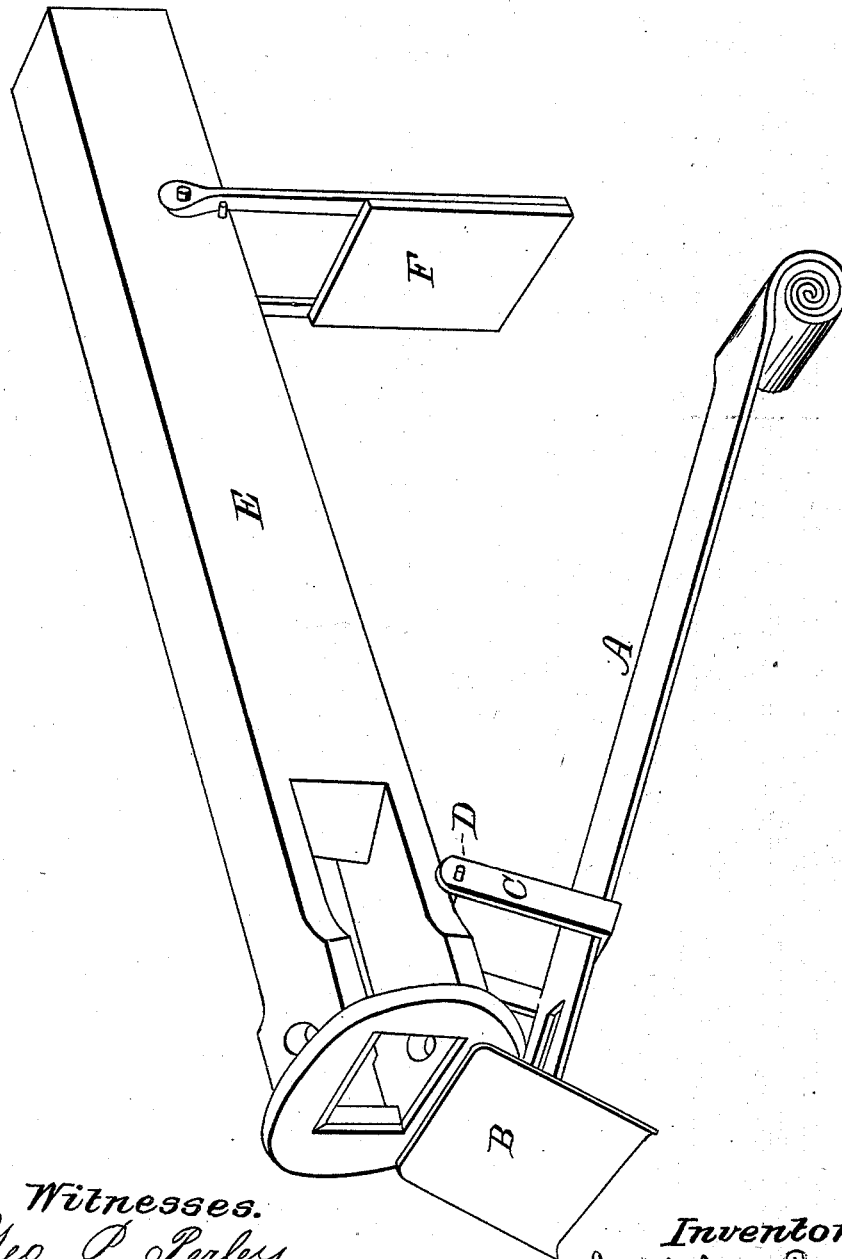


J. COUCH.
Car Coupling.

No. 49,385.

Patented Aug. 15, 1865.



Witnesses.
Geo P Perley
C L Cook

Inventor.
Joseph Couch

UNITED STATES PATENT OFFICE.

JOSEPH COUCH, OF HARRISON, MAINE.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. 49,385, dated August 15, 1865.

