

(No Model.)

M. W. BRUCE.

CAR COUPLING.

No. 255,586.

Patented Mar. 28, 1882.

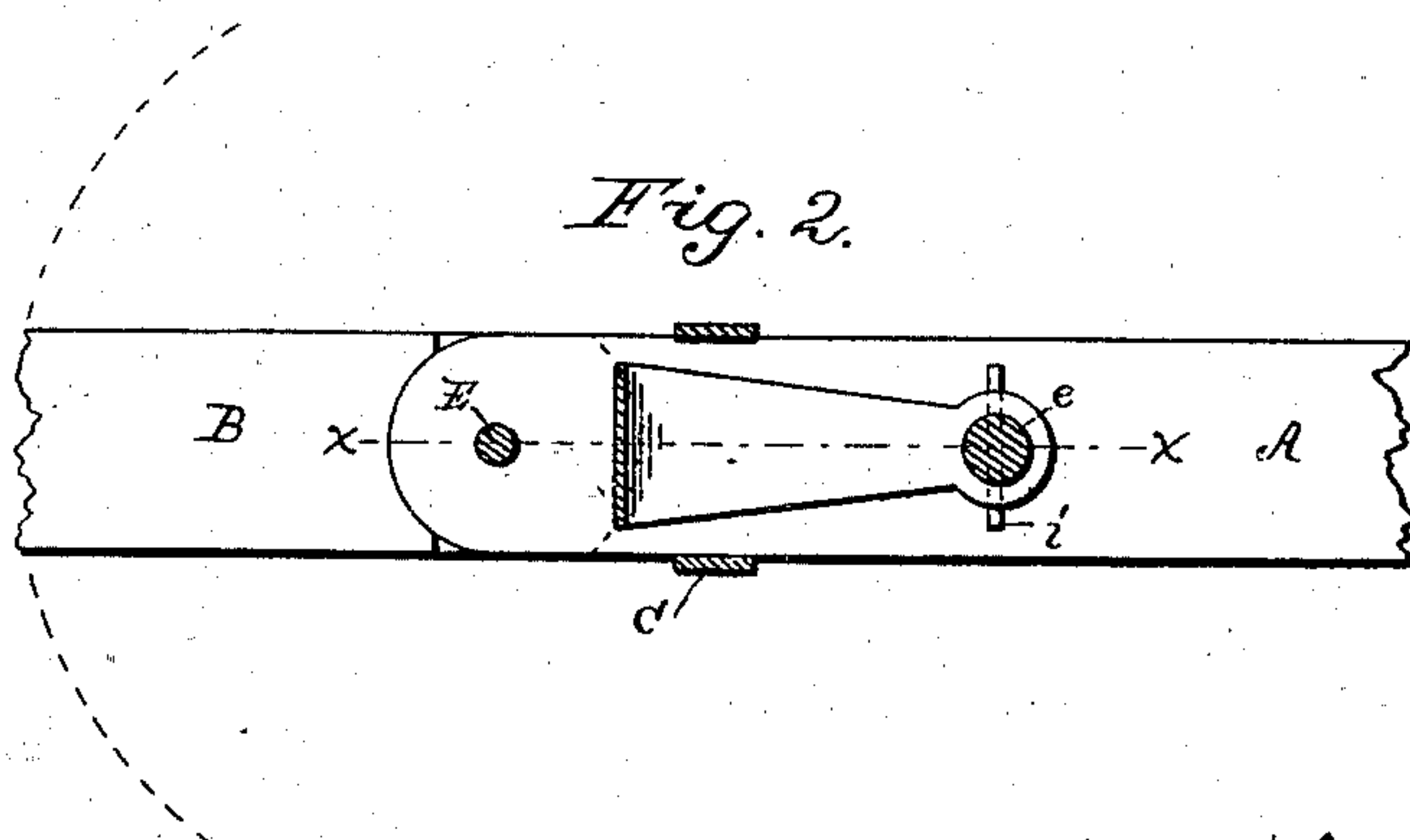
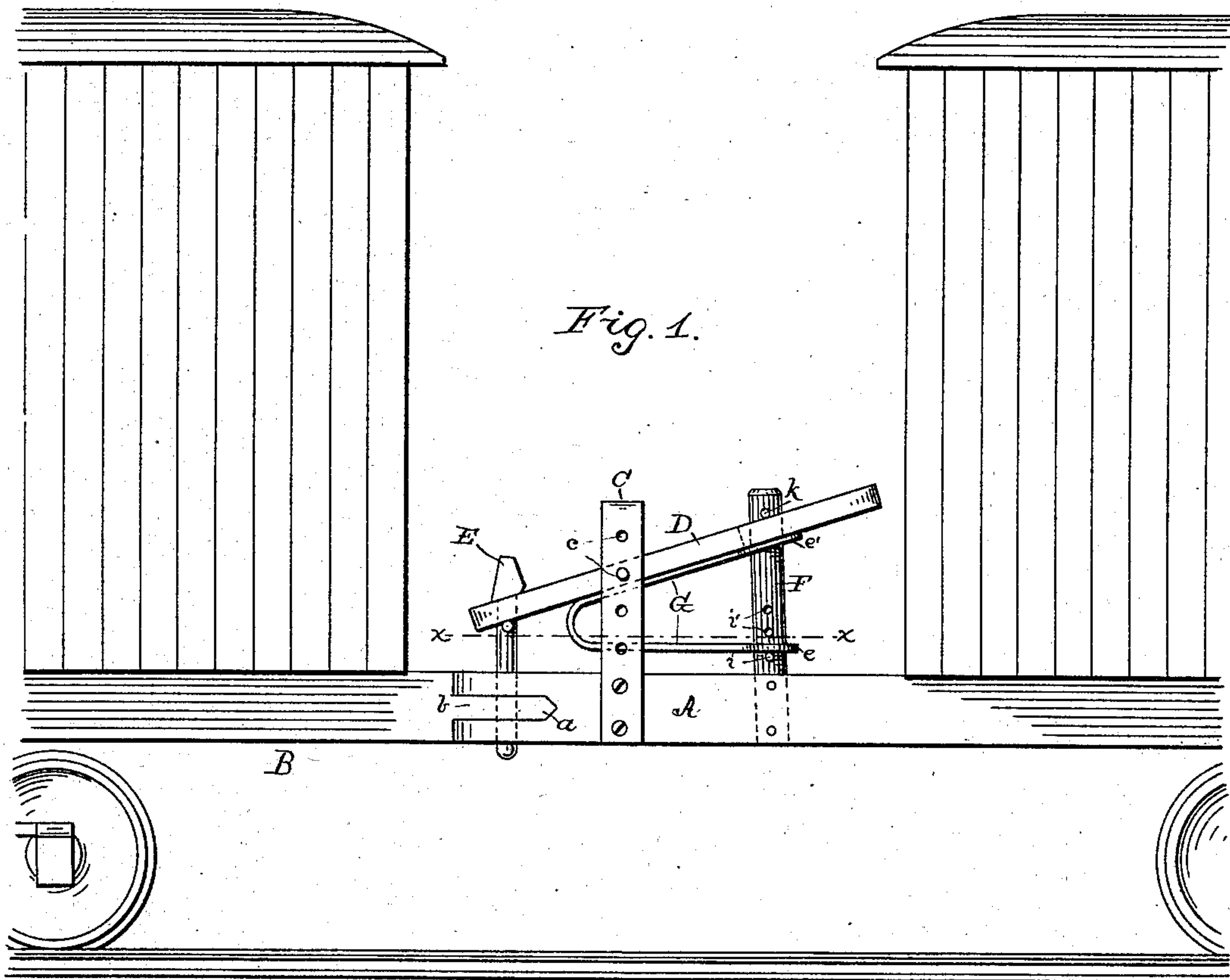


