J. RHOADS.

Car-Coupling.

No. 164,330. Patented June 8, 1875.

Fig 1

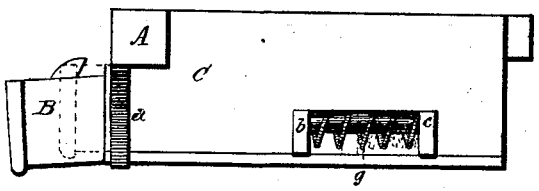
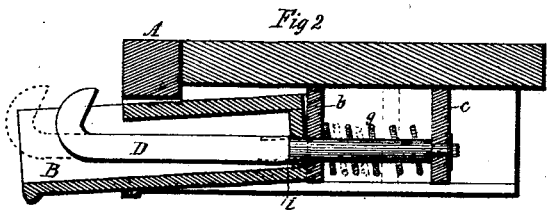


Fig 2



WITNESSES.

J. Wm. Lawrence.

Chas. W. Lemon.

INVENTOR.

John Rhoads.

per F. A. Lehmann

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UNITED STATES PATENT OFFICE.

JOHN RHOADS, OF HARRISBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO JAMES MUNROE RHOADS, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **164,330**, dated June 8, 1875; application filed April 6, 1875.

To all whom it may concern:

Be it known that I, JOHN RHOADS, of Harrisburg, in the county of Dauphin 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 consists in an arrangement and combination of parts, which will be more fully described hereafter.

The accompanying drawing represents my invention.

A represents the cross-beam at the end of a railroad-car, and under it is the buffer B. The buffer is loosely supported in the box C, which box is secured to the under side of the car, and is upheld by the straps *a*, which straps are fastened under the cross-beam A. The rear end of the buffer abuts against a slide, *b*, placed crosswise in the box C, the ends of which slide and extend through openings in the sides of the box. Within the buffer is the draw-bar D, its head, in the form of a hook, occupying the front part. The draw-bar passes through the closed rear end of the buffer and through the slides *b* and *c*, and is secured behind the latter by a pin or other fastening. A shoulder, *i*, is formed upon the draw-bar near the inner side, at the rear end of the buffer, by which the latter is prevented from sliding forward without the draw-bar. Between the slides *b* and *c*, and coiled around the draw-bar, is the spring *g*, which presses equally against both slides.

The buffer B, of which the rear end abuts against the slide *b*, may thus be pressed back without affecting the draw-bar, and will be restored to its place by the spring *g;* but the buffer can be drawn forward only in connection with the draw-bar, because the shoulder *i* on the draw-bar would prevent its forward motion so long as the draw-bar remains stationary. Both buffer and draw-bar may be drawn forward together, or the draw-bar alone, leaving the buffer stationary.

The varied motion of both buffer and draw-bar, either separate or in connection, and the discarding of coupling-pins, possess advantages which, it is believed, surpass those heretofore offered, and will supply the wants of railroad companies.

Having thus described my invention, I claim—

The combination of the buffer B, draw-bar D, slides *b* and *c*, spring *g*, and box C, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 31st day of March, 1875.

JOHN RHOADS.

Witnesses:

JAMES RHOADS,

THOS. H. CLARKE.