(No Model.)

P. SCHREIBER.

CAR COUPLING.

No. 564,768. Patented July 28, 1896.

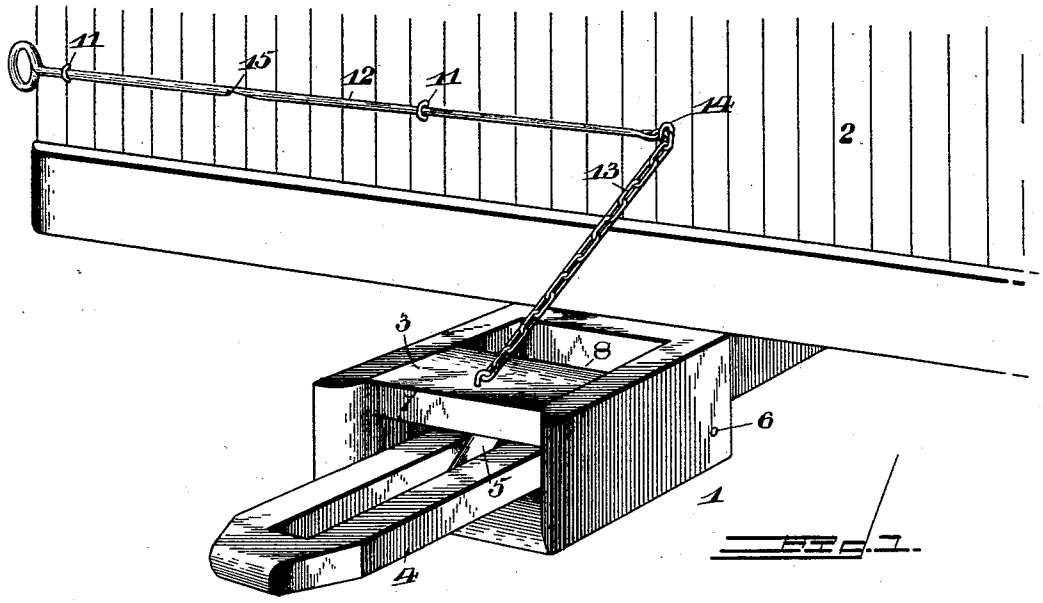

Fig. 1.

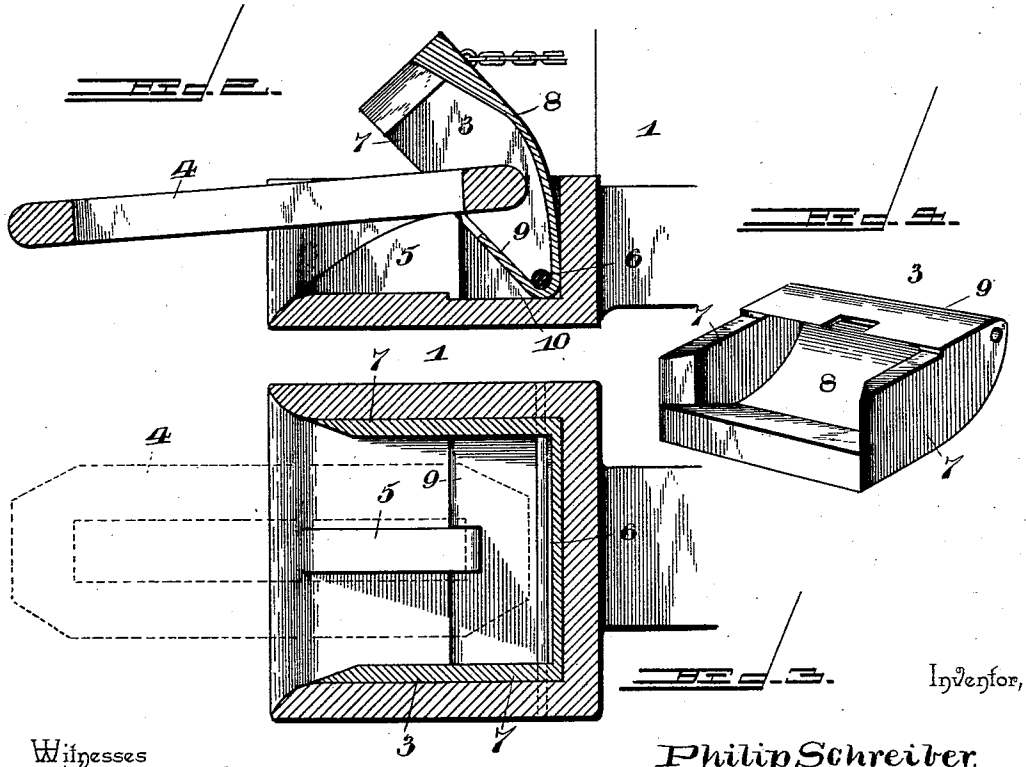

Fig. 2. Fig. 4. Fig. 3.

Inventor,

Witnesses

W. F. Doyle.

J. F. Riley

Philip Schreiber,

By his Attorneys,

C. A. Snow & Co

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

PHILIP SCHREIBER, OF ALMA, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 564,768, dated July 28, 1896.

Application filed March 31, 1896. Serial No. 585,648. (No model.)