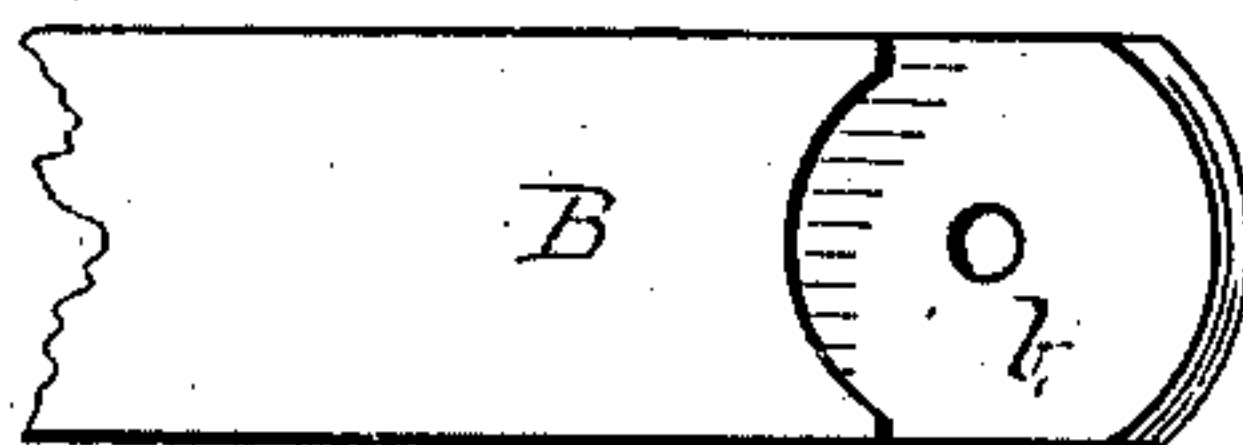
Fig. 3.

