LYNAHON & WING.

Car Coupling.

No. 15,997. Patented Oct. 28, 1856.

Fig. 1

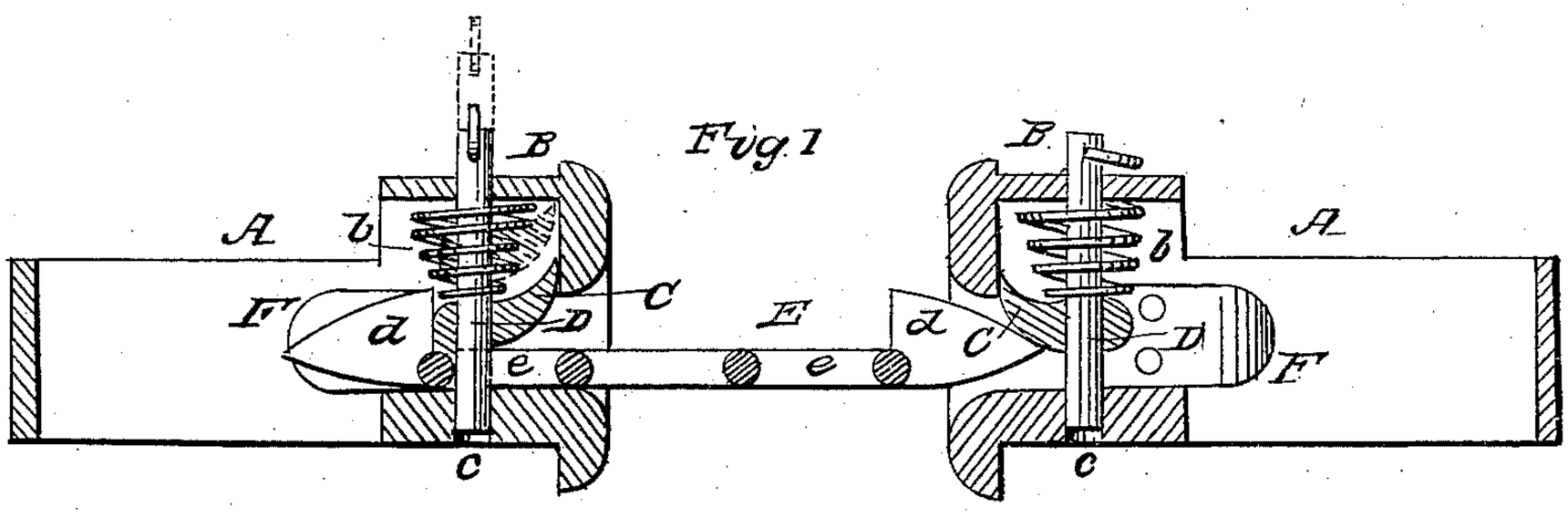
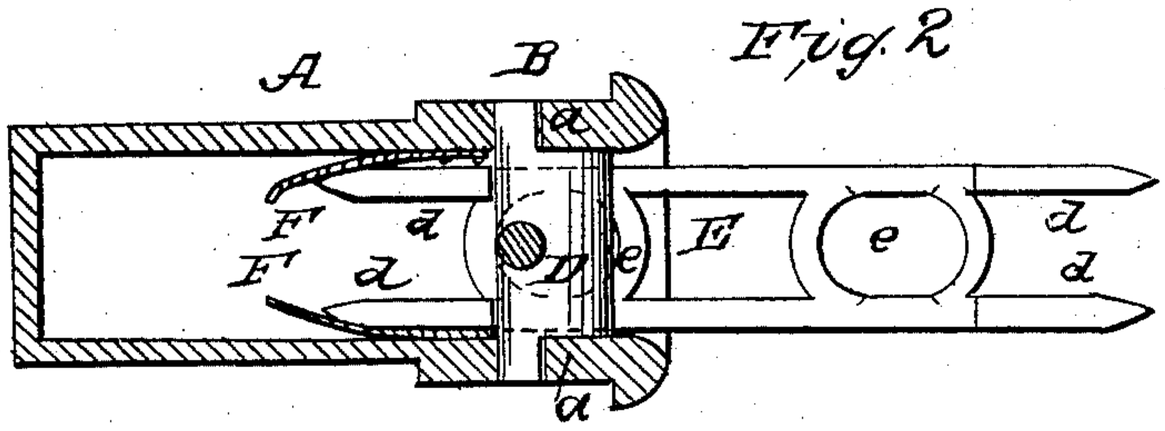


Fig. 2



UNITED STATES PATENT OFFICE.

