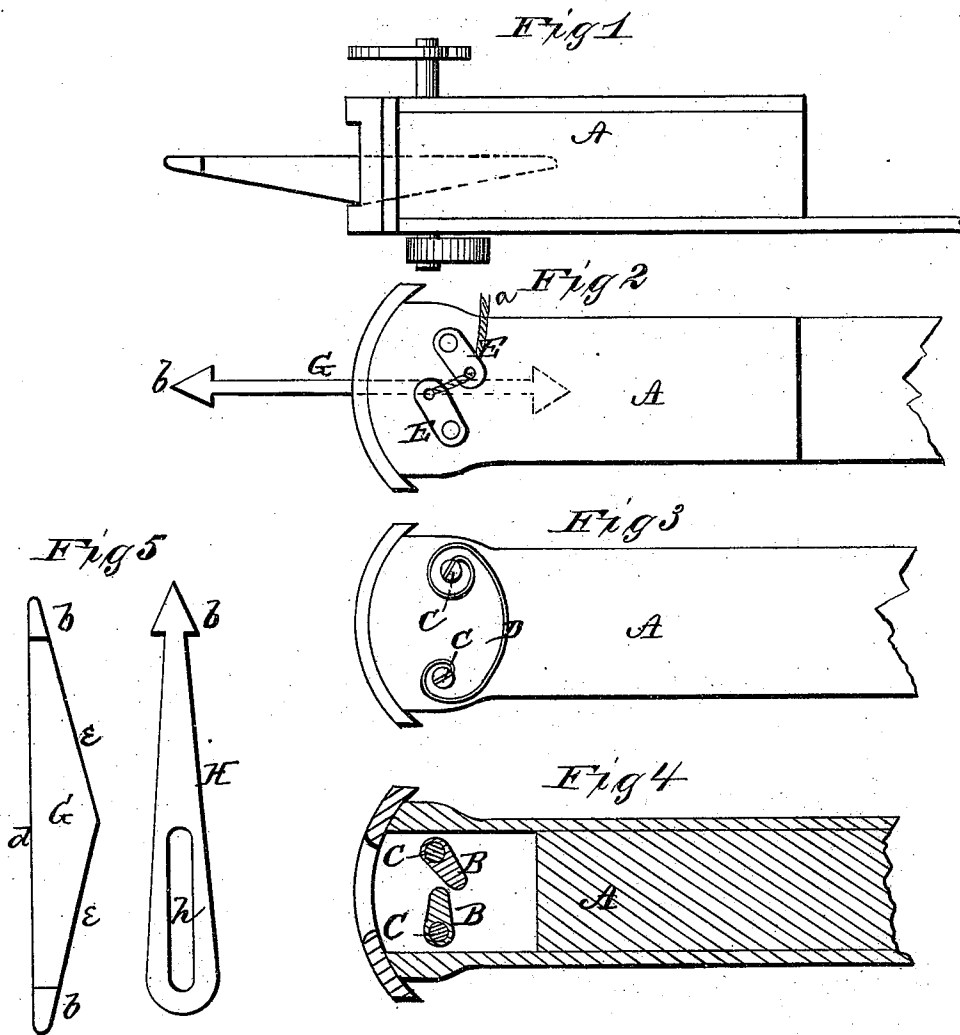


D. J. MARTIN.
CAR-COUPLING.

No. 175,479.

Patented March 28, 1876



WITNESSES
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DAVID J. MARTIN, OF COVINGTON, OHIO.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **175,479**, dated March 28, 1876; application filed February 16, 1876.

To all whom it may concern:

Be it known that I, DAVID J. MARTIN, of Covington, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a car-coupling, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view; Fig. 2, a plan view; Fig. 3, a bottom view, and Fig. 4 a horizontal section of my invention. Fig. 5 shows the coupling-bar.

A represents an ordinary draw-head, with the usual flaring mouth. Within the draw-head, immediately inside of the flaring mouth, are two jaws or wings, B B, secured one on each side to pins C C, passing vertically through the draw-head. These jaws close together in the center, and open inward toward the sides. The pins C C should be about the size of ordinary coupling-pins, and their lower ends, below the draw-head, are connected by a spring, D, so arranged that its tendency will be to keep jaws B B closed. On the upper ends of the pins C C are secured cranks E E, set at different angles, and connected by a wire chain or rope, *a*, and this rope attached to a lever running out to the side of the car, by the pulling or turning of which the jaws are opened for uncoupling.

By the application of suitable connections the jaws may also be opened from the top of the car.

The coupling-bar G is made a flat piece of iron or steel, with a spear-shaped head, *b*, at each end. One edge, *d*, of this bar is perfectly straight from head to head, while the other edge has two inclines, *e e*, running tapering from the center toward each end. In coup-

ling two cars, the bar G being in one draw-head, the outer head *b* of the bar G opens the jaws in the draw-head, and as soon as it has passed the inner edges of the jaws they close by the action of the spring D, thus coupling the cars.

To uncouple the cars, the jaws are opened as above described, allowing the coupling-bar to be withdrawn.

Cars of different height can easily be coupled with my invention without anybody going in between and guiding the link. If the car to be coupled is higher, the coupling-bar G is placed with the inclines *e* downward, which raises the outer end. If the car is lower, the bar is placed with the straight edge *d* downward, which depresses the outer end.

In case one car should run off the track, or otherwise turn over, the coupling-bar by being flat will turn and uncouple itself, thus preventing the adjoining car from being dragged over with it.

H represents a coupling-bar, formed with a head, *b*, at one end and a link, *h*, at the other, to be used to connect with a car having the ordinary pin and link coupling.

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

1. The combination, with the draw-head A, of the interior side jaws B B, the pins C C, pivoting said jaws, and projecting above and below the draw-head, the spring D connecting the lower ends of the pins, and the cranks E E, secured on the upper ends of said pins, all substantially as and for the purpose specified.

2. The reversible flat coupling-bar G, formed with the spear-shaped heads *b b*, straight edge *d*, and inclines *e e*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in the presence of two witnesses.

DAVID J. MARTIN.

Witnesses:

H. A. HALL,
C. L. EVERT.