

E. RUSSELL.
Car Coupling.

No. 84,648.

Patented Dec. 1, 1868.

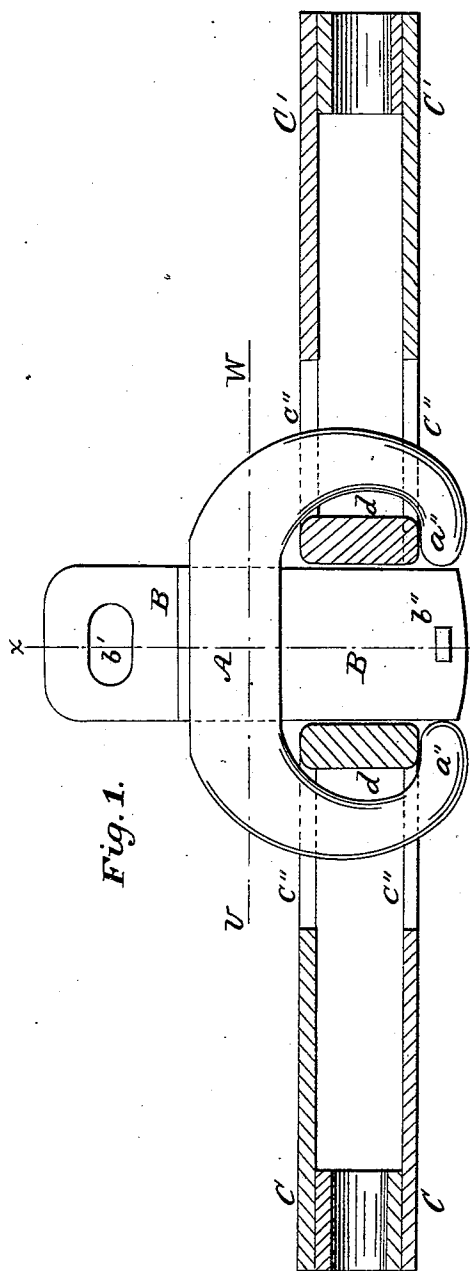


Fig. 1.

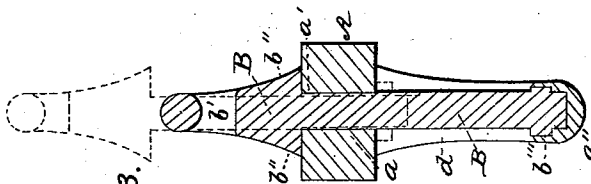


Fig. 3.

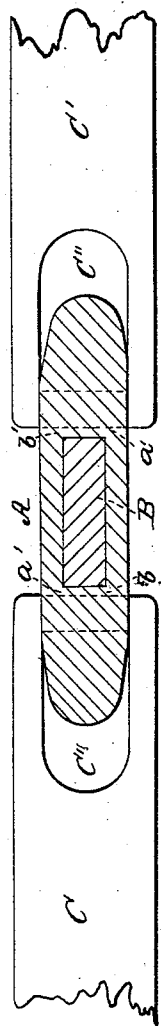


Fig. 2.

Witnesses:

Benjamin Morton
Wm. Morton

Inventor:

Ephraim Russell

UNITED STATES PATENT OFFICE.

EPHRIAM RUSSELL, OF WAYNESBURG, ASSIGNOR TO HIMSELF AND BENYARD YOST, OF HONEY BROOK, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 84,648, dated December 1, 1868.

To all whom it may concern:

Be it known that I, EPHRIAM RUSSELL, of Waynesburg, in the county of Chester and State of Pennsylvania, have invented a new and useful Coupling for Railroad-Cars; 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 accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the said coupling as when applied to connect the usual draw-heads of two cars; Fig. 2, a sectional plan view of the same below the dotted line *vw* of Fig. 1; and Fig. 3, a transverse section of the coupling detached, cut on the dotted line *xy* of Fig. 1, like letters of reference indicating the same parts when in the different figures.

The object of my invention is to afford a simply-constructed portable coupling for railroad-cars, whereby the conductor or operator can either connect or disconnect the cars with perfect facility and safety while standing on the platform of either car, or remove and carry away the said coupling for safe keeping, as occasion may require. My invention consists, substantially as hereinafter described, of an open link and an attached sliding handle, whereby, when the device is held up by the said handle, the free ends of the link-bar can be readily dropped into respective receiving-slots provided for them in the draw-heads of any two cars nearly in contact, so as to securely connect the cars together, or be simply lifted up out of said slots so as to disconnect the said cars while the operator is standing safely on the platform of either car.

Referring to the drawings, A is the open link; B, the sliding handle; and C C', the respective draw-heads of two cars. The link A is intended to be made of wrought-iron, and sufficiently thick and strong to sustain itself during the sudden jerks as well as the steady strains to which car-couplings are subject. Through the upper or closed side of the link A an oblong slot or through-hole, *a'*, is made, which is equal to or a little greater in length and breadth than the width and thickness of the sliding part of the handle B, which fits loosely in it. The distance apart of the

two ends *a'' a''* of the open link A is a little greater than the width of the said sliding part of the handle B at its lower end, so that the latter may pass easily or freely between them. (See Fig. 1.) The sliding handle B is also made of wrought-iron, and has a hand-hole, *b'*, through its upper or head end, and is provided with projecting shoulders *b'' b''*, by which it rests upon the upper or slotted side of the link A, while its lower end extends down between and to the lower sides of the free ends *a'' a''* of the said link A, leaving an open space, *d*, between each inside end of the link A and the sliding part of the handle B. (See Figs. 1 and 3.) There is a stud, *b'''*, on each side of the lower end of B, which prevents the said slide from being drawn entirely out of the link A.

The draw-heads may be made in the usual form; but, instead of the round hole heretofore required for a bolt, an oblong slot, *c''*, is made down through each, and is of sufficient length and width to allow the curved ends of the link A to drop simultaneously and freely down through them in applying the coupling, and so that the lower end of the sliding part of the handle B will afterward be permitted to drop down between the two draw-heads C C'. (See Fig. 1.)

The application, removal, and mode of operation of this coupling are very simple. The conductor or operator, standing upon the platform of either car and holding the coupling by its handle B, simultaneously enters both ends of the open link A into the respective slots *c'' c''* of the draw-heads of the two cars as the latter come together, and lets them drop into the said slots *c'' c''*, thus coupling the cars together, and, as they are immediately drawn a little way apart, the sliding handle B drops downward between the ends of the two heads C C', and thus confines the link properly or loosely in place, as shown in Fig. 1. In detaching the cars the operator raises the sliding handle B, and thereby the link A, and thus removes the coupling. In operation the draw-heads C C' are held together loosely by the link A, and at the same time kept from abutting together with each other by the sliding handle B, which at the

same time allows them sufficient freeness of motion for turning curves or irregularities in the rail-track.

This is a very simple and reliable coupling for cars, can be applied and detached with facility and without any risking of the life or limbs of the conductor or operator, and, moreover, can be readily removed and locked up in the standing car—a very important matter to railroad men, as the coupling-links and bolts now in use are often stolen or carried off by thieves.

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

The open link A and the sliding handle B, in combination with a slotted draw-head, all constructed and operating together substantially as and for the purpose described.

EPHRAIM RUSSELL.

Witnesses:

BENJ. MORISON,

WM. MORTON,

R. W. MORTON.