

M. A. KELLER.  
Car-Couplings.

No. 149,934.

Patented April 21, 1874.

Fig: 1.

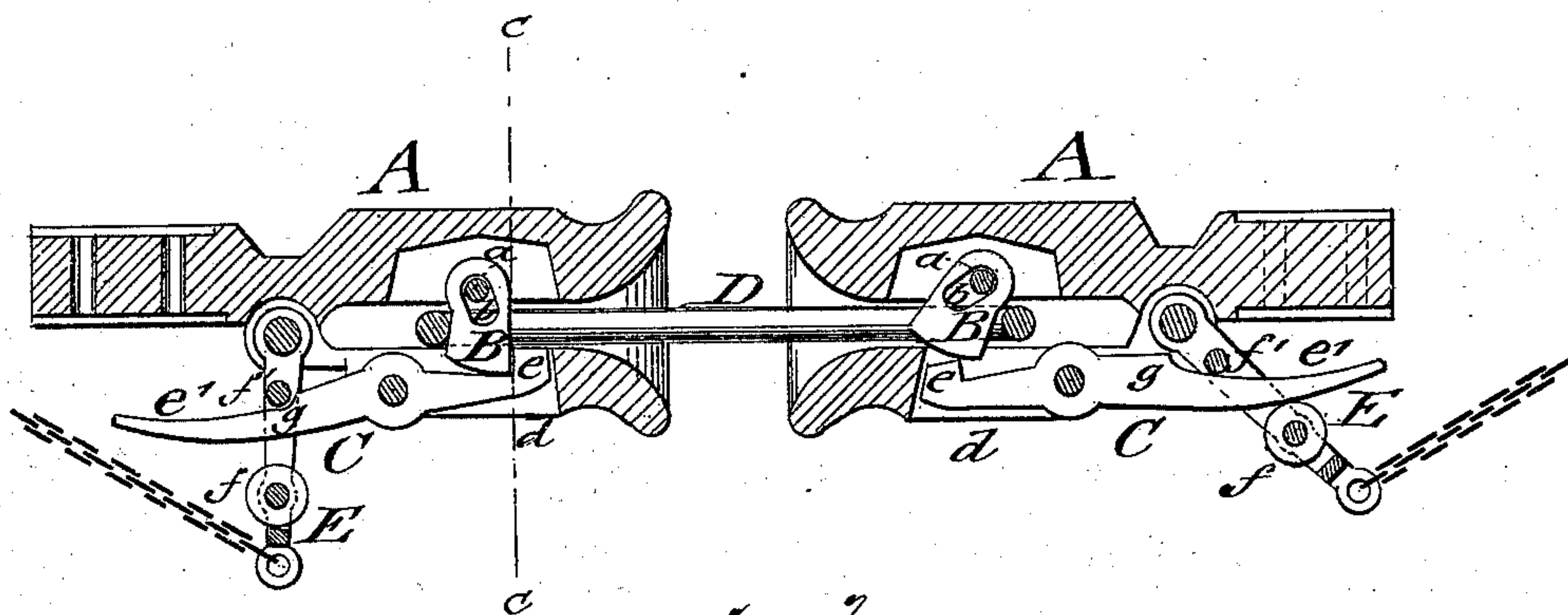
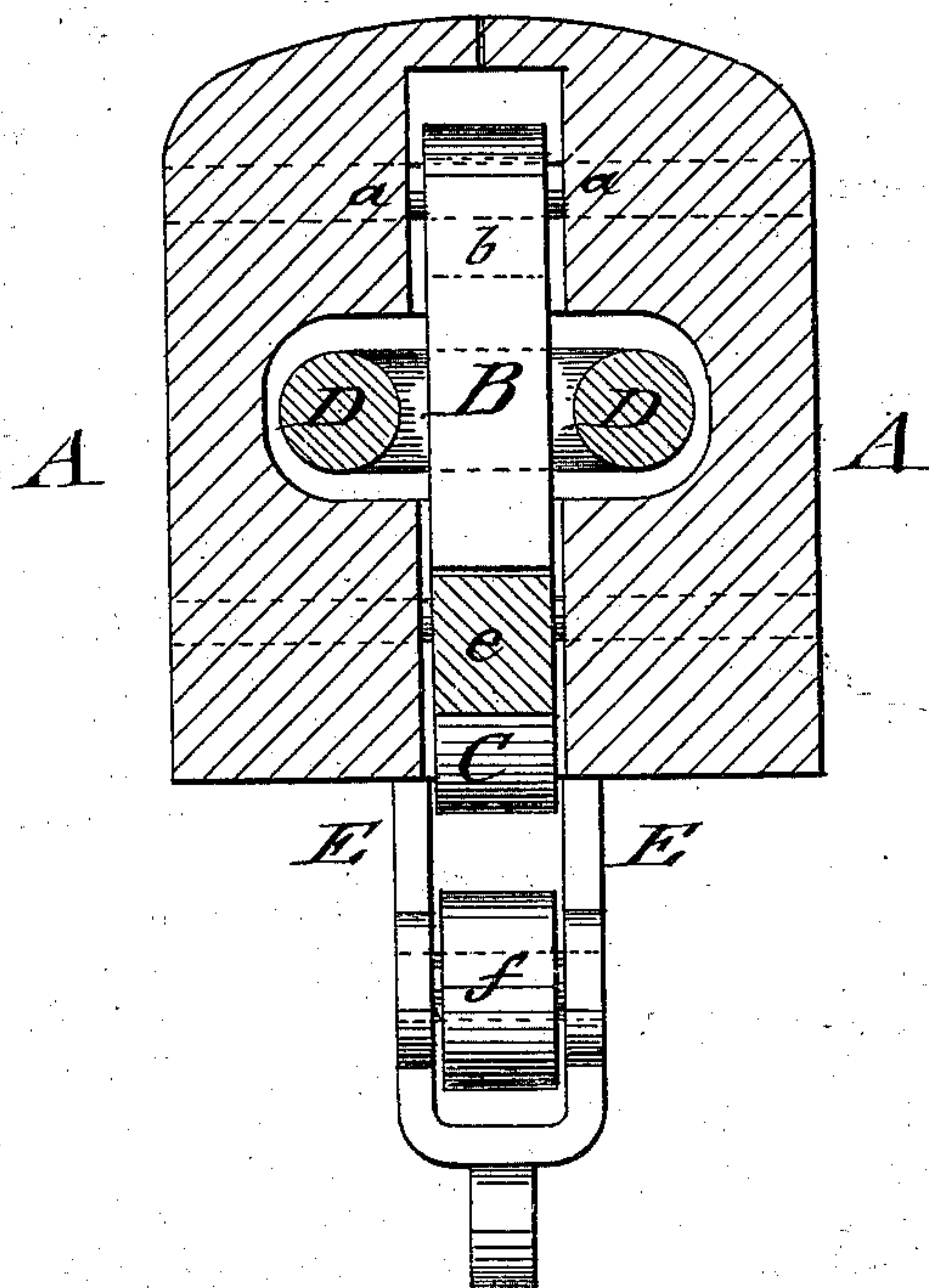


