

No. 114,566.

Patented May 9, 1871.

*Fig. 1.*

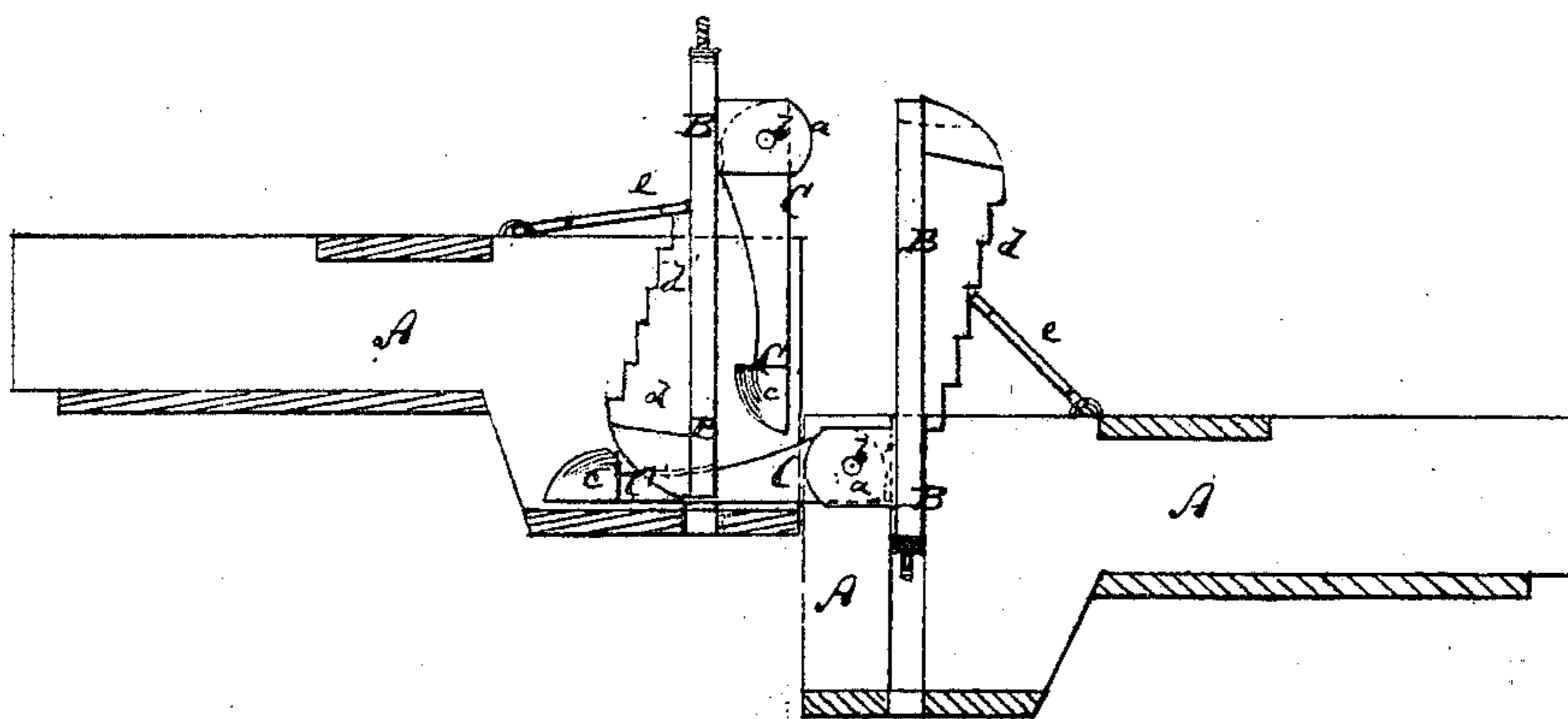
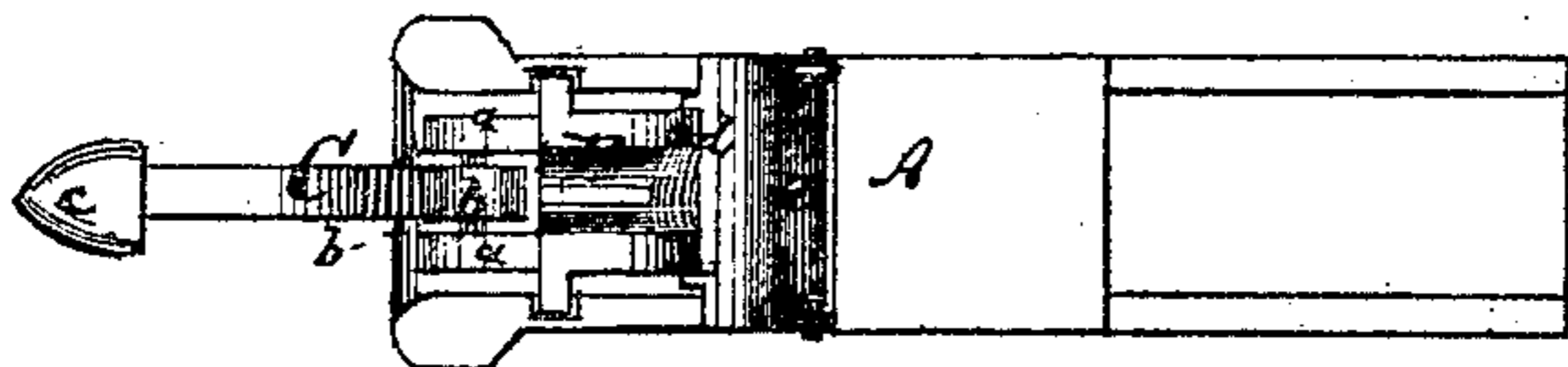


