

W. R. HOOPES & M. L. SMITH.  
Car-Couplings.

No. 152,558.

Patented June 30, 1874.

Fig. 1.

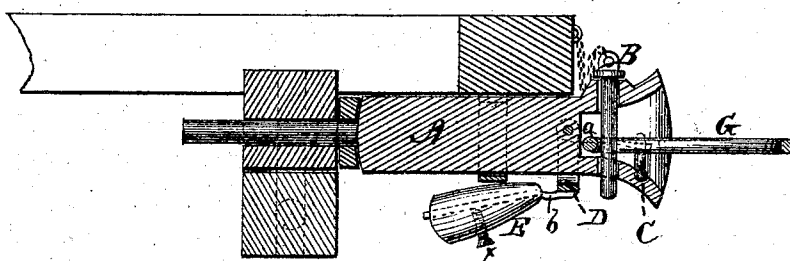
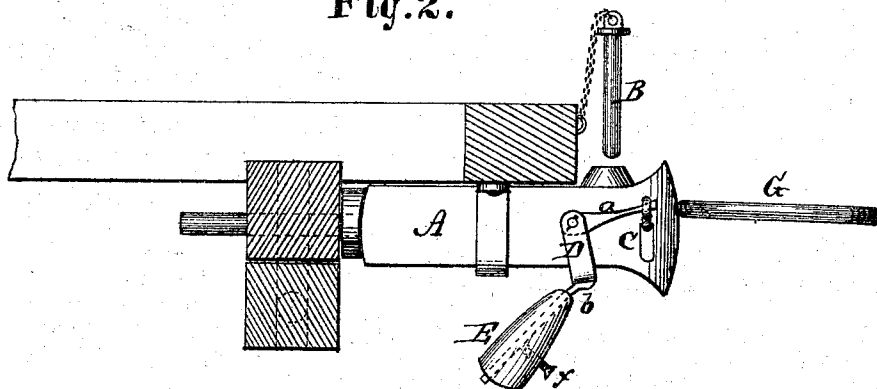


Fig. 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

WILLIAM R. HOOPES AND MARSHALL L. SMITH, OF WEST CHESTER, PA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **152,558**, dated June 20, 1874; application filed January 19, 1874.

*To all whom it may concern:*

Be it known that we, WILLIAM R. HOOPES and MARSHALL L. SMITH, of West Chester, in the county of Chester and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form part of this specification.

The nature of our invention consists in the construction and arrangement of a link-holding device for car-couplings, as will be herein-after more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section of a draw-bar for car-couplings embodying our invention, and Fig. 2 is a side view of the same.

A represents the draw-bar or draw-head of a railroad-car, constructed substantially in the same manner as now usually done with flaring sides to its mouth, an interior chamber, and with the ordinary coupling-pin B. This pin is provided with a head or flange at its upper end to prevent it from falling clear through, and is connected with the draw-head by a chain. In the sides of the mouth of the draw-head A, in front of the coupling-pin D, are vertical slots, through which is passed a stirrup or bail, C, and this is suspended on the

outside of the draw-head upon two arms, *a*, which are firmly attached to and project at right angles from the arms of a stirrup, D. This stirrup is pivoted to the draw-head at its ends, and from the center of the stirrup projects a rod, *b*, in a rearward and downward direction, upon which is secured a weight, E, by means of a set-screw, *x*. The tendency of the weight E is to throw the stirrup C upward, so that when the coupling-link G has been inserted in the draw-head A above the stirrup and coupled by the coupling-pin, the stirrup will hold the link in a horizontal position, so as to enter the opposite draw-head without the necessity of the brakeman going in between the cars to hold the link. The weight E is adjustable upon the rod *b*, so as to be regulated to the proper working of the stirrup C.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination, with the vertically-slotted draw-head A and link G, of the stirrup C, arms *a a*, stirrup D with rod *b*, and the weight E, substantially as and for the purposes set forth.

In testimony that we claim the foregoing as our own we affix our signatures in the presence of two witnesses.

WILLIAM R. HOOPES.  
MARSHALL L. SMITH.

Witnesses:

WM. WHITEHEAD,  
MARY F. WHITEHEAD.