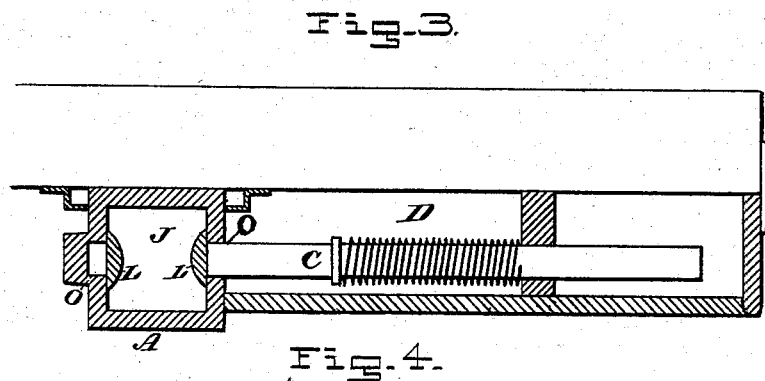
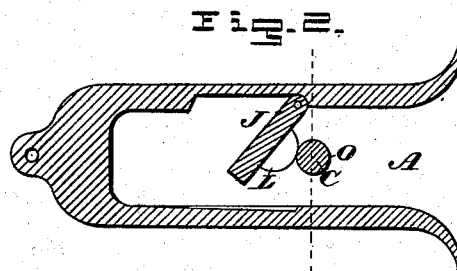
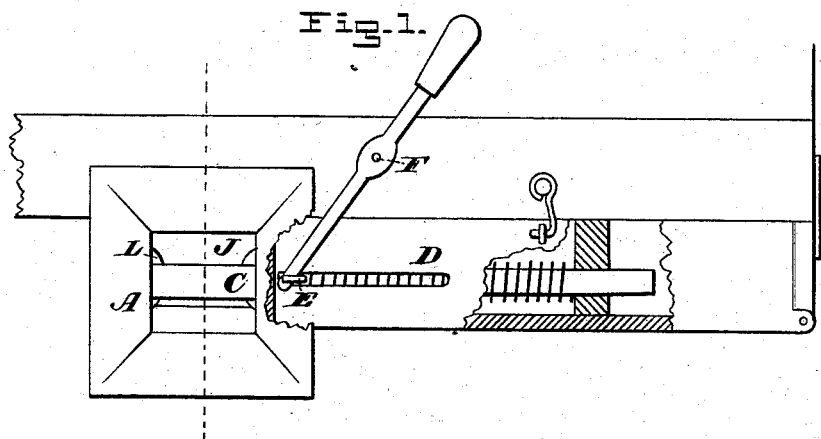


J. G. BAADER.
Car-Coupling.

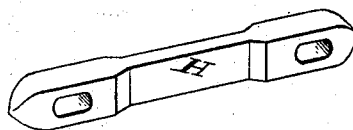
No. 215,552.

Patented May 20, 1879.



WITNESSES:

Jas. F. DuHamel.
J. W. Garner.



INVENTOR:

J. G. Baader,
per
F. A. Lehmann,
att'y.

UNITED STATES PATENT OFFICE.

JOHANN G. BAADER, OF ST. VINCENT'S, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **215,552**, dated May 20, 1879; application filed April 12, 1879.

To all whom it may concern:

Be it known that I, JOHANN G. BAADER, of St. Vincent's, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in car-couplings, and it is applied to my former improvements in car-couplings for which Patent No. 162,879, dated May 4, 1875, was granted to me by the United States; and it consists in simplifying my former invention by removing the secondary draw-head and other devices connected therewith, as will be fully described hereinafter.

The accompanying drawings represent my invention, in which Figure 1 is a front elevation. Fig. 2 is a horizontal section of the draw-head alone. Fig. 3 is a vertical cross-section, and Fig. 4 is a perspective of the link.

The draw-head A is, as shown in my former invention, similar to the old form of hand-coupling, but may be varied to suit the occasion.

On one side of the draw-head is a box or bearing, D, for a bolt, C, which is impelled toward and through openings O in the sides of the draw-head by a spring within the box D.

Attached to the side of the bolt, and moving laterally in a slot, is a projecting pin or hook, E, by which the bolt may be drawn back against the spring by means of a lever having its fulcrum on a pin, F, projecting from the upper part on the side of the box D. Within, at the upper side and in range with, the openings O in the sides of the draw-head is hinged a trap, J, which automatically drops and closes the front opening of the draw-head.

The sides of the trap are provided with ears or projections L, which, when the bolt is withdrawn, close openings O, through which the bolt is to pass.

The bolt C, when the car is uncoupled, bears against the ear on that side of the trap, and is thereby prevented from entering the draw-head.

If, now, the coupling-link is pushed into the draw-head against the trap, the trap yields to the pressure, thereby leaving the side openings free for the bolt impelled by the spring to pass through, and simultaneously through the link, whereby the coupling is effected.

It is evident that, whether the cars are standing still or whether in motion, the bolt C, holding the coupling-link, may be withdrawn to disconnect cars by a person standing in front or rear of the car.

To couple cars, after providing one with the necessary link, they are simply run against one another.

The coupling-link H may, as shown in the drawings, be a straight bar pierced at its ends vertically, or vertically on one end, laterally on the other; or it may be bent to adapt itself to cars of different heights and cars provided with the old draw-heads and coupling-pins.

For the purpose of giving access to the coupling-bolt C without exposure between the cars, a door is provided at the end of the box D, through which the rear end of the bolt can be reached and withdrawn from the draw-head, either to disconnect cars or to prepare them for coupling.

I am aware that a bolt operating from one side is old, and this I disclaim.

Having thus described my invention, I claim—

1. In a car-coupling, the combination of the draw-head A, having openings through it on opposite sides, automatically-acting traps J, placed inside of the draw-head, spring-rod C, frame D, and operating hand-lever, substantially as shown.

2. The automatic traps J, placed inside of the draw-head A, and provided with the ears L, with the spring-rod C, and hand-lever, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of April, 1879.

JOHANN G. BAADER.

Witnesses:

AUGUST SCHNEIDER,
T. F. LEHMANN.