

J. ROCKWILL.  
CAR-COUPPLINGS.

No. 193,896.

Patented Aug. 7, 1877.

Fig. 1.

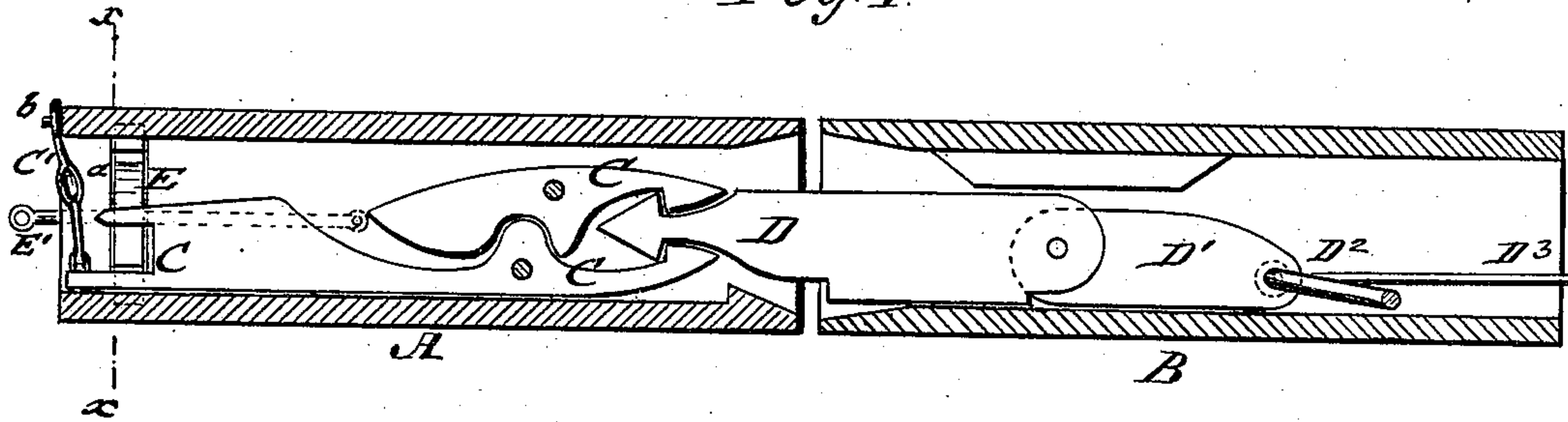


Fig. 2.