Math. W. Bruce

Inventor:

Witnesses:

J. W. Garner
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UNITED STATES PATENT OFFICE.

MATTHEW W. BRUCE, OF WHITE STONE, VIRGINIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 255,586, dated March 28, 1882.

Application filed December 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW W. BRUCE, a citizen of the United States, residing at White Stone, in the county of Lancaster and State of Virginia, have invented certain new and useful Improvements in Car-Couplers; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention has relation to car couplers; and the novelty consists in the construction of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

Figure 1 is a side elevation of the adjoining ends of two cars supplied with my improved coupler. Fig. 2 is a top plan view of the device through the lines *x x*, and Fig. 3 is a top plan of the female draw-bar.

In the accompanying drawings similar letters of reference indicate like parts of the invention.

A is a draw-bar, having the recess *a* to receive the tongue on tenon *b* of the opposite draw-bar B.

A yoke-standard secured to the bar A, and is provided with holes *c'*, in which the operating-lever D is pivoted. The forward end of the lever D carries the pin E and the rear end encircles the fixed standard F. A V-shaped spring, G, of peculiar construction, serves to press the rear end of the lever D up, which carries the forward end down, forcing the pin E in place and securely holding it there. The ends *e e'* of this spring G are provided with holes, through which the standard F passes, the end *e* allowing the tension of the spring to be adjusted by means of the pin *i* and holes *i'*. A pin, *k*, is inserted in the top of the standard to limit the play of the lever D upwardly.

The forward end of the draw-bar A is convex or semicircular in shape, while the adjoining end of the opposite draw-bar, B, is concave, which makes a solid joint and prevents any strain upon the pin E in backing, and at the same time allows a free motion in turning corners.

It will be seen that to uncouple the cars it is only necessary to depress the rear end of the operating-lever D, when the cars may be freely drawn apart. To couple, by following the same plan and pushing the cars together, then removing the pressure from the operating-lever D, the spring will force it and the pin E into place and retain it there, thereby preventing its displacement through any accident incidental to the motion of the train.

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

1. In a car-coupler, the draw-bar A, convex on its end, and the draw-bar B, correspondingly concaved to receive the end of the bar A, in combination with the pin E and operating-lever D, substantially as shown and described.

2. In a car-coupler, the draw-bar A, having the recess *a*, and the draw-bar B, having the tenon *b*, in combination with the pin E and operating-lever D, substantially as shown and described.

3. The combination, in a car-coupler, of the draw-bars A and B, constructed substantially as described, and the yoke C, standard F, spring G, operating-lever D, and pin E, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

MATTHEW W. BRUCE.

Witnesses:

E. H. BRADFORD,
H. J. ENNIS.