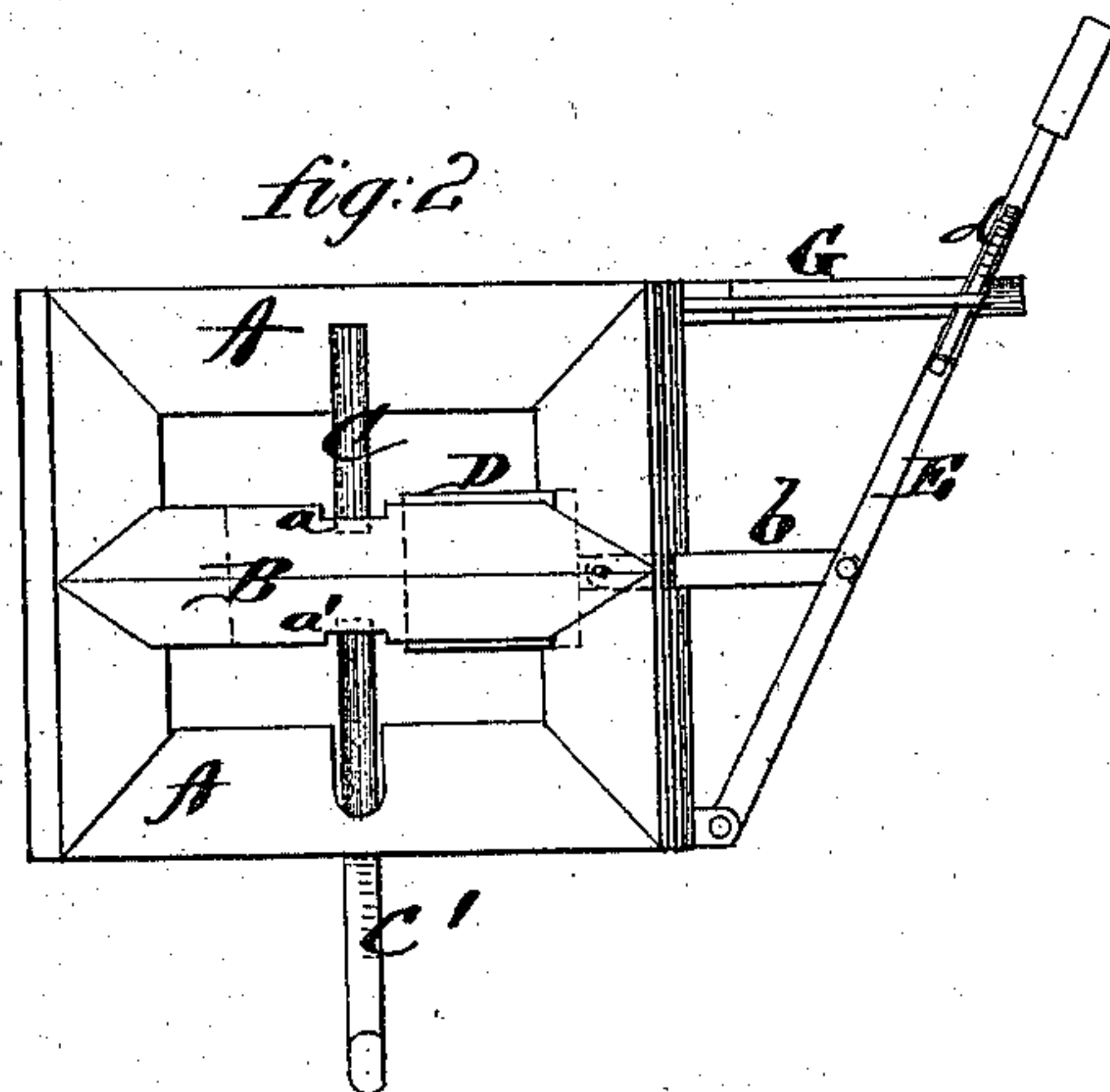
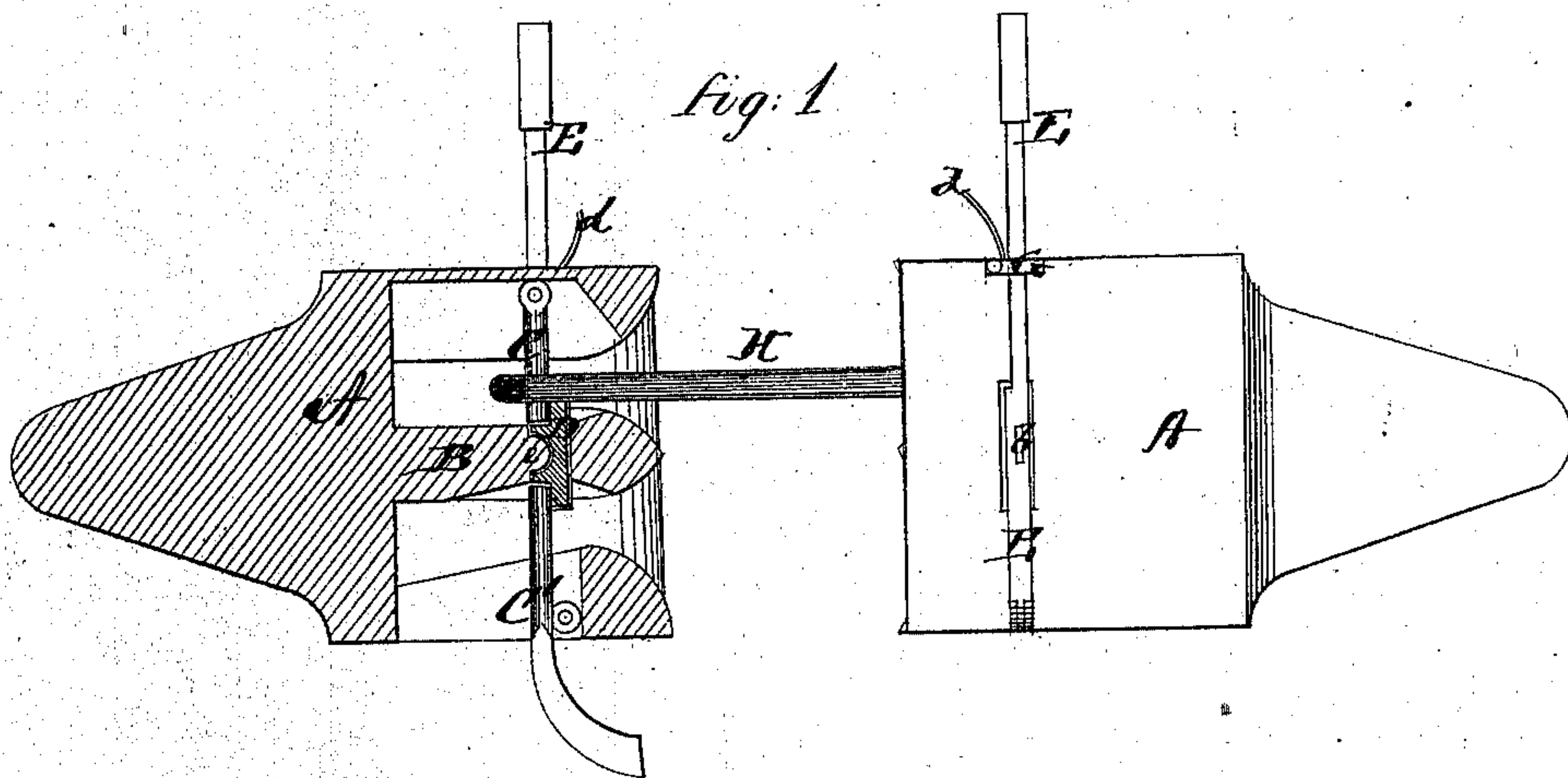