Fig: 2.



WITNESSES:

Chas. Nide.  
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# UNITED STATES PATENT OFFICE.

MOSES A. KELLER, OF LITTLESTOWN, PENNSYLVANIA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **149,934**, dated April 21, 1874; application filed December 13, 1873.

*To all whom it may concern:*

Be it known that I, MOSES A. KELLER, of Littlestown, in the county of Adams and State of Pennsylvania, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of my improved car-coupling; and Fig. 2, a vertical transverse section of the same on the line *c c*, Fig. 1, drawn in large scale.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claims.

In the drawing, A represents the draw-head, which may be attached to all kinds of cars already built, so as to use a part of the old draw-head with spring without removing the same from its former place. The top and sides of the draw-head A are made of one continuous piece or casing, the working parts being arranged at the lower part. No snow or ice can, therefore, enter into the draw-head and clog the parts during the winter season, preventing thereby their regular and reliable working. The top part of draw-head A is recessed at the inside, and the coupling-pin B pivoted therein at *a*. Pin B is straight at the sides, slightly curved at the lower part, and provided with a slot, *b*, at its upper part, which is arranged under some inclination toward the longer axis of the pin, so that the same is prevented from detaching, when coupled, by sudden jars, or by drawing a heavy load. The lever C is pivoted to the lower part of draw-head A, swinging in a longitudinal slot, *d*, of the same, and arranged with a hook-shaped projection, *e*, at its front part, and with a curved arm, *e'*, at its rear part. The hook *e* locks over the front end of pin B, and couples thereby the coupling-link D after the same has been introduced into the draw-head. A pendent link, E, is pivoted back of the fulcrum of lever C, being weighted by a roller, *f*, at the lower end thereof, with the curved arm *e'* passing through link E.

When link E is pending in vertical position it presses, with its top edge or pin *f'*, the arm *e'* down, raising thereby the hook part *e*. Pin *f'* slides on arm *e'* till it is engaged by a re-

cess, *g*; of arm *e'*, by which the regular position of link E and lever C is secured. When link E is swung back by means of a connecting treadle-chain, so that roller *f* strikes the curved arm *e'*, hook *e* is thereby carried down, detached from pin B, and link D uncoupled. The entering coupling-link will carry, by means of slot *b*, pin B back, whether the same is resting in front of hook *e*, or back of the same, and is coupled by the dropping of link B after passing far enough into the draw-head. In whatever position lever C may, therefore, be placed, whether in position for uncoupling or coupling, the entering link will, with equal certainty and security, engage pin B, which, on being locked by hook *e*, produces a firm and substantial connection, while the uncoupling may at any moment be performed by carrying lever C back and releasing pin D.

This may be very useful for preventing accidents, and forms a special advantage of my coupling over other constructions.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. As an improvement in car-couplings, the combination of the draw-head A, having pivoted slotted pin B arranged therein, with the locking and uncoupling lever C and link D, constructed to operate as and for the purpose herein set forth.

2. The combination of the slotted pin B, pivoted lever C, coupling-link D, and pendent link E, to operate substantially for the purpose set forth.

3. The pivoted lever C, having front hook *e*, to secure the pivoted pin B when the cars are coupled, in combination with the pendent link E, having locking-pin *f'*, to engage with the recess *g* of the curved arm *e'* of the lever C, substantially as and for the purpose set forth and described.

4. The pendent link E, pivoted to the draw-head A, and having a roller to operate on the curved rear-extending arm of lever C while uncoupling cars, all combined as and for the purpose set forth.

MOSES A. KELLER.

Witnesses:

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