

(No Model.)

O. S. KING.
CAR COUPLING.

No. 315,514.

Patented Apr. 14, 1885.

Fig. 1.

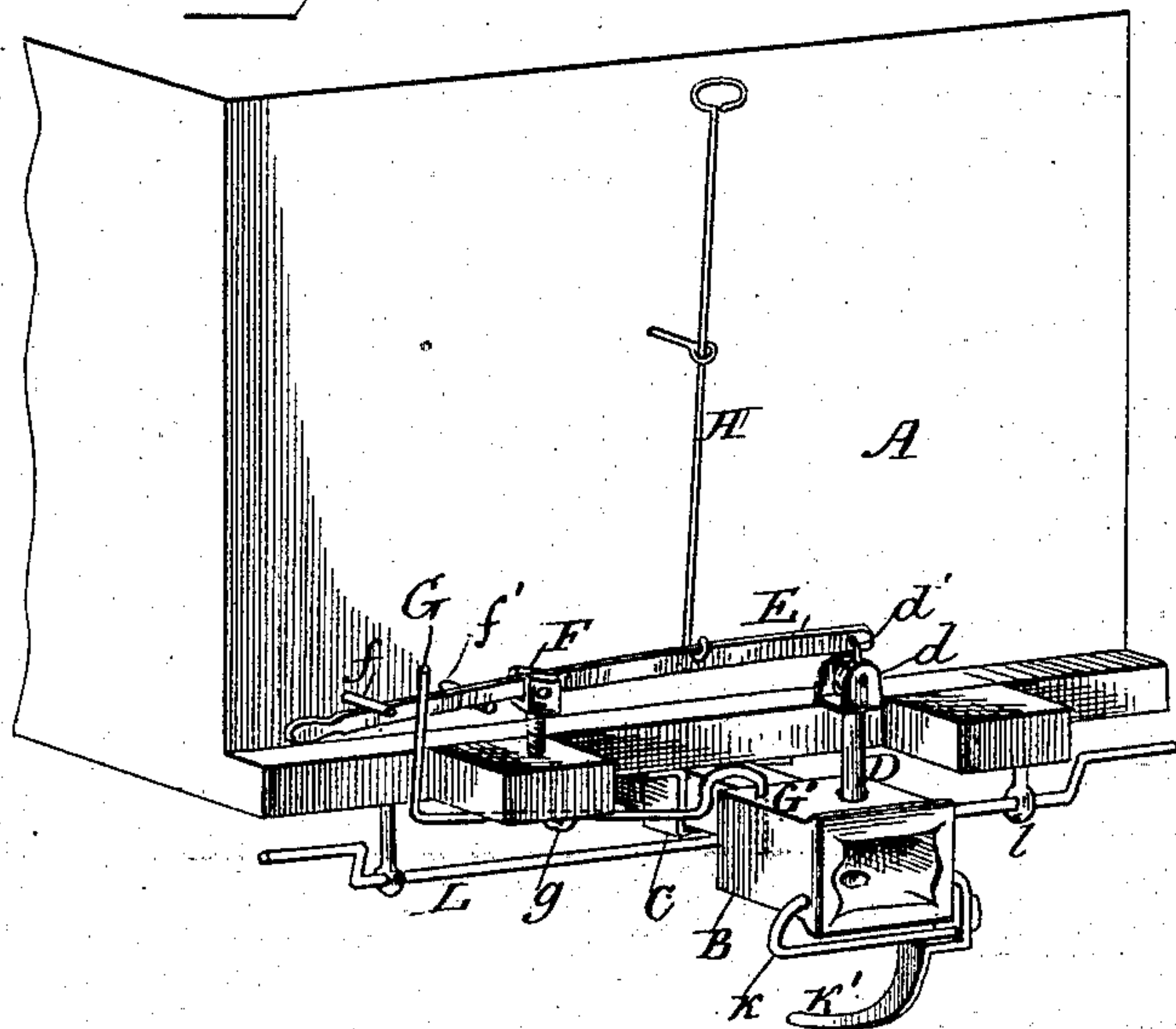
