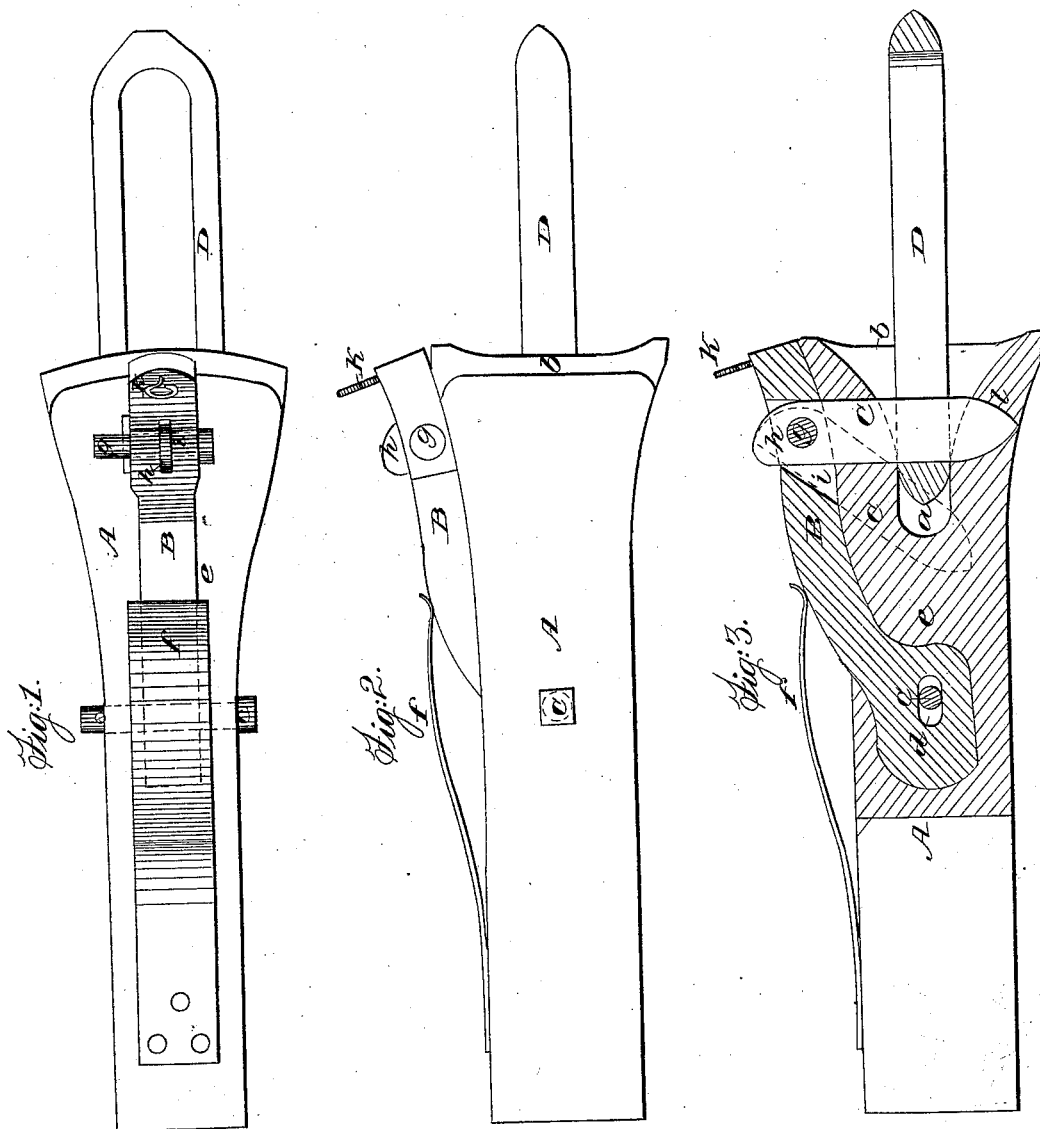


L. MOODY.
Car Coupling.

No. 50,152.

Patented Sept. 26, 1865.



