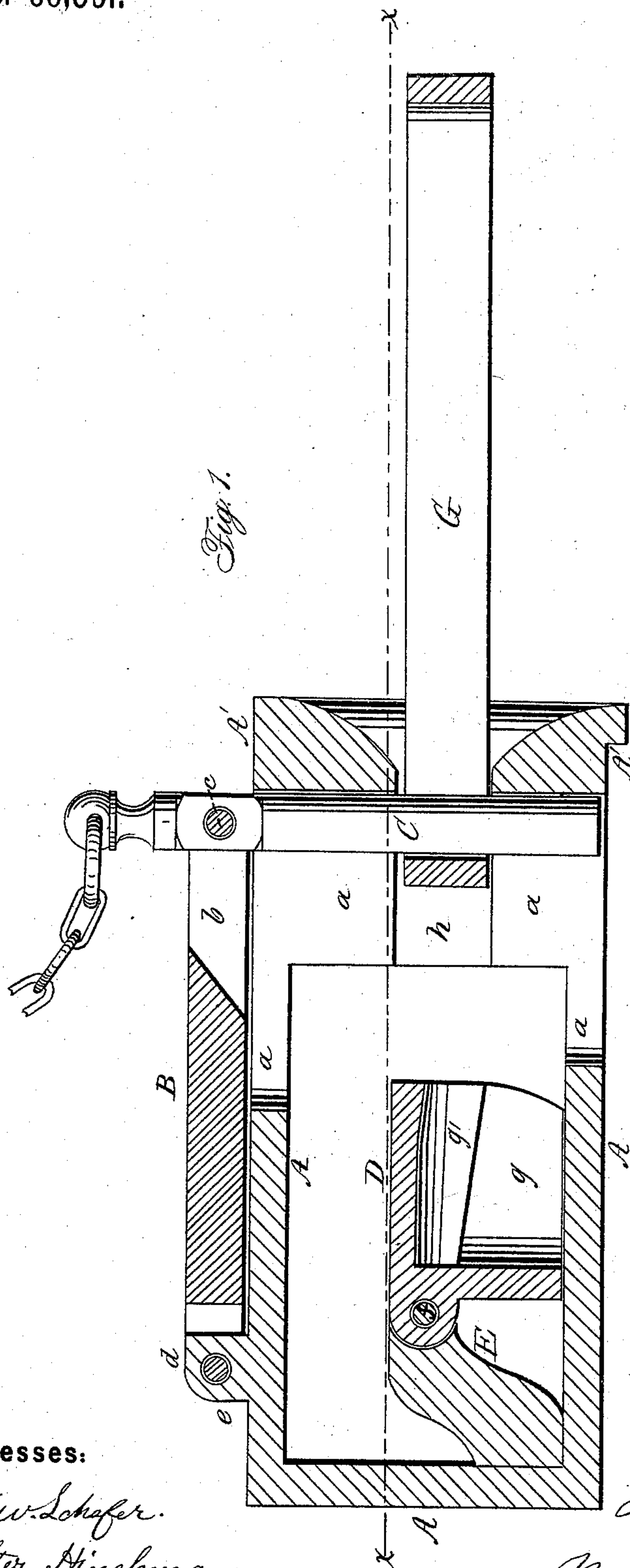


J. F. WOTRING.

Car Coupling.

No. 66,061.

Patented June 25, 1867



Witnesses:

Edw. Schaefer.

Walter Hinchman.

Inventor:

Jehu. F. Motring
by his agents.

Mason, Fenwick Lawrence.

