## M. M. COPPUCK & S. L. WIEGAND.

CAR-COUPLING.

No. 187,517.

Patented Feb. 20, 1877.

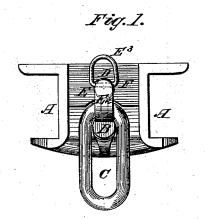


Fig. 2.

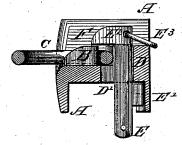
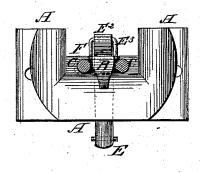


Fig.3.



Mitnesses:

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## UNITED STATES PATENT OFFICE.

MALCOLM M. COPPUCK AND S. LLOYD WIEGAND, OF PHILADELPHIA, PA.

## IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 187,517, dated February 20, 1877; application filed January 16, 1877.

To all whom it may concern:

Be it known that we, MALCOLM M. COPPUCK and S. LLOYD WIEGAND, both of the city and county of Philadelphia and state of Pennsylvania, have jointly invented certain new and useful Improvements in Coupling and Draw-Heads for Railway Cars; and we do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable persons skilled in the art to make and use the same.

The nature of our invention consists in an improved shape of draw-head, of as simple and as cheap construction as those in common use, by which a link for coupling can be inserted or withdrawn without retracting the cars, and without requiring the hand to be placed in such position as to endanger pinching or crushing; and, further, our invention is so constructed that cars having this form of draw-head can be readily coupled with those of ordinary construction, and are not liable to become uncoupled by accident.

We will now proceed to describe particularly and exactly the manner in which the said invention is to be made and operated, referring in so doing to the drawing anuexed, and forming a part of this specification.

Figure 1 is a plan, Fig 2 a vertical section, and Fig. 3 a front elevation, of this invention.

The same letters of reference apply to the same parts in the several figures.

A represents the draw-head casting, made with the top open, and having a pin or stud, B, fixed rigidly in it. The form of the open mouth of the casting A is flaring, so as to permit the link C, when placed on the pin B, to swing to a considerable extent in every direction without cramping. The pin B is also shaped thin at the front for the same purpose.

In the bottom of the casting A, back of the place of the bend of the link C, is a hole, D, made circular, with its axis vertical or nearly so, and having a slot, D', extending under the bend of the link. A cylindric pin, E, fits easily in the hole D, and has a feather, E<sup>1</sup>,

susceptible of easily passing through the slot D¹. On the upper end of the pin E is formed, diametrically opposite to the feather E¹, a lip or head, projecting on one side only, marked E². In the head E² is placed a ring or bail, E³, by which the pin E may be turned around or lifted.

A recess or cavity, F, is formed in the casting A, in which the bail E<sup>3</sup> lies when the lip E is over the bend of the link C, and thus prevents the pin E from turning, and the lip E<sup>2</sup> holds the link C on the pin B; (a permanently-attached feather formed on the pin E fitting a recess in the casting A may be used for the same purpose.)

To disengage the link C from the pin B, the pin E is rotated far enough to permit the feather E<sup>1</sup> to rise through the slot D, and raise the link C above the pin B.

The pin E may, to prevent its removal from the draw-head A, have its lower end prolonged, and a nut-head or pin, or other projection, securely fastened at its lower end, to prevent its passing out of the hole D.

The front of the draw head A is made with broad surfaces, so as to prevent its becoming fouled with couplings of other or like construction, and also to provide ample surface for the bearing of wooden packings between the draw-heads, so as to diminish the concussions between them.

What we claim as our invention is-

1. The draw-head, having expanded surface for cushioning, and open at the top for the introduction of a link upon a stationary hook or pin, in combination with the lip headed pin E, having a feather to retain it when locked, and to lift the link for the purpose of disengaging it, substantially as described.

2. The feathered pin E, having a lip head and bail, as described, adapted to hold and lift a link, substantially as set forth and shown.

M. M. COPPUCK. S. LLOYD WIEGAND.

Witnesses:

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