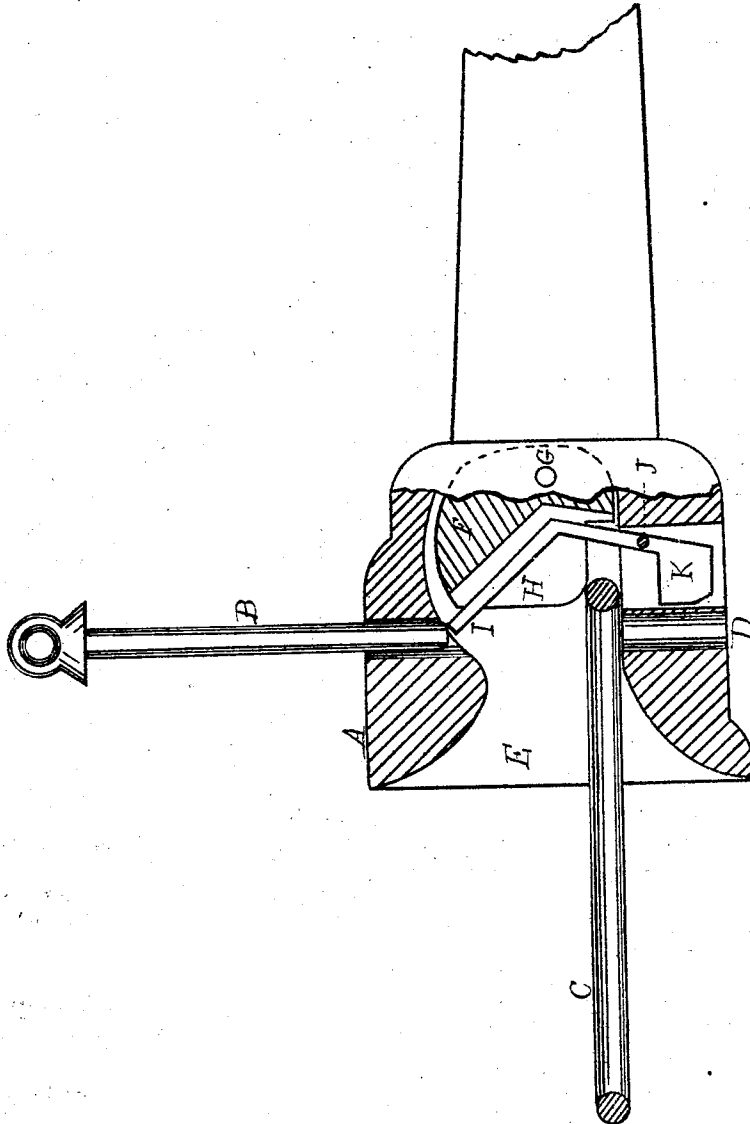


O. & W. ROCHFORD  
Car-Couplings.

No. 147,175.

Patented Feb. 3, 1874.



Witnesses,  
Frank H. Jordan,  
Edwin H. Hazell

Inventors  
Wm. Rochford  
Oliver Rochford  
per Wm. Henry Clifford  
att'y.

# UNITED STATES PATENT OFFICE.

OLIVER ROCHFORD AND WILLIAM ROCHFORD, OF BIDDEFORD, MAINE.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **147,175**, dated February 3, 1874; application filed January 16, 1874.

*To all whom it may concern:*

Be it known that we, OLIVER ROCHFORD and WILLIAM ROCHFORD, of Biddeford, in the county of York and State of Maine, 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, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

In the drawing is shown a side elevation, partly in section, of our invention.

Our invention relates to that class of car-shackles which are called self-coupling; and it employs the common pin and the common link, the two working in the ordinary manner. Our invention consists in the combination of a link, pin, and draw-head of ordinary construction, and upon which no claim is made, with certain devices to be more particularly described.

Before describing the structure and operation of the parts claimed as new, we will enumerate the different parts of the coupling shown in the drawing.

A shows the draw-head; B, the pin; C, the link; D, the hole in the draw-head, through which the pin drops when its support is removed. E is the mouth or aperture of the draw-head. F shows a weighted block, pivoted at G, and placed within the hollow of the draw-head. H shows a slot or recess in the front end of the block F, in which works the bent arm or support I, which arm is pivoted to the draw-head at J. This arm is counterbalanced, as shown at K. The pin B rests on the top of the bent lever I when ready for coupling, as shown in the drawing.

Having enumerated the different parts composing our invention, we will now describe its operation.

The link, entering the draw-head A, passes under the lower side or edge of the block F, and strikes the counterbalanced lever I. This movement releases the pin B, which then falls, and completes the coupling. When the link C is coupled to the draw-head, the said link is held in a horizontal position, to facilitate its entrance to an approaching draw-head by reason of the weighted block F, which, as will be seen by reference to the drawing, will rest on the inner end of the link, and thus hold its outer end on the same plane. This is quite an important feature of our invention.

The inside of the draw-head A is made concave, to allow of the movement of the block F.

What we claim as our invention, and desire to secure by Letters Patent, is—

In combination with the pin B, link C, and draw-head A, having the inner concave space, the lever I, having the counter-balance K, and the weighted block F, provided with the slot H, all constructed to operate in the manner set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 9th day of January, 1874.

OLIVER <sup>his</sup> × ROCHFORD.  
mark.

WILLIAM <sup>his</sup> × ROCHFORD.  
mark.

Witnesses:

ROBERT M. STEVENS,  
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