

J. McNABB.
Car-Coupling.

No. 164,017.

Patented June 1, 1875.

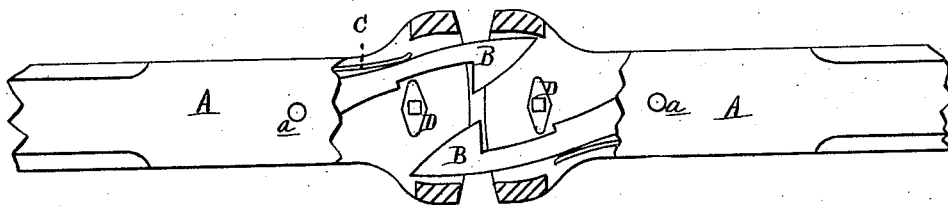


Fig. 1

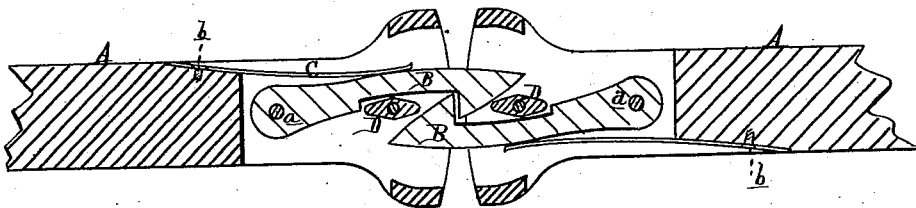


Fig. 2.

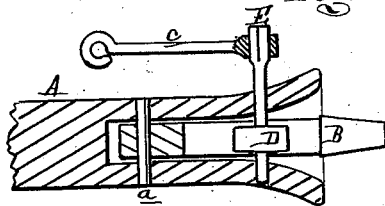


Fig. 3.

ATTEST:

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UNITED STATES PATENT OFFICE.

JAMES McNABB, OF WIDDER STATION, CANADA, ASSIGNOR TO HIMSELF
AND SYLVANUS CORNELL, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **164,017**, dated June 1, 1875; application filed
August 22, 1873.

To all whom it may concern:

Be it known that I, JAMES McNABB, of Widder Station, in the Province of Ontario and Dominion of Canada, have invented an Improvement in Car-Couplings, of which the following is a specification:

The nature of this invention relates to an improvement in that class of car-couplings in which the buffer or draw-bar has pivoted to it a hooked or barbed coupling, which will automatically engage with a similar one on an approaching car. The object of the invention is to combine, with a draw-head approximating in form that in use for coupling passenger and freight cars, an automatic coupling-hook, and a cam or lever for separating the hooks in uncoupling, which can be operated from the deck or platform of the car. The invention consists in a draw-bar having pivoted within its cavity or socket a hooked coupling actuated by a leaf-spring at the side of the draw-head, and an uncoupling cam or lever, arranged and operating as more fully hereinafter set forth.

Figure 1 is a sectional plan view of my improved self-coupler. Fig. 2 is a longitudinal horizontal section, and Fig. 3 is a longitudinal vertical section.

In the drawing, A represents a draw-bar, preferably of cast metal, having an enlarged head to form a buffer, and a flaring socket extending from the buffer back into the shank, wherein is pivoted by a pin, *a*, the rear end of a curved hook-headed coupler, B, whose barb projects from the face of the buffer. C is a leaf-spring, whose rear end is secured by the bolts *b b* in a recess in the side of the draw-bar, projecting through a slot in the same, with its front end bearing upon the back edge of the coupler, pushing the latter toward the opposite side of the socket. D is a double cam or wiper, mounted on a shaft, E, pivoted vertically in the jaw of the draw-head, below which its lower end projects, and

has secured to it an arm, *c*, to whose outer end may be secured one end of a chain, whose other end can be wound upon a vertically-journalled rod fitted with a hand-wheel at its top, above the platform or deck of a car, as the case may be. F is the combined draw and buffer spring, fitted to the shank at the rear end of the draw-bar in the usual manner.

When two cars fitted with these coupling devices come together the angular faces of the couplers crowd each other apart until the barbs pass by each other, when the springs force and hold them together, the wiper or cam occupying a longitudinal position between them. When it is desired to uncouple them a few turns of the hand-wheel referred to, or any other equivalent device for rotating the shaft E which will cause the wiper to assume a position transversely of the jaw, will crowd the couplers apart, and thus uncouple the cars, which, in trains of freight-cars, will save much time and prevent many dangerous accidents.

Hook-couplers have heretofore been used to a certain extent, but of such construction that their excessive cost forbids their employment except upon passenger-cars, while the present one will cost but little more than an ordinary link-and-pin coupling.

By providing a pin-hole near the jaw and drawing aside the coupler this draw-bar may be used to couple with a car having an ordinary link-coupling.

I claim—

The combination of the draw-bar A, capable of longitudinal movement under the car-bed, the hooked coupler B, pivoted within its socket, so as to have a lateral movement, and the wiper D, all substantially as and for the purpose set forth.

JAMES McNABB.

Witnesses:

ROBERT RAE,
J. R. PALMER.