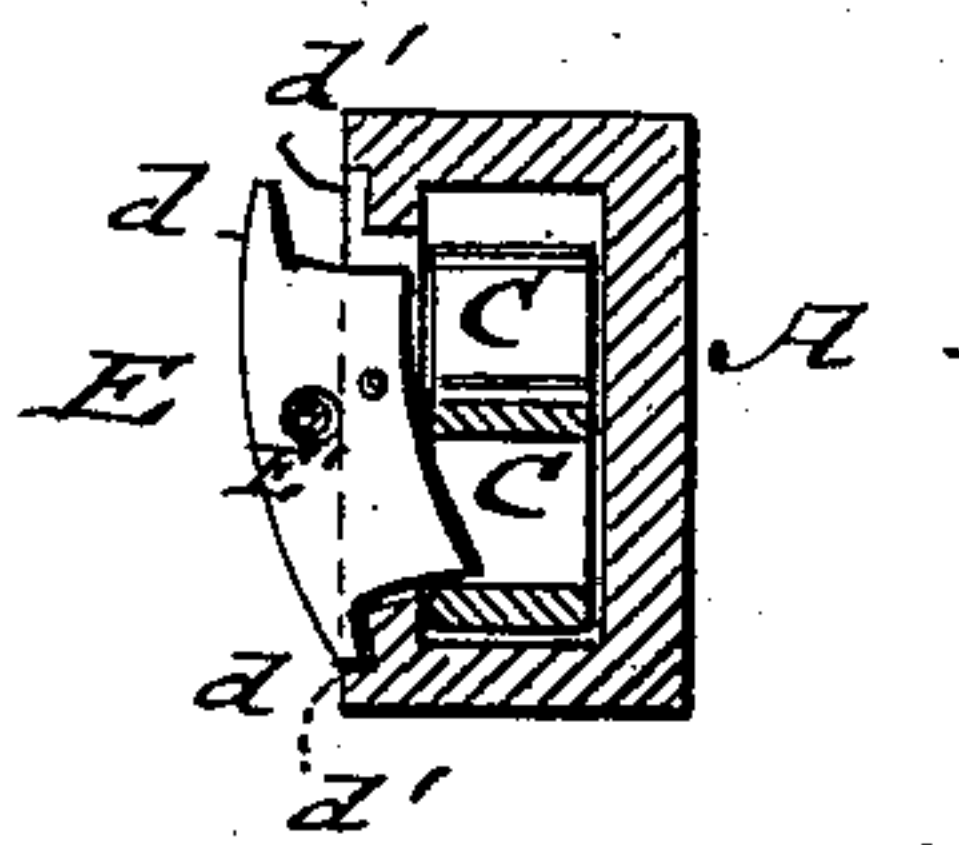
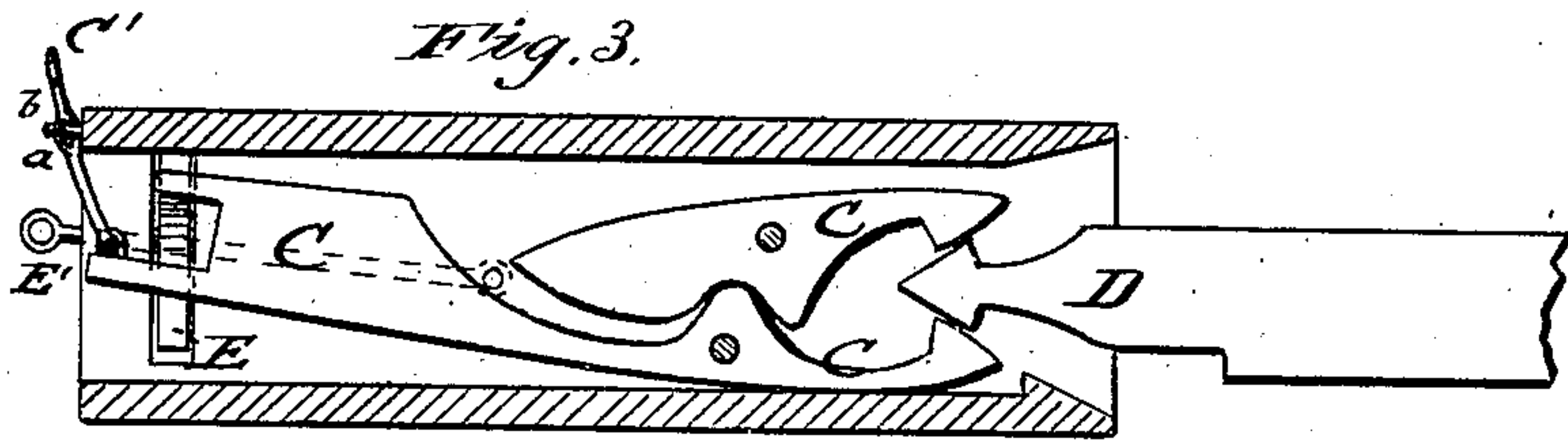


Fig. 3.



WITNESSES:

*E. Wolf*  
*J. H. Scarborough.*

INVENTOR:

*J. Rockwill.*  
BY *mm*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JAMES ROCKWILL, OF PONCA, NEBRASKA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 193,896, dated August 7, 1877; application filed June 11, 1877.

*To all whom it may concern :*

Be it known that I, JAMES ROCKWILL, of Ponca, in the county of Dixon and State of Nebraska, have invented a new and Improved Car-Coupling, of which the following is a specification :

In the accompanying drawings, Figure 1 represents a vertical longitudinal section through both draw-heads of my improved car-coupling, showing it in coupled position; Fig. 2, a vertical transverse section on line *x-x*, Fig. 1; and Fig. 3, a vertical longitudinal section, showing the draw-heads in the act of coupling.

