the top of the draw-head and connected at its lower end to the pivoted catch, whereby when the rod is lifted the pivoted catch will be swung upward and rearward, carrying with it the link-holder. The sides of the link-holder are arranged at opposite sides of the two catches and are provided at their front edges with rearwardly-extending substantially horizontally-disposed link-receiving recesses 14, located contiguous to the link-receiving recesses 3 of the fixed catch, adapted to engage the upper and lower faces of the link, whereby the latter is held in position for guiding it into the mouth of the draw-head. The link rests and is fulcrumed on the bottom of the draw-head, and its outer portion is adapted to be elevated or depressed, accordingly as the link-holder is raised or lowered, whereby the link may be accurately guided into the mouth of a draw-head. Any suitable means may be provided for operating the rod 12 from the top and sides of a car to enable the operation of uncoupling to be performed at these points, and also to permit the link to be guided without going between cars. When the rod 12 is elevated to the full extent of its movement, the link-holder and the pivoted catch are swung upward, and

the link is carried above the top or apex of the front portion of the fixed catch and is thrown out of the draw-head or placed in position for uncoupling.

5 It will be seen that the car-coupling is exceedingly simple and inexpensive in construction, that it is positive and reliable in operation, and that it is capable of coupling automatically. It will also be apparent that it is
10 capable of being readily uncoupled, and that a link may be accurately guided into the mouth of a draw-head without going between cars.

Changes in the form, proportion, and minor
15 details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

20 1. In a car-coupling, the combination of a draw-head, a fixed catch arranged at the bottom thereof and provided with a link-receiving recess, a pivoted catch depending from
25 the top of the draw-head and arranged to engage the fixed catch to confine a link in the

recess thereof, and a substantially U-shaped link-holder straddling the catches and provided with link-receiving recesses and adapted to engage the upper and lower faces of a link, substantially as and for the purpose set forth. 30

2. In a car-coupling, the combination of a draw-head, a pivoted catch located at the bottom thereof and provided with a link-receiving recess and having a lug or projection, a
35 substantially U-shaped link-holder straddling the catches, resting upon and supported by the pivoted catch and provided at its sides with recesses located adjacent to the link-receiving recess, and a rod connected with
40 the pivoted catch and passing through the link-holder at the top of the draw-head, substantially as and for the purpose described.

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

JOSEPH CALLANTINE.

Witnesses:

S. J. MATTHEWS,

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