D. LYNAHON AND C. J. WING, OF BUFFALO, NEW YORK, ASSIGNORS TO D. LYNAHON.

RAILROAD-CAR COUPLING.

Specification of Letters Patent No. 15,997, dated October 28, 1856.

To all whom it may concern:

Be it known that we, D. LYNAHON and C. J. WING, of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Car-Coupling; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of our improvement. Fig. 2 is a horizontal section of one of the bumpers.

Similar letters of reference indicate corresponding parts in the two figures.

The nature of our invention consists in having the ends of the bumpers of each car enlarged and having in each enlarged end a cross bar to which a vertical pin is attached. The ends of the cross bars work in slots in the sides of the enlarged parts of the bumpers, and the pins above mentioned are encompassed by springs which keep the cross bars depressed or forced down upon the shackles which have catches or inclined planes at their ends, the catches or inclined planes being back of the cross bars when the bumpers are connected as will be presently shown and described.

To enable others skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A, A, Fig. 1, represent the bumpers of two cars, each bumper at its outer end has an enlargement or a rectangular box B, in the sides of which slots, *a*, *a*, are made, one in each side, as shown clearly in Fig. 2. In each box B, there is placed a cross bar C, the ends of which fit or work in the slots *a*. The front sides of the cross bars are rounded as shown in Fig. 1.

D, are vertical pins which pass through the cross bars C, at their center, one pin to each cross bar. These pins pass through the upper or top part of the boxes B, and have spiral springs, *b*, around them between the undersides of the top pieces of the boxes and the upper surfaces of the cross bars. The lower ends of the pins pass through apertures, *c*, in the lower parts of the boxes.

E, represents the shackle which has two inclined planes *d*, *d*, at each end. The inclined planes are at suitable distances apart so that they can pass each side of the pin D, and the shackle has two holes or rings, *e*, *e*, formed in it to receive the pins. The shackle may be formed of a single piece of metal with the holes, *e*, cut through it, or they may be formed of rods with rings attached to them, as shown in Fig. 2.

Within the bumpers A, A, and directly back of the cross bars C, there are attached springs F, F, one at each side. These springs curve inward toward each other and their outer ends meet or nearly meet when the shackle is not in the bumpers.

By showing the shackle in one of the bumpers, the inclined planes *d*, *d*, will raise the cross bar C, and the inclined planes will pass behind it the cross bar falling in consequence of the spring *b*, directly back of the inclined planes and holding the shackle in the bumper, the lower end of the pin D, passing through one of the rings or holes, *e*, into the hole, *c*, in the lower part of the box B. The springs F, F, keep the shackle in a horizontal position so that the opposite or outward end of the shackle may be in a proper position to pass into the bumper of an adjoining car when brought up to it. The device therefore couples itself and the disconnection is readily effected by drawing upward either of the pins and cross bars by hand.

By the above improvement the cars may be readily connected and disconnected and without danger, as there is no occasion for a person to pass between the cars in order to adjust the pins D.

The device is simple, not liable to get out of repair, and not expensive to manufacture.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent, is,

The construction of the coupling as herein shown, viz. having the cross bars C, with pins D, attached, and encompassed by springs, *b*, the bars and springs being placed in the boxes B, as described and the shackles E, formed with inclined planes, *d*, *d*, at their ends for the purpose set forth.

D. LYNAHON.
CHAS. J. WING.

Witnesses:
GEO. BURROWS,
HORACE WING, Jr.