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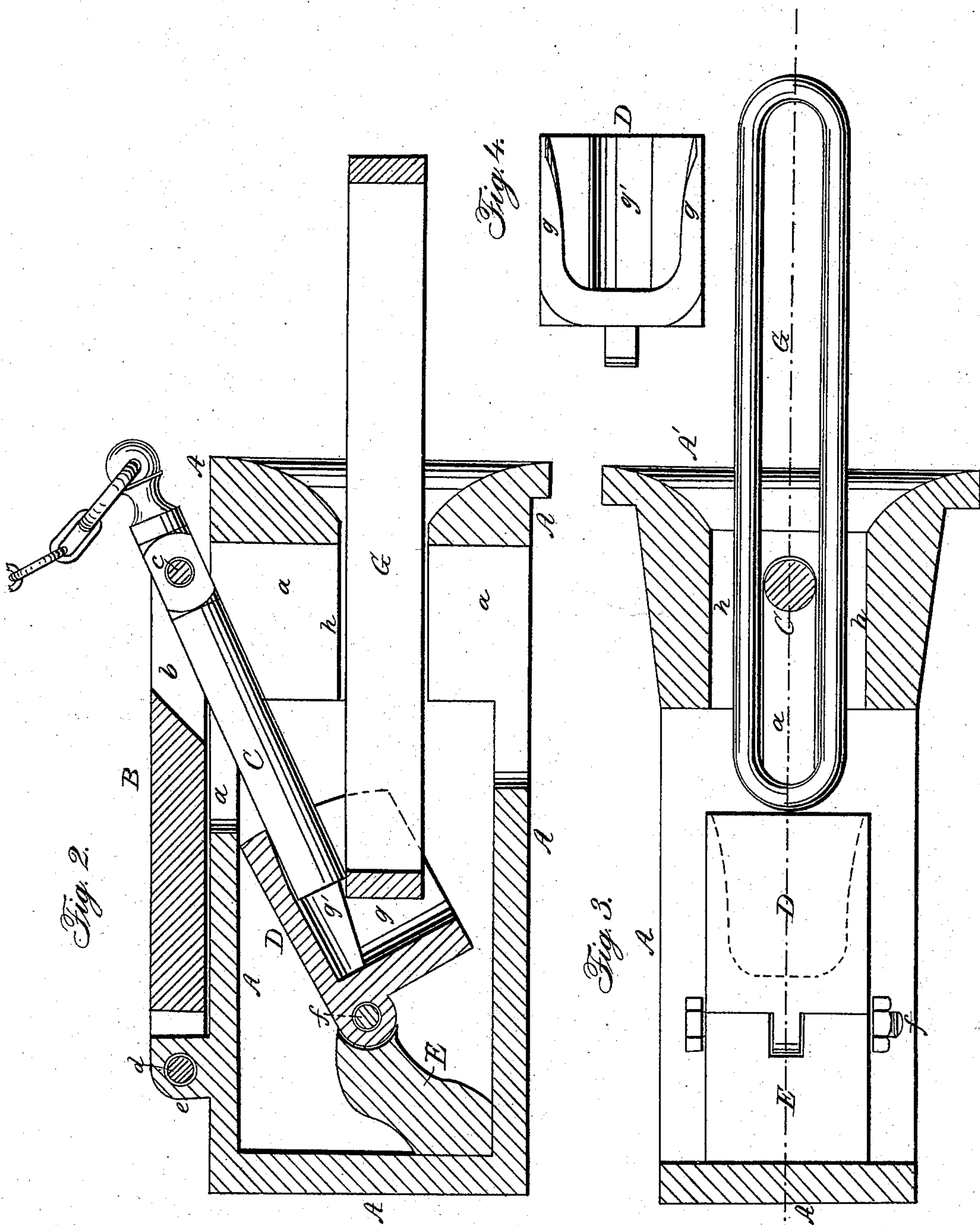
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2 Sheets—Sheet 2.

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United States Patent Office.

JEHU F. WOTRING, OF WILLEY, WEST VIRGINIA.

Letters Patent No. 66,061, dated June 25, 1867.

IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JEHU F. WOTRING, of Willey, in the county of Preston, and State of West Virginia, have invented an improved Car-Coupling; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical section, taken longitudinally through the centre of the improved coupling.

Figure 2 is a similar section of the same parts, showing the link in the act of coupling with the pin.

Figure 3 is a section taken in the horizontal plane indicated by red lines *x x* in fig. 1, showing the link bearing against its abutment.

Figure 4 is a bottom view of the pivoted guide-box and link abutment.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to certain novel improvements in the construction of that class of railroad car-couplings which are adapted for self-coupling when cars are brought together.

