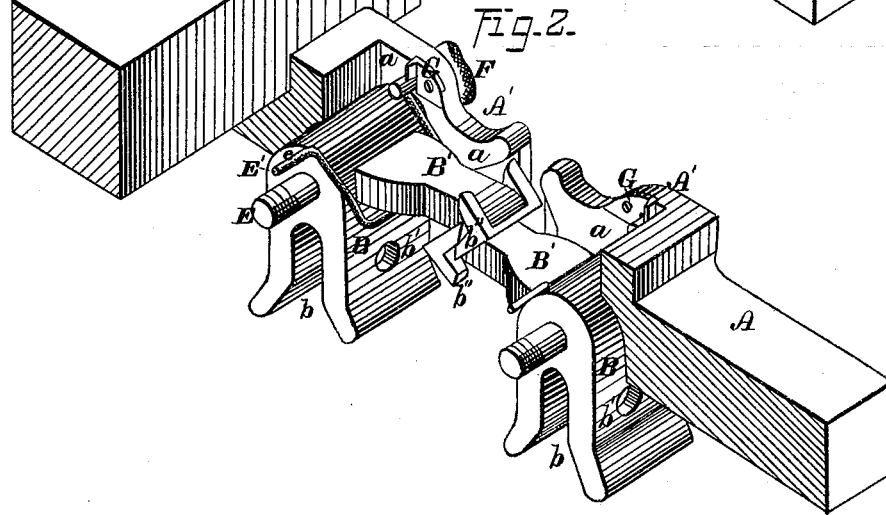
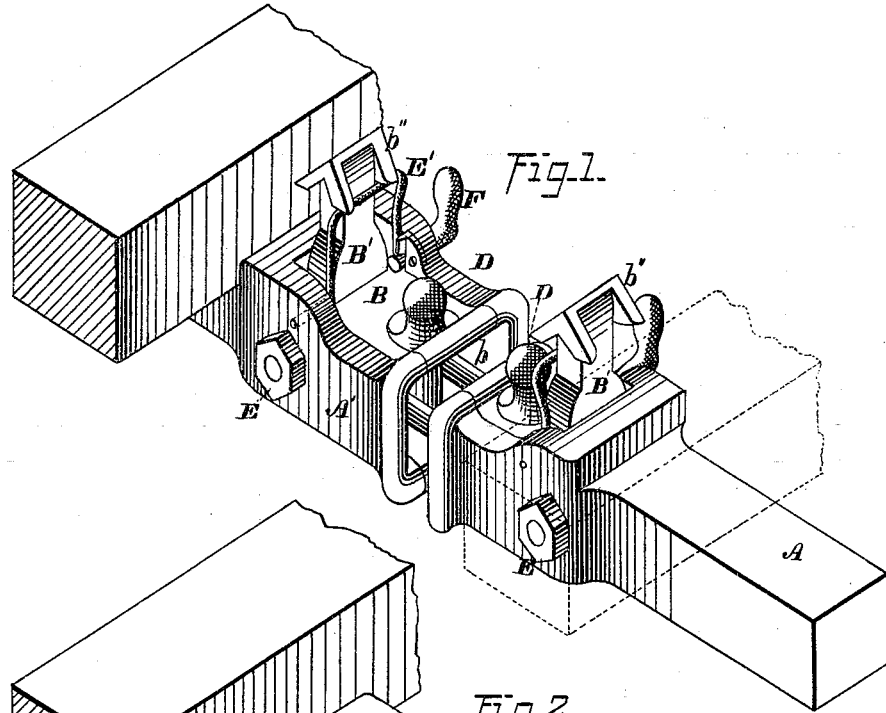


J. G. FISHER.
CAR-COUPLING.

No. 185,308.

Patented Dec. 12, 1876.



WITNESSES—
Jas. E. Hutchinson
John R. Young

INVENTOR—
J. G. Fisher, by
Prindle & Leitch attys.

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Fig. 3.

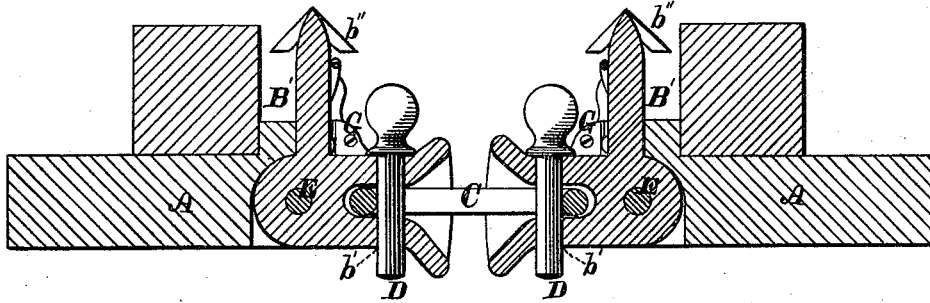
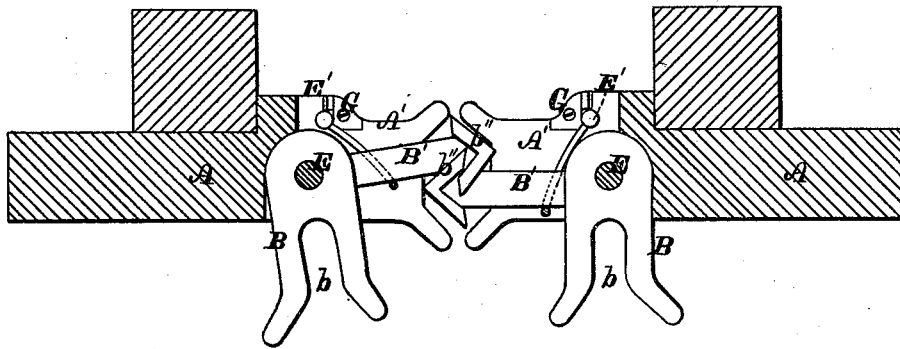


Fig. 4.



