G. W. GOMBER.

CAR-COUPLINGS.

No. 188,356. Patented March 13, 1877.

Fig. 1.

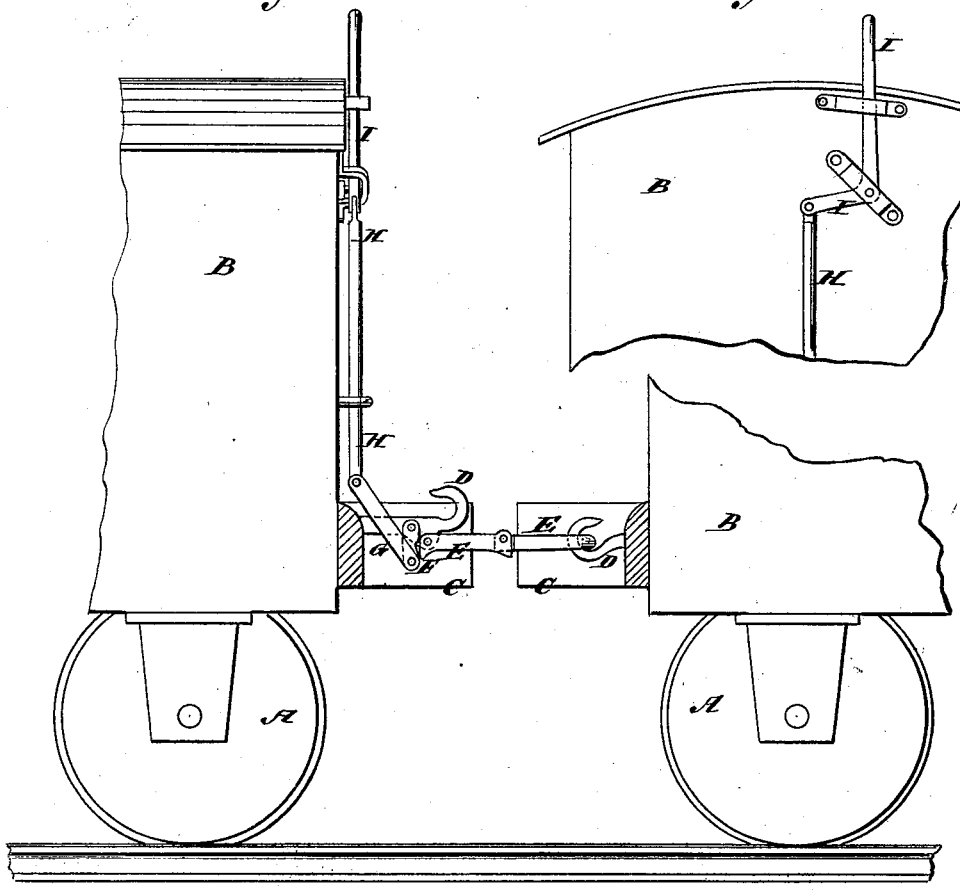
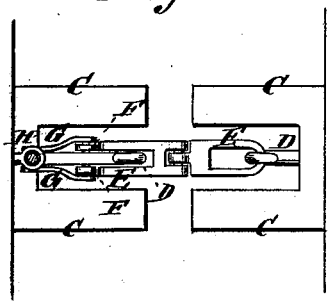


Fig. 2.

Fig. 3.



WITNESSES:

E. Wolff.

J. H. Scarborough

INVENTOR:

G. W. Gomber.

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE W. GOMBER, OF SYBERTSVILLE, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **188,356**, dated March 13, 1877; application filed November 18, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. GOMBER, of Sybertsville, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification:

Figure 1 is a side view of the end of a car to which my improved coupling has been applied, part being broken away to show the construction. Fig. 2 is an end view of the upper part of the car. Fig. 3 is a detail top view of the coupling.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved car-coupling which shall be simple in construction, reliable in operation, and convenient in use, enabling the cars to be coupled and uncoupled from their tops or sides, and having sufficient play to prevent binding when the cars pass around curves.

The invention consists in the coupling-link made in two parts, hinged to each other by a rule-hinge, in combination with the draw-hook of a car; and in the combination of the hinged link, the pivoted bars, the sliding bar, and the bent lever with each other, and with the draw-hook of a car, as hereinafter fully described.

A are the wheels, B are the bodies, and C are the bumpers, of the car. D are the draw-hooks, which are securely connected with the cars. E are the coupling-links, which are made in two parts or halves, connected together by a rule-joint hinge. The inner end of the hinged link E is pivoted to the bar of the hook D, and has a toe formed upon it for the short bars F to rest against.

The upper ends of the short bars F are pivoted to the bar of the hook D, a little above and in the rear of the pivot of the link E. To the lower ends of the bars F are pivoted the lower ends of the bars G, which pass up upon the opposite sides of the hook D, and their upper ends are pivoted to the lower end of a rod, H. The rod H passes up through keepers attached to the end of the cars, and its upper end is pivoted to the end of a bent lever, I, which is pivoted at its angle to the end of the car. By this construction, by operating the lever I to press the rod H downward, the bars G F will be pressed against the inner end of the link E, so as to raise the outer end of said link and drop it over the hook D of the adjacent car. In the same way the link E may be raised to uncouple the cars.

The device may be so arranged as to be operated from the top or side of the car, as may be desired. The hinge in the link enables it to be raised by hand to couple and uncouple the cars, and also makes it more convenient in coupling to cars provided with the ordinary coupling. The hinge of the links E also renders the cars less liable to be uncoupled when run together, as the middle part of the link tends to sink down when not under strain. A hinged link and its operating bars and lever are attached to the draw-hook at each end of each car. Only one of the links is used at a time, the one not in use being allowed to hang down, so as to be out of the way.

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

1. The coupling-link E, made in two parts, hinged to each other by a rule-hinge, in combination with the draw-hook D of a car, substantially as herein shown and described.

2. The combination of the hinged link E, the pivoted bars F G, the sliding bar H, and the bent lever I with each other, and with the draw-hook D of a car, substantially as herein shown and described.

GEORGE W. GOMBER.

Witnesses:
WM. MINNICH,
W. H. SEIWELL.