

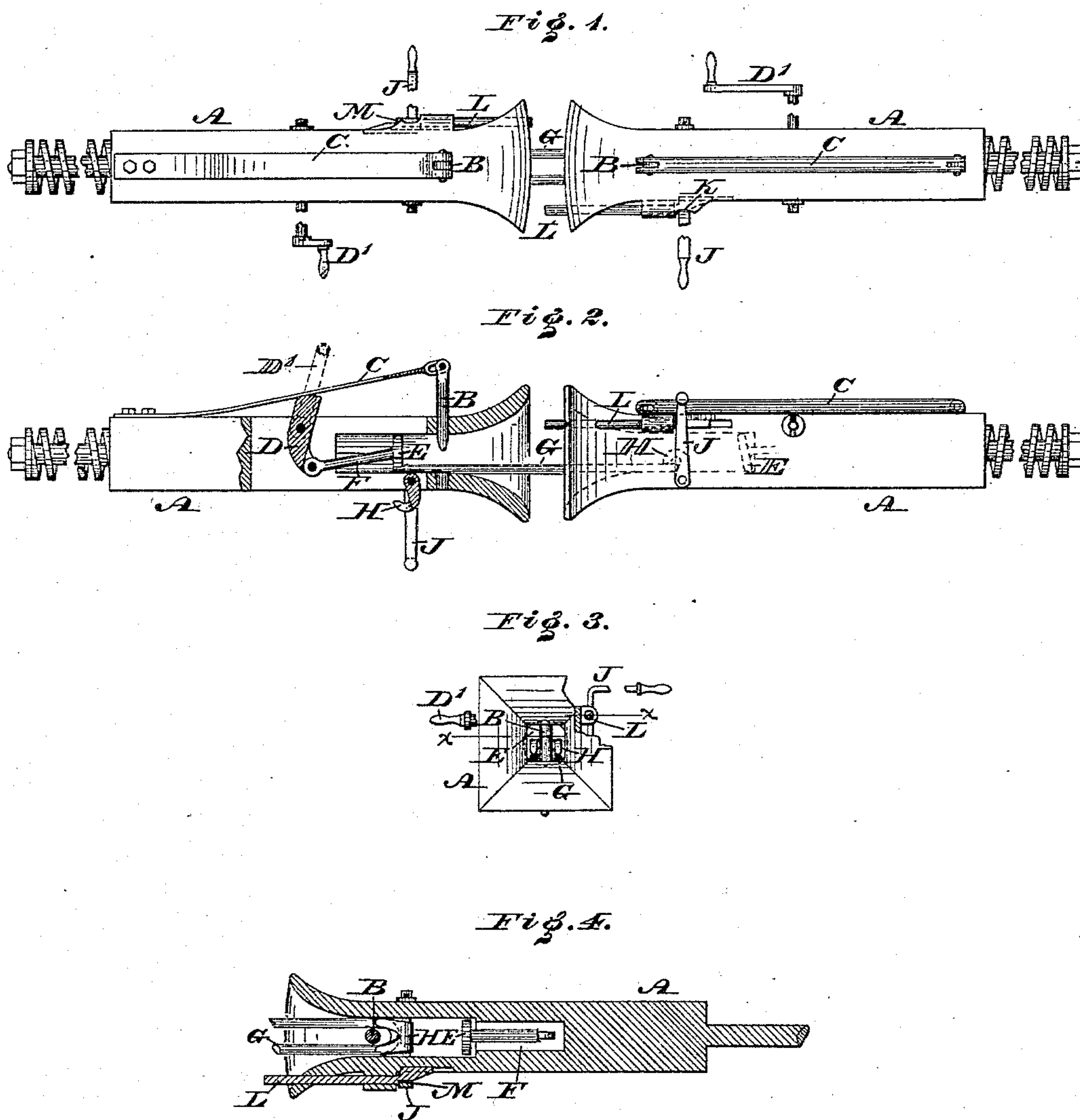
(No Model.)

P. McALEER & J. K. JOHNSTON.

CAR COUPLING.

No. 339,568.