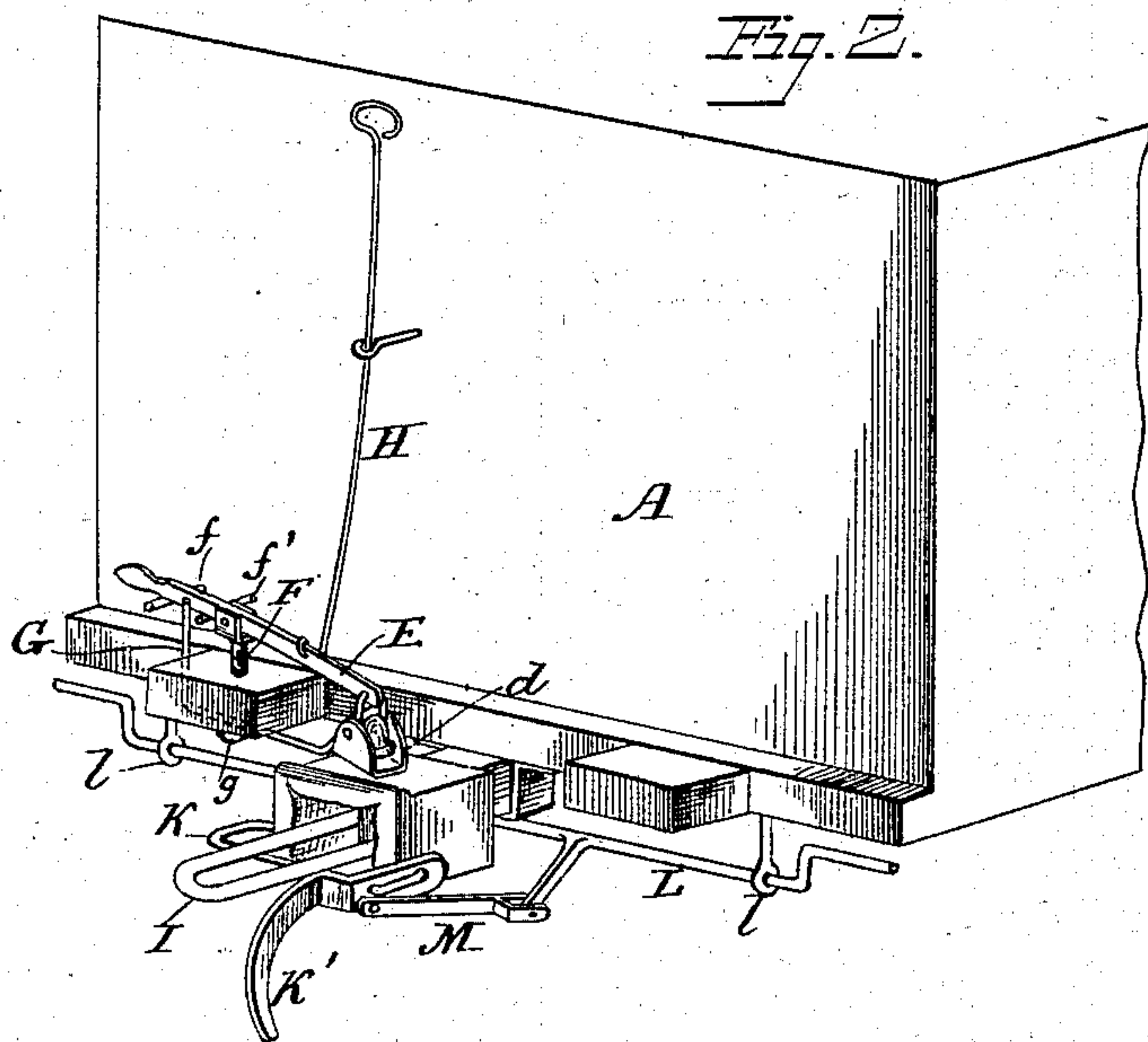


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 315,514, dated April 14, 1885.