To all whom it may concern:

Be it known that I, PHILIP SCHREIBER, a citizen of the United States, residing at Alma, in the county of Wabaunsee and State of Kansas, 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 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 provide a car-coupling which will enable a link to be readily guided into the mouth of a draw-head without going between cars.

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 perspective view of a car-coupling constructed in accordance with this invention and shown applied to a car. Fig. 2 is a longitudinal sectional view of the same, the link-holder being raised to carry the link out of engagement with the fixed catch. Fig. 3 is a horizontal sectional view. Fig. 4 is a detail perspective view of the link-holder, the same being inverted.

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

1 designates a draw-head designed to be secured to a car 2 in the usual manner and being open at the top and front and receiving a pivotally-mounted upwardly-swinging link-holder 3. The draw-head comprises a bottom, parallel longitudinally-disposed sides, and a back or rear wall formed by the solid rear portion of the draw-head. The bottom and sides of the draw-head are beveled at the front of the latter to form a flaring mouth to direct a link 4 into engagement with a fixed catch 5, rigid with the bottom of the draw-head and extending upward therefrom.

The catch 5 has a beveled or inclined front face or edge and a vertical rear edge, forming a shoulder adapted to engage the link which straddles the catch.

The link is confined in engagement with the catch by the pivoted link-holder 3, secured at its back or inner portion to the draw-head, between the sides thereof, by a transverse pin 6, and the link-holder comprises parallel sides 7, a top 8, and a bottom 9, connecting the lower edges of the rear portions of the sides 7 and adapted to fit in the recess 10 of the bottom of the draw-head and have its upper face flush with the front portion of the bottom of the draw-head when the link-holder is in a horizontal position. The front portion of the top of the link-holder extends over the catch and the rear portion of the top 8 of the link-holder inclines downward, forming with the bottom 9 a tapering pocket or recess adapted to receive the inner end of the link. The bottom 9 of the link-holder is centrally recessed at its front to receive the rear portion of the fixed catch. It extends slightly in advance of the shoulder of the catch, and the front of the bottom 9 is beveled at opposite sides of the catch.

Any suitable means may be provided for enabling the link-holder to be swung upward to carry the link out of engagement with the fixed catch, and by slightly elevating the link-holder the outer end of the link may be raised to guide it into the mouth of a draw-head. The operation of coupling is automatic, and the link is adapted to ride up the inclined front face or edge of the fixed catch, lift the link-holder, and drop into engagement with the rear edge or shoulder of the catch.

In the accompanying drawings is illustrated one means for operating the link-holder. The car is provided with horizontally-alined guides 11, in which is arranged a sliding operating-rod 12, disposed transversely of the car, terminating at its outer end at one side of the car in a handle or grip, and connected at its inner end with the link-holder by a chain 13 or other suitable flexible connection. The chain 13 passes through a guide 14, mounted on the car, at the center thereof, in rear and above the draw-head. One end of the chain is secured to an eye of the link-holder at the top and front thereof, and the other end of the chain is linked into an eye of the inner

end of the operating-rod. The operating-rod is provided at a point intermediate of its ends with a shoulder 15, adapted to engage the outer guide of the rod to lock the link-holder in an elevated position to uncouple cars, and also to maintain the parts in a position to prevent coupling. When it is desired to uncouple two cars, the operating-rod of one of them is drawn outward to lift the link-holder, which will raise the link above the catch, as illustrated in Fig. 2 of the accompanying drawings, and as soon as the cars are pulled apart the link will slide out of the draw-head.

It will be seen that the car-coupling is simple and comparatively inexpensive in construction, that it possesses strength, durability, and efficiency, and that it is positive and reliable in operation. It will also be apparent that it is capable of coupling automatically and of being readily uncoupled without going between cars, and that it will also enable a link to be guided into the mouth of a draw-head without going between cars.

Changes in the form, proportion, and minor 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—

1. In a car-coupling, the combination of a draw-head, a fixed catch mounted on the bottom of the draw-head and adapted to be engaged by a link, an upwardly-swinging link-holder pivotally mounted between the sides of the draw-head and comprising longitudinally-disposed sides, a bottom connecting the sides and arranged in rear of the fixed catch, and a top extending over the catch and in advance of the same to confine a link into engagement therewith, and having its rear portion inclining downward toward the bottom of the link-holder, to form a pocket or recess to receive and engage a link, substantially as described.

2. In a car-coupling, the combination of a draw-head provided at its bottom with an upwardly-extending rigid catch, and having a recess in rear of the catch and an upwardly-swinging link-holder pivotally mounted between the sides of the draw-head and comprising sides, a top extending over the catch and in rear of the same, and a bottom fitting in the recess of the bottom of the draw-head, having its upper face flush with the upper face of the front portion of the same and having its front edge beveled and provided with a central recess, substantially as described.

3. In a car-coupling, the combination with a car, of a draw-head provided with link engaging and releasing devices, a guide mounted on the car and located above the draw-head, a chain connected to and extending upward from the link-releasing device and passing through the said guide, and a sliding operating-rod mounted in suitable guides of the car, provided with a shoulder for engaging one of such guides, and connected with said chain, substantially as described.

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

PHILIP SCHREIBER.

Witnesses:
C. A. SCHWANKE,
HENRY A. SCHWANKE.