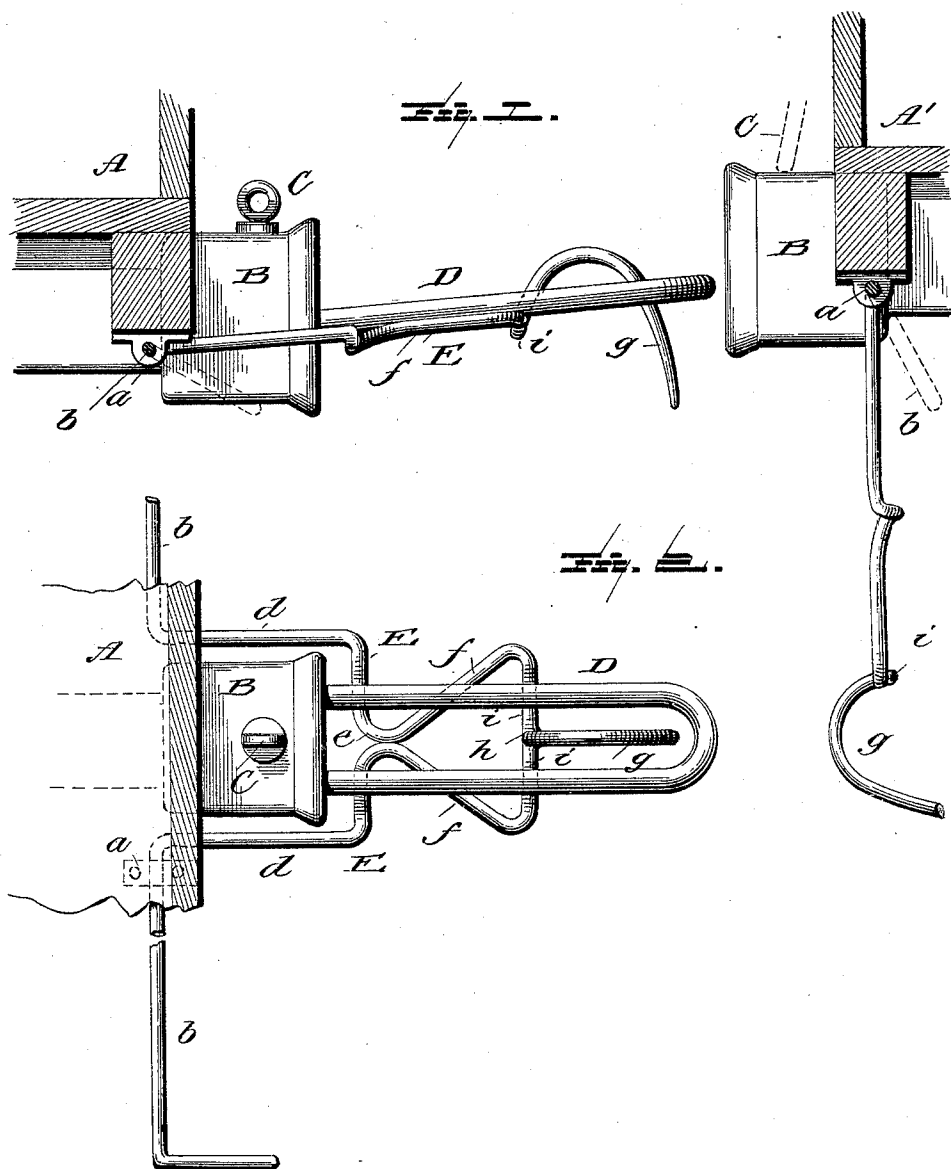


(No Model.)

W. RICHARDS.
CAR COUPLING.

No. 460,402.

Patented Sept. 29, 1891.



Witnesses :

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UNITED STATES PATENT OFFICE.

WILLIAM RICHARDS, OF BIG SPRINGS, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 460,402, dated September 29, 1891.

Application filed June 20, 1891. Serial No. 396,949. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM RICHARDS, a citizen of the United States, residing at Big Springs, in the county of Logan, State of Ohio, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in link-lifters for car-couplings; and it has for its objects, among others, to provide an improved lifter by which the link will be taken up and guided to the center of the opposite draw-head and prevented from slipping or jostling to one side or the other.

The lifter is so constructed as to form a support for the link for the greater portion of its length, so that it will not sag and fail to readily enter the center of the mouth of the opposing draw-head.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a longitudinal vertical section through portions of two cars provided with my improvement, the latter being shown in side elevation. Fig. 2 is a top plan of my improvement in position, holding the link in its horizontal position.

Like letters of reference indicate like parts in both views where they occur.

Referring now to the details of the drawings by letter, A designates a portion of the end of a car, and A' the like portion of an opposing car of known construction, and B are the draw-heads of the cars. These draw-heads may be of any well-known or approved forms and provided with a vertical opening for the reception of the coupling-pin C and the mouth adapted to receive the link D of ordinary construction.

My improved lifter E is journaled in suitable eyes or bearings a upon the under side

of the car, as shown, and is provided with extended ends, which constitute the handles b, by which the lifter is manipulated. From the bearings the lifter extends forward in parallel portions d upon opposite sides of the draw-head, as seen best in Fig. 2, and at a point slightly in front of the draw-head these portions are bent inwardly and in contact with each other at their bends e, where they are bent outwardly and forwardly at an angle, as shown at f, and then transversely to form the cross-bar h, as shown in Fig. 2. From the center of this cross-bar projects the hook g, which is curved upwardly and then downwardly, as seen best in Fig. 1. The cross-bar is curved downwardly upon each side of the forwardly-projecting hook, as shown at i, to form seats or rests for the link D to hold the latter and prevent its moving sidewise.

The operation will be readily understood. The lifter normally hangs down in the position in which it is shown at the right of Fig. 1, out of the way. It is raised beneath the link by the handle at either side of the car, and as the lifter engages the link the latter falls into the seats i and is held from slipping sidewise thereby and also by the upward curve of the hook g, these features being considered of prime importance. The angular portions f of the lifter add great strength thereto. The curved hook g serves as a guard to prevent the lifter from entering the opposing draw-head.

What I claim as new is—

1. An improved link-lifter for car-couplings, having at its forward end a hook curved above and below the plane of the lifter and between the inner end of said hook and its journaled end a support for the link, as set forth.

2. An improved link-lifter for car-couplings, having at its forward end a cross-bar formed with downward curves to form seats for the link, whereby the latter is prevented from side movement, and a support for the link between the said cross-bar and the journal of the lifter, as set forth.

3. The improved lifter provided at its for-

ward end with a curved hook extending above
and below the plane of the lifter, a cross-bar
from which said hook extends, formed with
a curved seat upon each side of the hook and
5 to the rear of the said cross-bar with angular
portions, substantially as and for the pur-
pose specified.

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

WILLIAM RICHARDS.

Witnesses:

J. G. HATCHER,
S. E. DEARDORFF.