Patented Apr. 6, 1886.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PETER McALEER, OF ALTOONA, AND JACOB KEENER JOHNSTON, OF JEFFERSON COUNTY, ASSIGNORS OF ONE-THIRD TO S. SIMON, OF PHILADELPHIA, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 339,568, dated April 6, 1886.

Application filed February 4, 1886. Serial No. 190,794. (No model.)

To all whom it may concern:

Be it known that we, PETER McALEER, of Altoona, Blair county, and JACOB KEENER JOHNSTON, of Jefferson county, in the State of Pennsylvania, both citizens of the United States, have invented a new and useful Improvement in Car-Couplings, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a top or plan view of a car-coupling embodying our invention. Fig. 2 represents a partial side view and partial vertical section thereof. Fig. 3 represents a front view thereof, partly broken away; and Fig. 4 represents a horizontal section of a portion in line *x x*, Fig. 3.

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

Our invention consists of an automatic car-coupling possessing novel features, as will be hereinafter fully set forth.

Referring to the drawings, A represents a draw-head, which, excepting as far as our invention relates thereto, is of usual form.

B represents a coupling-pin, which is connected with the forward end of the spring-bar C, the latter having its rear end secured to the draw-head, whereby the pin is caused to be lowered and retained in position when the cars are coupled.

In lieu of the spring-bar C we may employ a hinged bar, C, the same falling by gravity, and having the pin B pivoted to it.

Mounted on the draw-head is a block, D, so disposed that when rotated it bears against the bar C and raises the same, and consequently the coupling-pin.

Within the draw-head is a sliding head, E, which is connected with an arm, F, the latter being pivoted to the lower end of the block D, whereby, when the coupling-link G enters the draw-head, it strikes the head and forces the same rearward, thus causing the dropping of the bar C.

Mounted on the draw-head is a link-holder, H, which is hook shape and rotates within the draw-head, so as to bear against the inner end of the coupling-link and hold the same, whereby the link is in condition for coupling.

In order to retain the holder H in operative position against the link, the same has connected with it a crank arm or lever, J, whose end is adapted to drop into a recess, K, on the side of the draw-head.

L represents a rod, which extends horizontally and longitudinally along the side of the draw-head and fitted in openings therein, the rear ends of said rod having a shoulder, M, which, when the lever J is thrown up, as in the right side of Fig. 2, is adapted to bear against said lever. The front end of said lever is adapted to project in front of the draw-head, so as to be struck by the opposite draw-head.

In order to couple the cars the coupling-pin of one of the draw-heads is raised by operating the block D thereof, said block having a connected lever, D', for conveniently rotating the block. The coupling-link is now inserted into the draw-head and the pin dropped, whereby the latter enters the link. The holder is then swung upwardly and forwardly, so as to engage with the inner end of the coupling-link and hold the link rigidly, projecting forwardly from the draw-head. The coupling-pin of the other draw-head is raised by its block D, the position of parts being shown in Fig. 2. As the cars approach, the coupling-link entering the draw-head bears against the head E and forces the same inwardly or rearwardly, whereby the block is caused to fall and release the bar C, the latter then dropping, the pin then entering the link, whereby the cars are coupled, the same having been effected in an automatic manner, and consequently with safety to the train-hands. As soon as the draw-head strikes the rod L the lever J is forced from the recess K and then drops, whereby the holder H rotates and clears the end of the link, leaving the latter free to play in the draw-heads.

The cars can be readily uncoupled by raising either of the bars C through the operation of the proper block D.

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

1. The draw-head A, having the side recess,

K, substantially as described, in combination with the rotatable holder H, link G, and pivoted bar J, substantially as described.

2. The draw-head A, having recess K, in combination with the link G, the holder H, the pivoted bar J, and reciprocating rod L, having the head M, substantially as and for the purpose set forth.

3. A link-holder consisting of a rotary piece adapted to bear against the end of the link, an operating-lever attached to said piece, and a rod which is operated by contact with the opposite draw-head and moves said rod, and consequently the link-holder, thus releasing the link, substantially as described.

4. The draw-head A, having recess K, in combination with link G, the pin B, pivotally secured to the bar C, the block D, the sliding head with arm F, pivotally secured to said block D, the pivoted bar J, and sliding rod L, with shoulder M, all arranged, combined, and operated substantially as and for the purpose set forth.

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Witnesses:

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