WITNESSES=
Jas. Hutchinson
John R. Young

INVENTOR.
J. G. Fisher, by
Orindle and Fox, Attys.

UNITED STATES PATENT OFFICE

JOSEPH G. FISHER, OF TOLEDO, ASSIGNOR TO HIMSELF, WM. R. HUNTER, OF SAME PLACE, AND EDWARD W. KELLY, OF PAINESVILLE, OHIO.

IMPROVEMENT IN CAR-COUPINGS.

Specification forming part of Letters Patent No. 185,308, dated December 12, 1876; application filed May 25, 1876.

To all whom it may concern:

Be it known that I, JOSEPH G. FISHER, of Toledo, in the county of Lucas, and in the State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my improved device arranged for use with links and coupling-pins of ordinary construction. Fig. 2 is a like view of the same arranged for the engagement of the hooked-end coupling-bars; and Figs. 3 and 4 are, respectively, vertical longitudinal sections of Figs. 1 and 2 upon central lines.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to enable ordinary links and pins to be used, when necessary, upon or in connection with car-couplings in which hooked-end coupling-bars are employed; and to this end—

It consists, principally, in a car-coupling in which the outer end of the draw-bar is provided with a head that contains two forms of coupling, and is so pivoted or journaled as to permit either form to be presented in position for use, substantially as and for the purposes hereinafter specified.

It consists, further, in the peculiar construction of the pivoted or journaled head-block, substantially as and for the purposes hereinafter shown.

It consists, further, in the means employed for changing the position of and securing in place the pivoted head-block, substantially as and for the purposes hereinafter set forth.

In the annexed drawings, A represents a draw-bar of usual shape and construction, except at its outer end or head A', which latter is provided with a vertical slot, *a*, that has parallel sides, and extends from the said outer end longitudinally inward to a point considerably in rear of the usual opening for the reception of the link.

Within the slot or recess *a* is fitted a block, B, which loosely fills the same, and restores the outlines of the head A', and is provided

with a longitudinal opening, *b*, which has the usual bell-mouth or flaring outer end, and is intended for the reception of a coupling-link, C, of ordinary construction. A round opening, *b'*, passing vertically through said block B near its outer end, receives a common coupling-pin, D, which pin engages with and locks said link in place.

The head-block B is connected to or with the draw-head A' by means of a bolt, E, which passes transversely through said draw-head, and through the rear end of said head-block, and forms a pivoted bearing for and upon which the latter may move in a vertical plane, for the purpose hereinafter described.

Upon the upper side, at the rear end, of the head-block B is provided an arm, B', which extends vertically upward to a point somewhat farther from the pivoted center of said block than is the outer end of the latter, and at its upper end is made wedge-shaped, and upon each side, at said end, is provided with an A-shaped projection, *b''*, as shown in Figs. 1 and 2.

When the coupling-pins D and D' and the link C are removed, and the head-blocks B and B' turned downward to the position shown in Figs. 2 and 4, the lower face of each of said heads will impinge upon the rear vertical wall of the slot *a*, and prevent the arms or bars B' and B' from passing below a horizontal line, while the weight of said heads will incline said arms to return to position whenever raised above such lines.

When the pivoted heads are thus arranged, if the couplings are moved toward each other, the outer end of one of the bars B' will be raised by the outer end of the other bar, and will pass rearward over the latter until the lower ends of its A-shaped projections *b''* and *b''* drop in rear of and engage with the corresponding upper projections *b''* and *b''* of said lower bar, in which positions said bars B' and B' operate to connect the cars together.

In order that the pivoted heads may be raised to and secured in the position shown in Figs. 1 and 3, a crank-shaped bar, E', is journaled within the upper portion of each of the draw-heads A', at the front line of the arm B', with its U-shaped portion bearing against the

forward face of said arm, just below the projections b'' and b' .

Upon one or both of the projecting ends of the pivoted bearings e of each bar E' is provided a handle, F , by means of which said bar may be turned to or from a horizontal position, and when occupying a vertical position said bar may be locked in place by moving the same laterally, for which purpose a little end motion is allowed, until one of its vertical portions passes behind and engages with a stop, G , that is secured upon the contiguous portion of the draw-head A' .

It will be seen that the crank-bar E' not only operates to lock the head-blocks in position to enable the link C to be used, but said bar also furnishes a means whereby the coupling-bars may be released from engagement whenever it is desired to disconnect the cars.

When the ordinary links and pins are employed said parts will require the usual manipulation; but when the coupling-bars are used the coupling is effected by simply backing the cars together, and the uncoupling by means of the crank-bars at one side of said cars.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. A car-coupling in which the outer end of the draw-bar is provided with a head that contains two forms of couplings, and is so pivoted or journaled as to permit either form of coupling to be presented in position for use, substantially as and for the purpose specified.

2. The head-block B , provided with the recess b , pin-openings b' and b'' , and coupling-bars $B' b''$, in combination with the draw-head A' , having the recess a , substantially as and for the purpose shown.

3. In combination with the pivoted head-block $B B'$, the crank-bar E , journaled within the draw-head A' , and the stop G , secured upon said draw-head, and engaging with said bar, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of May, 1876.

JOSEPH G. FISHER.

Witnesses:

JOHN F. KUMLER,
ALONZO A. LOTT.