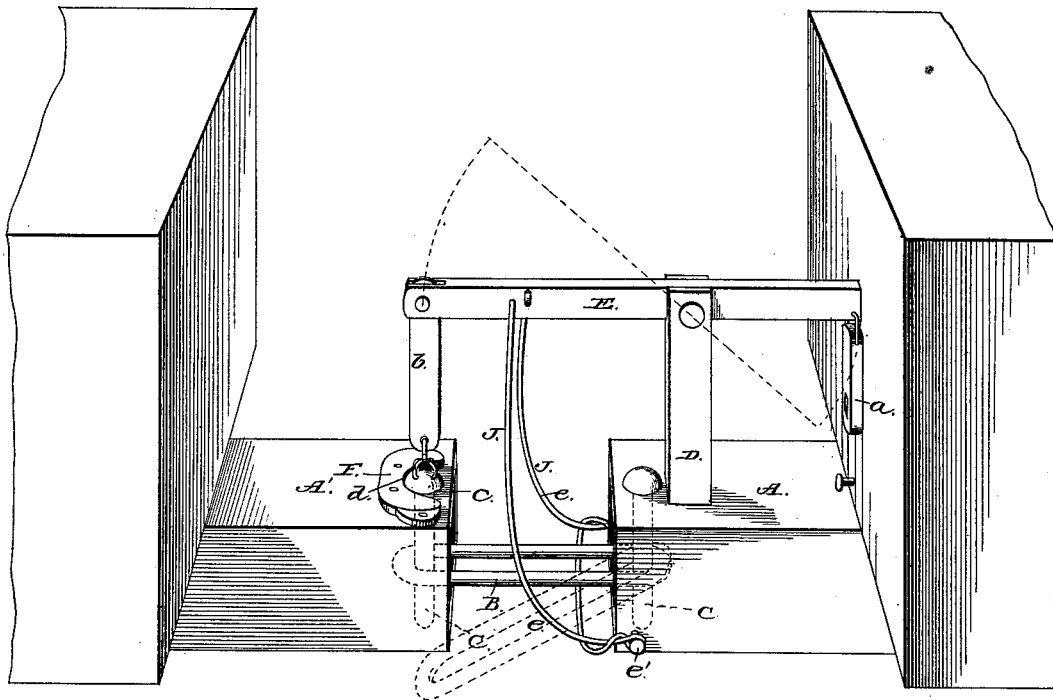


E. WILSON.  
Car-Coupling.

No. 214,223.

Patented April 8, 1879.



WITNESSES

*John Adams.*  
*A. J. Massi.*

INVENTOR

*Ezra Wilson.*  
*by E. W. Anderson.*  
ATTORNEY

# UNITED STATES PATENT OFFICE.

EZRA WILSON, OF NEW CASTLE, PENNSYLVANIA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **214,223**, dated April 8, 1879; application filed March 8, 1879.

*To all whom it may concern:*

Be it known that I, EZRA WILSON, of New Castle, in the county of Lawrence and State of Pennsylvania, have invented a new and valuable Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

The drawing is a representation of a perspective of my improved coupling.

This invention has relation to improvements in car-couplings; and the nature of the invention consists in certain novel combinations of the parts of the coupling, as will be hereinafter more fully set forth.

In the annexed drawing, the letters A A' designate the ordinary chambered draw-heads of two adjoining cars, designed to be used with the usual coupling-link B and pin C. Upon the head A is erected an upright, D, forked at its upper end, and affording bearings at its upper end to a vertically-vibrating lever, E. From the power-arm of this lever is flexibly suspended a draw-pole, *a*, and in the forked weight end thereof is pivoted to vibrate vertically a flat rod, *b*, to the lower end of which is flexibly secured the pin C.

Upon the top of the head A', in rear of the pin-hole *c*, is a guide-plate, F, having in its front edge an angular recess, *d*, the angle of which is just behind the said hole, and the sides bounding the said angle extending to the front beyond the said hole, as shown in the figure.

Depending from the lever E is a metallic bail, J, of the following form: A stout wire is secured at each end to the said lever, carried down in diverging branches *e*, looped around pins or headed bolts *e'*, and thence car-

ried across the front under the link, all as shown in the figure.

The operation is as follows: The train-hand, standing out of the line of the draw-heads and bunters, if such are used, seizes the draw-pole *a*, and, drawing down upon the same, raises the coupling-pin above the top of the adjacent draw-bar, and at the same time actuates the lifting-bail to raise the coupling-link, and causes it to enter the draw-head. This being accomplished, the end of the pin is directed by the angularly-notched guide-plate F to the pin-hole *c*, so that if the pole *a* be released the pin will fall through the pin-holes and link, and thus effect the coupling. The uncoupling is had by drawing down upon the said pole *a* and lifting the pin out of the draw-head.

In the end of pole *a* is an elongated slot designed to receive a pin on the end of a car, and allow cars to be brought together without injury to the coupling-pins. When thus engaged the pin is up above the heads; consequently they may come together without touching the same.

What I claim as new, and desire to secure by Letters Patent, is—

In a car-coupling, the combination, with the draw-heads A A', the pins C, and link B, of the upright D, the lever E, fulcrumed in said upright, and provided, respectively, at its power and weight ends with the draw-pole *a* and swinging rod *b*, flexibly secured to pin C, the bail J, secured to said lever and extending under the link, and an angularly-notched guide, F, arranged and operating as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EZRA WILSON.

Witnesses:

F. M. WHITNEY,  
GEO. W. MILLER.