The nature of my invention consists in pivoting the coupling-pin to a vertically vibrating bar, which is applied on the top of the coupling-box in such manner that said pin shall hang freely, and always maintain a vertical position, except when pressed back by the introduction of the link, and in the employment, in conjunction therewith, of a contrivance which will receive the end of the coupling-link when cars are brought together, and guide this link in a position for receiving the coupling-pin, and allowing this pin to drop in its place, as will be hereinafter described. It also consists in a coupling-pin which is pivoted to its coupling-box in such manner that it will hang free in a vertical position, and also be allowed to rise and fall bodily, and in the employment in conjunction with such pin of a device which shall serve the double purpose of a guide for the coupling-link, and also of an abutment for resisting the backward thrust of this link in the act of coupling two cars together, as will be hereinafter described. It also consists in so constructing the link guide and abutment that it shall also serve as a means for properly guiding the lower end of the pivoted coupling-pin into the coupling-link, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, A represents a coupling-box or draw-head, which is constructed with a flaring mouth, A', with a straight, rectangular throat or passage, *h*, through it for receiving and guiding the coupling-link G into the box to receive through it the coupling-pin. This box or head A has also an oblong slot, *a*, made vertically and centrally through it, of sufficient width to allow the coupling-pin C to vibrate freely in it, and to maintain a vertical position, as shown in fig. 1. This slot *a* is made through the coupling-box A, so as to have its front end terminate in the solid head A', and thereby form a strong abutment for the coupling-pin above and below the throat *h* when this pin stands in a vertical position. Said slot should be made of sufficient length to allow the lower end of the pin C to be moved back to the position shown in fig. 2 by the end of the link in the act of coupling cars together. In every other respect the coupling-box or draw-head may be constructed and connected to the cars in the usual well-known manner. The coupling-pin C is a round bar of iron, having a perforated head, to which a chain may be connected for conveniently lifting the pin from the platform of a car when it is desired to uncouple. This pin C is connected by a pivot, *c*, near its upper end or head, to a vertically vibrating bar, B, which is arranged on top of the coupling-box A, attached at its rear end to this box by a lug, *e*, and transverse pivot *d*, as shown in figs. 1 and 2. This bar B is a plane passing vertically and longitudinally through the centre of the coupling-box, and its front end is forked to receive and properly hold the pin C, and to allow this pin to vibrate freely and assume a vertical position when unrestrained. When one end of the coupling-link G is thrust through the throat of the box A it will strike the pin C, and move the lower end of this pin backward until it drops through the link, and assumes the position shown in fig. 1. If circumstances would always allow the link G to be introduced in a straight line into its box A, the coupling-pin, as above described, would always drop through the link and effect a coupling; but under some circumstances the link will enter its box in an oblique line to the longitudinal central plane thereof, and thus move on one side or the other of the end of its pin. To remedy this I employ a guide-block, D, which is arranged at a proper point, in line with the throat *h* and in rear of the pin C, and which is pivoted

to the bar E by a transverse pin, *f*, so that its front end can rise and fall freely. The bottom of this block is recessed so as to form two flaring side-jaws, *g g*, and a groove, *g'*, as shown in the bottom view, fig. 4. The jaws *g g* are designed for receiving between them and guiding the end of the link G as this link is moved back far enough to allow pin C to drop into it, shown in fig. 2. The groove *g'* is designed for receiving and guiding the lower end of pin C during the act of moving the link back to a position for receiving this pin. The block D serves as a means for centring the link, and also the lower end of the coupling-pin, so that the latter will be brought directly over the space through the link, and caused to drop therein without fail. When the link is forced back into the coupling-box it will press the lower end of the pin C against the pivoted block D, so as to raise this block and allow the end of the link to enter it, as shown in fig. 2. When the pin C drops into the link, and the latter is drawn outward, the block D will drop and serve as an abutment for the link for holding it out in place during the act of coupling two cars together.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the hinged bar B, hinged pin C, hinged guide D, substantially as and for the purpose described.
2. In combination with the pivoted pin C, which is allowed to swing freely about a pivot, *c*, I claim the recessed guide-block D, for guiding the pin C and link G, substantially as described.
3. The construction of the block D, with side-jaws *g g*, and a groove, *g'*, substantially as and for the purpose described.
4. The manner, substantially as herein described, of insuring the proper relation of the link to the pin, and of coupling two cars together when such cars are moved towards each other, as set forth.

JEHU F. WOTRING.

Witnesses:

JOSEPH JACKSON,
JAMES W. PARSONS.