Application filed July 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, OSMAN S. KING, a citizen of the United States, residing at Painesville, in the county of Lake and State of Ohio, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to that class of car-couplers in which the coupling-pin is operated by means of levers pivoted to the car or platform thereof, and the construction and operation will be hereinafter described, and the novel features thereof specifically set forth in the claims.

Referring to the drawings, Figure 1 is a perspective of a coupler constructed in accordance with my invention, with the coupling-pin elevated and coupling-head ready to receive a coupling-link. Fig. 2 is a perspective view of my improved coupler, with one end of the coupling-link within the draw-head.

Like letters indicate similar parts in both figures.

A represents a portion of the frame of a car, to which the draw-head B is connected, as usual, by metal straps C. The draw-head is provided with an ordinary coupling-pin, D, standing vertically in holes made for its reception. To facilitate the raising of this coupling-pin, either from the side or from the top of the car, it is made to pass through and the under side of its head rests upon a stirrup, *d*, provided with a bail, *d'*, and the latter is connected to one end of a lever, E, pivoted to a standard, F, secured to the frame or to the front platform of the car. To retain the lever E temporarily immovable while the coupling-pin is elevated, as shown in Fig. 1, its outer end is made to engage under a pin, *f*, projecting horizontally from the frame of the car, and to prevent the outer end of the lever E from being too much depressed and the coupling-pin raised out from the draw-head a similar pin, *f'*, is made to project horizontally from the frame of the car between the pin *f* and the standard F. The outer end of the lever E is made of such form and metal as to have some resilience laterally, to be made to pass beyond the point of the pin *f*, and then engage under said pin. To retain the outer end of the lever E locked under the pin *f*, the upper portion of a lever, G, is made to bear against the outer side of the lever E. The lever G is pivoted about the middle of its length at *g* to the frame of the car, and its

end G' is made to enter a socket in the draw-head, or is so connected to the draw-head that when the latter is pushed backward it brings the outer end of the lever G forward and permits the locked end of the lever E to escape from under the pin *f* as said locked end is swung forward under the backward impulse given to the opposite end by the back movement of the draw-head and its coupling-pin. To permit said coupling-pin to be raised in its socket from the top of the car, the lever E is provided with a rod, H, extending to the top of the car.

To direct the car-link I within an approaching draw-head, the outer portion of said link rests upon the middle portion of a bail-like piece, K, having its ends pivoted into the sides of the draw-head, and to said bail is secured an arm, K', curved forward and downward to meet another ordinary draw-head, and thus automatically bring the link I opposite the opening in the latter; but the link can also be properly guided from the side of the car by means of the crank-lever L, suspended at *l* from the under side of the car, and connecting-rod M, that has one end pivoted to the bail-piece K or its arm K'.

Having now fully described my invention, I claim—

1. A draw-head coupling-pin suspended from a lever having its outer end engaging under a pin, *f*, projecting from the car-frame, in combination with a locking-lever, G, pivoted about the middle of its length to the frame, and having its end G' connected with the draw-head, substantially as described.

2. The combination of a draw-head, its coupling-pin, and operating-lever E with the standard F and locking-pins *f* and *f'*, substantially as and for the purpose described.

3. The combination of a draw-head, its coupling-pin, stirrup *d*, and bail *d'* with the lever E, its standard F, and locking-pin *f*, substantially as and for the purpose described.

4. The combination of a draw-head provided with a link-supporting bail-piece, K, its curved arm K', connecting-rod, and crank-lever with the coupling-pin D, lever E, and the lever G, connected to the draw-head, substantially as described.

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

Witnesses: OSMAN S. KING.

L. G. TUTTLE,
GEORGE ALLNUTT.