Similar letters of reference indicate corresponding parts.

The invention refers to an improved car-coupling of that class of couplings which are self-coupling on the approach of the cars, without requiring any one to step in between the same for holding the link; and the invention consists of the arrow-shaped draft-hook of one draw-head, coupling with fulcrumed hook-shaped jaws of the opposite draw-head, the lower jaw being extended to the rear of the draw-head, and locked by a pivoted and weighted catch into open or uncoupled and closed or coupled position.

In the drawings, A represents a draw-head, having the interior jaws C; and B, the connecting draw-head, with the coupling draft-hook D. The draft-hook D has an arrow-shaped head, and is pivoted at the rear end to a link-piece, D<sup>1</sup>, which is again pivoted to a wire loop, D<sup>2</sup>, that turns, by its outwardly-bent ends, in pivot-holes at the lower part of the draw-head B. A loop-shaped lever, D<sup>3</sup>, is hung to the wire loop D<sup>2</sup> at the point of connection with the link D<sup>1</sup>, and extended backward through the rear end of the draw-head B, to admit the throwing forward of the draft-hook D for coupling, or the drawing back of the same within the mouth of the draw-head whenever it is not desired that the cars should couple. When the draft-hook is thrown forward the draft-hook, link, and wire loop are securely retained in line and prevented from swinging back into the draw-head.

The locking-jaws C of the draw-head A are fulcrumed to the same, the upper jaw having

a short, weighted rear part, and resting by a curved recess on a protruding portion of the lower jaw. The lower jaw is extended back beyond the upper jaw to the rear end of the draw-head A, and provided with a recessed or forked and weighted end, that is locked by a weighted catch-block, E, fulcrumed into a side slot of the draw-head, so as to project by its curved middle part to the interior of the same and engage the rear end of the lower coupling-jaw C.

A lever-rod, E', passes through the catch-block E, and is pivoted to the side of the draw-head in front of the catch-block, the lever-rod being extended back of the catch-block, to be taken hold of for swinging the block into position, so as to bind by its heel portion on the lower rear end of the jaw C, or by its upper end or top shoulder on the upper end of the forked rear part of the jaw. The catch-block retains thereby the coupling-jaw either in locked position, so as to produce the reliable interlocking of jaws and draft-hook, as shown in Fig. 1, or supports the lower jaw in open and uncoupled position, as shown in Fig. 3, until, by the entrance of the draft-hook, the catch-block is released by the raising of the rear end of the lower jaw, and the weighted rear end dropped, and the heel of weighted catch-block thrown into the recess of the rear end, so as to rigidly lock thereon.

A lever-rod, C', is attached to a staple at the rear end of lower jaw C, and bent to form a ring or loop, *a*, that is slipped on a pin, *b*, at the upper rear end of the draw-head A, after first withdrawing the catch-block and then raising the jaw by the rod C'. The lower jaw C is thus secured in uncoupled position until the lever-rod C' is detached from the pin. The upper rear end of the jaw is then placed in position on the upper end or top shoulder of the catch-block, so that the jaw is retained in position for coupling automatically on the entrance of the draft-hook. The catch-block has upper and lower extension-lugs *d*, that bear into recesses *d'* of the draw-head, and secure thus the exact position of the catch-block for the coupled and uncoupled position of the jaws, and thereby the reliable and effective working of the coupling.



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

1. The combination of draw-head B with draft-hook D, link-piece D<sup>1</sup>, pivoted wire loop D<sup>2</sup>, and operating-lever D<sup>3</sup>, to throw the coupling-hook forward or draw it back into the draw-head, substantially as specified.

2. The combination of the pivoted lower coupling-jaw, being extended to the rear end of the draw-head, and having recessed rear part, with the laterally-swinging and weighted

catch-block E, having lever E', substantially as described.

3. The recessed rear end of the lower jaw C, having pivoted lifting-lever C', with rings or eyes *a*, in combination with the supporting-pin *b* of the draw-head, to retain jaws in open and uncoupled position, substantially as set forth.

JAMES ROCKWILL.

Witnesses:

ED. T. HEALEY,  
E. M. BISBEE.