Fig. 2.



**Witnesses:**

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WILLIAM JOHNSTON, OF DECATUR, MICHIGAN.

Letters Patent No. 114,566, dated May 9, 1871.

## IMPROVEMENT IN CAR-COUPPLINGS.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern:*

Be it known that I, WILLIAM JOHNSTON, of Decatur, in the county of Van Buren and State of Michigan, have invented a new and improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a longitudinal section of my improved car-coupling.

Figure 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new car-coupling, which is made so as to be vertically adjustable to permit the connection of cars of different height.

The invention consists in pivoting the coupling-pins to vertical slides, which can be adjusted in the buffers and locked at suitable height by pivoted pawls.

A in the drawing represents the buffer or draw-head of a railroad car.

Its front end forms a rectangular opening, having straight parallel sides.

These sides are grooved vertically to receive an upright slide, B, which is forked at one end, as indicated in fig. 2, while near its other end it has projecting ears *a a* at its front face.

To the ears *a* is pivoted, by a pin, *b*, the coupling-pin C, which has an arrow-head, *c*, at its outer end.

From the back face of the slide B projects a rib, *d*, having steps, which start from near that end, whence the ears *a* project, so that it widens toward the forked end of the slide.

The car which is to couple by means of its pin re-

ceives the slide so that the forked end is on top, it being held at suitable height by a pivoted plate, *e*, which locks under the desired step, as shown on the right side of fig. 1.

The slide in the opposite car is applied in the reverse position, so that its forked end is down and its coupling-pin will be suspended in front, as shown.

The coupling-pin of the first slide projects horizontally forward, and will, when pushed into the opposite box A, raise the slide and enter with its head behind the same, so that it will be locked when the forked slide drops over the pin in front of the head.

By making the slide vertically adjustable it can be adapted to cars of different heights, as is clearly indicated in fig. 1.

Suitable levers or cords may connect with the slides to raise or lower, without requiring attendants to directly handle them.

By folding up the coupling-pin of the locking-slide it can be made ineffective to leave two adjoining cars uncoupled.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. The vertical forked slide B, provided with the pivoted headed pin C and with the steps *d*, to operate substantially as herein shown and described.

2. The draw-head A, provided with vertical grooves at the sides to receive the vertical slides B, substantially as herein shown and described.

WILLIAM JOHNSTON.

Witnesses:

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