Witnesses.
Frederick Buntz
R. C. Fisher

Inventor
Loring Moody
by his attorney
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UNITED STATES PATENT OFFICE.

LORING MOODY, OF MALDEN, MASSACHUSETTS.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. **50,152**, dated September 26, 1865.

To all whom it may concern:

Be it known that I, LORING MOODY, of Malden, in the county of Middlesex and State of Massachusetts, have invented an Improved Railway-Car Coupling; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of it.

In the said drawings, A denotes a bunter-bar of a railway-carriage, such bar being provided with a link-chamber or receiving-recess, *a*, having a flaring or trumpet mouth, *b*.

A lever, B, formed as shown in the drawings, is arranged within the bunter-bar A, and is supported not only by the front part being made to rest on the top of the surface of the bunter-bar, but by means of a fulcrum-pin, *c*, which goes through the bar transversely of it, and also through an elongated slot, *d*, made through the lever near its rear end, and arranged therein in manner as represented in Fig. 3. The lever is disposed in a slot, *e*, formed vertically through the bunter, and projects from the said slot, and has or may have a spring, *f*, to force its longer arm down upon its seat, the said spring being fastened to the top of the bunter-bar, and arranged as exhibited in Figs. 1, 2, and 3.

There is suspended from the lever B a pendulous pin, C, which extends down through the vertical passage or slot *e* and the mouth of the bunter-bar. The said pin swings freely and backward on a pin, *g*, which goes through the lever and a tenon, *h*, formed on the upper part of the said pin, and extending through a slot or mortise, *i*, made down through the lever.

The mortise and tenon are so made as to cause the pin, when forced back to its rear-most position while the lever is resting on the bunter-bar, to stand at an acute angle with respect to the lever, or in manner as represented by dotted lines at C', in Fig. 3.

The coupling-link D, while passing or being forced into the bunter-bar will press the pin C backward into the inclined position shown at C'. After having reached such a position, the pin, by abutting against the rear end of the mortise *i*, will serve as a cam or inclined plane against which the link will operate in such a manner as to force both the pin C and the lever B upward. They will continue to so rise until the curved end of the link may have passed sufficiently in rear of the pin to enable such

pin to enter the link, which having taken place the pin will immediately fall or be driven downward through the link by the reacting power of the spring *f*, and will thus couple the link to the bunter-bar.

A staple, *k*, fixed in the lever B, is for the purpose of enabling a tripping-rope to be attached to the lever. By pulling such rope upward the lever may be elevated so as to draw the pin out of the link, in order to uncouple the two.

The lever end of the pin is made conical, as shown in Fig. 3. By so making the pin its rise over and on the link will be facilitated. The object of making the fulcrum-pin passage *d*, of the lever B, an elongated slot instead of a cylindrical hole is to enable the lever not only to turn on its fulcrum but to slide upward therein under the pressure of the link against the pendulous pin C. The sliding of the lever on its fulcrum aids in raising the pin C relatively to the link, and thus enables a shorter pin to be used and a less angular movement of the lever requisite than would be the case were the hole in the lever for the reception of the fulcrum-pin to be a cylindrical one having the same diameter as the fulcrum-pin. The slot in the lever also enables the strain of the draft-link on the pin C to draw such pin closely against the front end or part, *l*, of the vertical slot or passage made through the bunter-bar, and thus relieve the fulcrum-pin *c* from the pressure occasioned by draft on the link.

I do not herein claim the combination of a curved pin with the tripping-lever and the recessed bunter-bar, the whole being as represented in Letters Patent No. 45,733, granted to me on the 3d day of January, A. D. 1865. Nor do I claim the improvement or car-coupling which constitutes the subject of the United States Patent No. 44,484.

What I claim as my improvement is—

The car-coupling as made, not only with the pendulous pin C, combined with or applied to the lever B, and so as to operate therewith, in manner and under pressure of the link, substantially as described, but as having the slot *d* in the said lever to enable the latter to slide upward on its fulcrum under circumstances and for the objects as hereinbefore explained.

LORING MOODY.

Witnesses:

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