To all whom it may concern:

Be it known that I, JOSEPH COUCH, of Harrison, in the county of Cumberland and State of Maine, have invented a new and Improved mode of Coupling Railroad-Cars; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention consists in attaching to the bunter or draw-bar a lever placed on the underside and extending back from the end of the bunter twelve or fourteen inches. This lever is suspended to a fulcrum, which is secured to the under side of the bunter by screws or bolts with screw cut on the end, and a nut turned on about three inches from the end of the bunter. On the outer end of the lever is riveted a lip two inches wider than the throat of the bunter, and about five inches deep. This lip stands at right angles with the lever, and the upper end is placed as high above the lever as the distance is from the under side of the rim of the bunter to the throat. The lever is suspended to the fulcrum by means of an iron bar about one and a half inch wide and a half inch thick, riveted to the under side of the lever, the ends turned up perpendicular and attached to the fulcrum, the arms being just long enough when hung to the fulcrum to let the upper edge of the lip swing clear of the under edge of the bunter. By the levers dropping down the lip is thrown out and up to the throat of the bunter, making an inclined plane for the connecting-link to slide up into the throat of the bunter without the assistance of a man, and making it unnecessary for a man to stand between the cars when they run up to couple, a place in which he is liable to get jammed or killed. The link is thrown in and the lip pressed back by the bunter, which raises the lever into a rest which is placed back of the strap that supports the bunter at the back end of the car.

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

I construct my lever (marked A on the accompanying drawing) from a bar of iron from two to three inches wide and three-eighths of an inch thick, and cut a slot in the front end long enough and wide enough to work round the coupling-pin. I turn the end of it down at right

angles about three inches. Onto this end I rivet the lip marked B on the accompanying drawing. The lever is placed in the center of the lip widthwise, and the upper end of the lip as far above the lever as the distance is from the under edge of the rim of the bunter to the throat. The lip is about three-eighths of an inch thick, two inches wider than the throat of the bunter, and deep enough to let the connecting-link strike it about an inch from the lower end.

The suspension-bar (marked C on the accompanying drawing) is about one and a half inch wide, three-eighths of an inch thick, riveted to the under side of the lever about three inches from the lip, with the ends turned to a perpendicular upward, with holes in the ends about a half inch in diameter, to fit to the fulcrum. These arms must be long enough when hung to the fulcrum to let the lip swing clear of the under edge of the rim of the bunter.

The fulcrum (marked D on the accompanying drawing) is about an inch and a half wide, one-half inch thick, the ends worked off round, with a shoulder to fit the arms. It must be long enough from shoulder to shoulder to reach across the under side of the bunter. It is secured to the bunter (marked E on the accompanying drawings) by screws or bolts, with a screw cut on the end and a nut turned on, and must be placed on the bunter so that when the lever is suspended to it by means of the arms of the suspension-bar, and the lever is raised to a level, the lip will be perpendicular to the end of the bunter, or nearly so, and not quite out flush with the end of the bunter. The lip is made a little dishing, so as to throw the connecting-link to the center. The lever is about twelve or fourteen inches long, with a knob on the back end heavy enough to hold the lip in its place when the link strikes it.

Upon the bunter, just back of the strap that supports the bunter at the end of the car, I place a rest. I construct it from a piece of plate-iron about an inch wider than the bunter, and five inches deep. On each side is riveted or welded on an arm, which reaches up the sides of the bunter about half-way. These arms are long enough to leave a throat from the under side of the bunter down to the upper edge of the rest (marked F on the accompanying drawing) deep enough so that when the lever is on the rest it will be about level. In the ends of the

arms are holes, and the rest is suspended to pins attached to the sides of the bunter, upon which the rest swings. Just below the pin on which the rest swings, and on the front side of the arm-place, is another pin, to prevent the rest from swinging forward farther than a perpendicular. When the lever is off the rest it drops down and throws the lip outward and upward to the throat of the bunter. When the car runs up to couple, the link strikes the lip and is thrown into its place without the assistance of a man. The bunter throws the lip back out of the way and lifts the lever onto the rest, which is placed so that when the lever rises it throws the rest back till it comes up to the throat, and then it

swings back under the lever two or three inches, where it remains while the cars are running. When the car is uncoupled the lever is dropped from the rest, and the car is ready to couple again.

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

The lever, with the lip and suspension-bar attached, in combination with the fulcrum and rest, substantially as described, and for the purposes specified.

JOSEPH COUCH.

Witnesses:

WILLIAM L. PUTNAM,
THOMAS M. GWIN.