JOHN ROYAL, M. A. LENTZ & J. M. DEIBERT.

Improvement in Car-Couplings.

No. 115,242.

Patented May 23, 1871.



Witnesses.

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United States Patent Office.

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LA FAYETTE, INDIANA.

Letters Patent No. 115,242, dated May 23, 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 we, JOHN ROYAL, MOSES A. LENTZ, and JEREMIAH M. DEIBERT, of La Fayette, in the county of Tippecanoe and in the State of Indiana, have invented certain new and useful Improvements in Car-Coupling; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of our invention consists in the construction and arrangement of a car-coupling, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 shows a side view of one bumper and a longitudinal vertical section of the other.

Figure 2 is a front view of one of the bumpers.

A represents the bumper or front end of the draw-head, provided with a horizontal partition, B, which divides it into two compartments, into either one of which the coupling-link may enter so as to accommodate or adapt itself to cars of different heights.

The mouths of the bumpers are beveled, as shown in fig. 1, to fit them the better to receive the entering link.

In a groove in the under side of the top of the bumper is hung a pin, C, of just sufficient length that when swung forward it will pass through a notch, *a*, in the center of the upper side of the partition B.

In the bottom of the bumper A is made a slot or mortise, in which is hung another pin, C', the upper end of which is of suitable length, so that it will, when swung forward, pass through a notch, *a'*, in the center of the under side of the partition B. The lower end of the pin C' is made heavier, and curved forward, so that the upper end will stand in an upright position.

One side of the bumper A is provided with a mor-

tise, and the partition B is slotted from said mortise to a point beyond its center, and in the same is passed a slide, D.

The inner side of this slide is grooved longitudinally, and in the slot on the partition B is a tongue, *i*, fitting in said groove on the slide, as shown in fig. 1, whereby the slide is held so that it cannot move up or down, but is allowed to move freely out or in.

An arm, *b*, connects the slide D with a lever, E, pivoted or hinged at the lower edge of the bumper A, and the upper end of said lever held by a spring, *d*, in a rack, G, extending from the side of the bumper, as shown.

When the slide D is moved in by the lever E it covers the notches *a a'* on the partition B, or rather closes their inner ends, so that the ends of the pins C C' will strike said slide and cannot swing forward.

When the link H is inserted either above or below the partition B, it swings the pin backward until it can drop down within the link, when the cars are, of course, coupled.

To uncouple it is only necessary to withdraw the slide D by means of the lever E, when the pin can swing forward and release the link.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

The combination of the bumper A, partition B, pins C C', slide D, arm *b*, lever E, spring *d*, and rack G, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 17th day of March, 1871.

JOHN ROYAL.

MOSES A. LENTZ.

JEREMIAH M. DEIBERT.

Witnesses :

JOHN A. STEIN,

CHRISTOPHER KELLER,

JOSHUA STAHLER.