A. K. MOTT.

CAR-COUPLING.

No. 182,381. Patented Sept. 19, 1876.

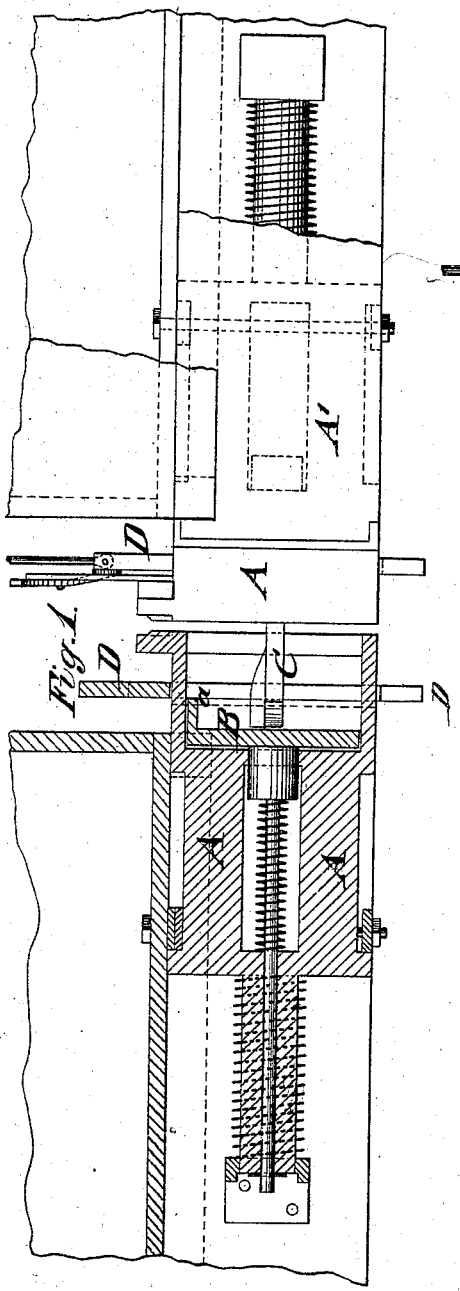

Fig. 1.

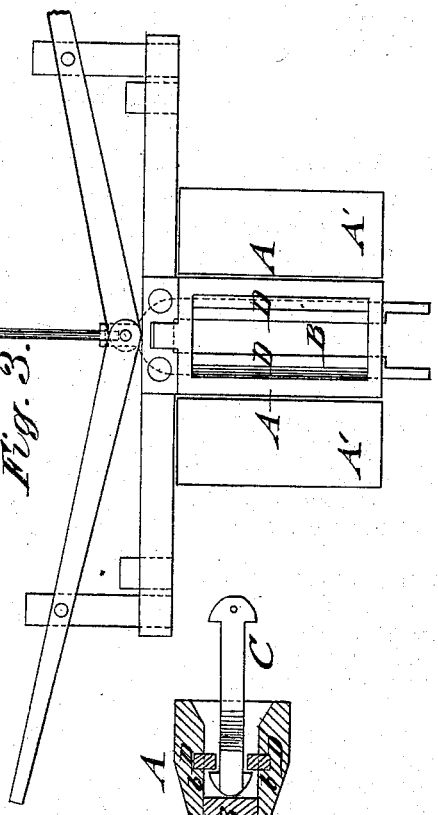

Fig. 3.

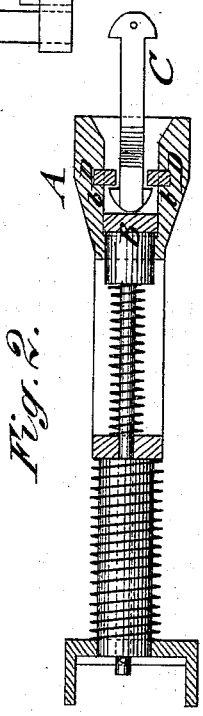

Fig. 2.

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ALVIN K. MOTT, OF ATLANTIC, IOWA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **182,381**, dated September 19, 1876; application filed August 21, 1876.

To all whom it may concern:

Be it known that I, ALVIN K. MOTT, of Atlantic, in the county of Cass and State of Iowa, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a sectional side elevation, Fig. 2 a horizontal section, and Fig. 3 an end view, of my improved car-coupling.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved automatic car-coupling that is readily coupled without going in between the cars, and uncoupled from any part of the same. The coupling is adapted to couple with cars of any height, and with the common pin-and-link coupling.

The invention consists of a draw-head, with sliding and spring-acted block or follower, and a fork-shaped locking-piece that slides in side grooves and top perforations of the draw-head, and couples the arrow-shaped head of the link. The forked lock-piece is made wider at the lower parts of the legs to admit the forward motion of spring-block and the seating of the lock-piece on the forward-projecting top flange of the same.

In the drawing, A represents the draw-head of my improved car-coupling; B, the sliding and spring-acted block or follower; C, the coupling-link; and D, the vertically-sliding fork-shaped lock-piece.

The draw-head A is made with tapering mouth to admit the ready entering of the coupling-link, and of sufficient height to provide for cars having platforms of different heights. The draw-head is guided on the bottom frame of the car between strong side timbers A′, with metal-lined heads, that take up the concussions of the cars when the cushioning-spring of the draw-head is sufficiently compressed. The sliding spring-block or follower B is guided in suitable recesses of the draw-head, its face-plate conforming to the shape and sliding in the cavity of the draw-head. A projecting top flange, *a*, of the spring-follower B serves to retain the forked lock-piece in raised position when the link is uncoupled. The forked piece D slides in interior side grooves *b* of the draw-head, and projects at both sides into the draw-head. The lower parts of the legs or sides of the fork-piece D are recessed to be flush with the inner walls of the draw-head, and form thereby a wider space, which admits, when the fork-piece D is raised to sufficient height, the forward sliding of the top flange of the follower-block between the ends, so as to support the fork-piece in raised position ready for coupling. The raising or lowering of the lock-piece D may be accomplished from the top, side, or platform of the car by a rod or chain running up to the top of the car, or by fulcrumed levers extending to the sides of the same, or in any other approved manner.

The coupling-link C is provided with arrow-shaped heads, and retained at any height for coupling by the pressure of the follower against the head of link and against the retaining sides of the lock-piece. The approaching car forces the head of the link along the mouth of the draw-head on the spring-follower, and presses the same back till the top flange releases the sliding lock-piece, which drops and passes back of the head along the sides of the link into the bottom holes of the draw-head, so as to rigidly couple the link. The coupling-link has vertical and lateral play, and cannot escape except by raising the locking-piece. One end of the link may be provided with a raised center flange, as shown in Fig. 1, so as to be sustained more reliably at any height in the draw-head, while the opposite arrow-head is perforated to connect with the common pin-and-link coupling. The draw-heads are coupled close to each other, and form a strong, effective, and reliable coupling.

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

1. The combination of the draw-head A, having side guide-grooves, sliding and spring acted block or follower B, forked lock-piece D, and arrow-headed link C, substantially in the manner and for the purpose set forth.

2. The combination of the sliding and spring-

acted follower-block B, provided with top flange *a*, with the vertically-sliding fork-piece D, being recessed at the lower ends to admit forward motion of top flange when fork-piece is raised, so as to support the same in raised position, substantially as specified.

3. The combination of the sliding and spring, acted follower-block with the arrow-headed link and the projecting sides of the forked lock-piece, to sustain link at any height for coupling, substantially as set forth.

ALVIN K. MOTT.

Witnesses:
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