(No Model.)

W. H. KALTENBECK.

CAR COUPLING.

No. 354,321.

Patented Dec. 14, 1886.

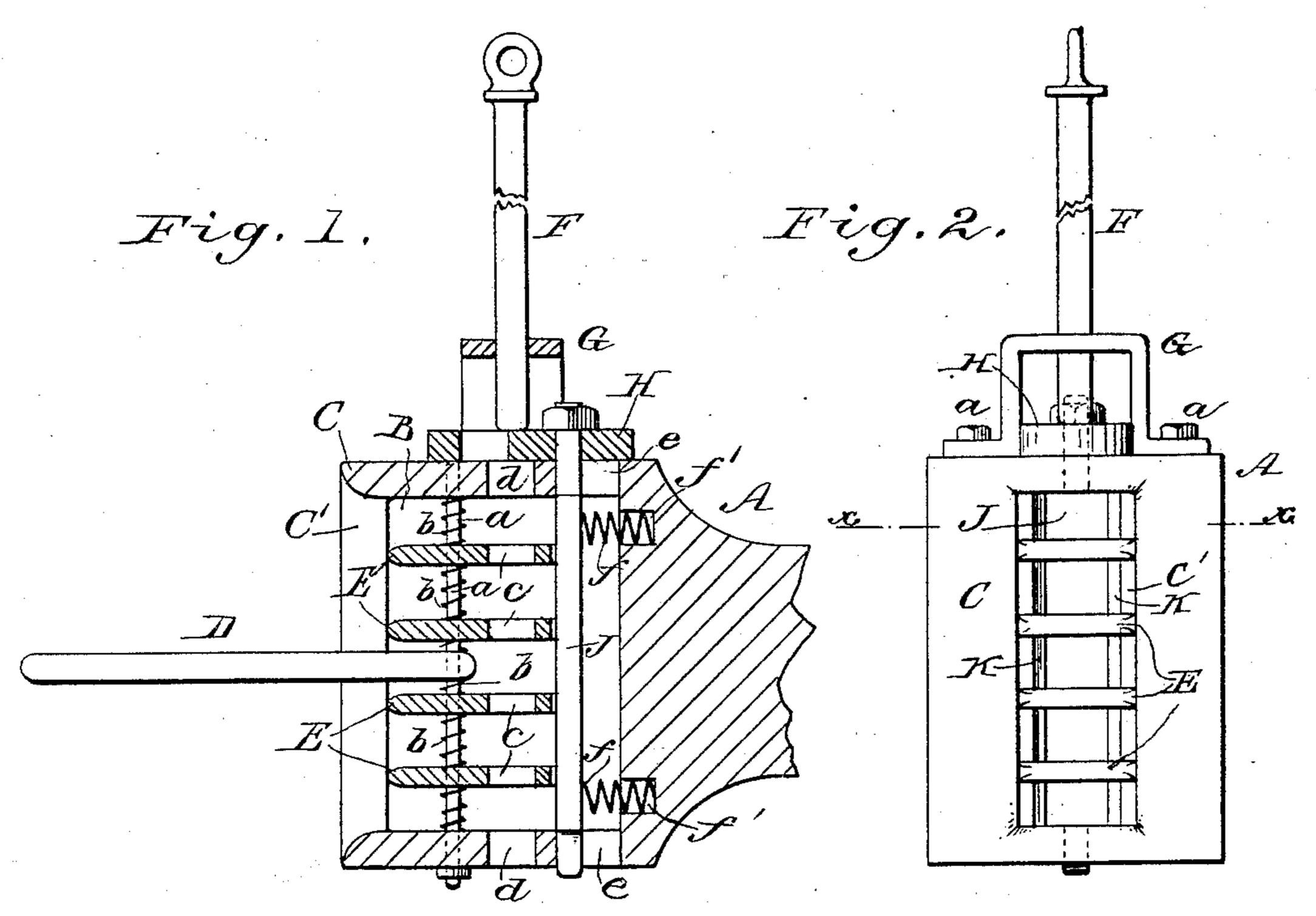


Fig. 3.

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Fig. 3.

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CAR-COUPLING.

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Application filed August 13, 1886. Serial No. 210,819. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY KAL-TENBECK, of Roxbury, in the county of Delaware and State of New York, have invented a new and Improved Car-Coupler, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of a draw-head constructed in accordance with my invention, showing a link entering the draw-head and the coupling-pin in elevated position. Fig. 2 is a front elevation of the draw-head and coupling-pin, and Fig. 3 is a sectional plan view taken on the line xx of Fig. 2.

The invention will first be described in con-20 nection with the drawings, and then pointed

out in the claims.

The draw-head A is formed with the chamber B, which is partially closed in front by the plate C, through which is formed the 25 elongated opening C', for the passage of the connecting-link D into the draw-head. Within the chamber B is placed upon rods a a the series of division-plates E. These plates are loose upon the rods a, and are separated and 30 held in position by coiled springs b, placed upon the rods, so the plates are adapted to have a yielding action, so as not to resist the entrance of the connecting-link D to the drawhead. The plates E being several in number 35 and spaced by the spring b, they are adapted to support the connecting-link at various elevations, so the coupler is adapted to couple cars of different heights. The plates E are all correspondingly apertured, as shown at c, 40 and these apertures correspond with the apertures d d, made in the top and bottom of the draw-head, to permit the coupling-pin F to drop into the draw-head and down through the connecting-link D when the same is forced 45 into the draw-head between the plates E.

The coupling-pin F, when lifted out of the draw-head, is held in elevated position by the guide piece or strap G and sliding trip-plate H, which latter is adapted to be forced for-

ward by the action of springs f, to occupy 50 a position under the coupling-pin, as shown clearly in Fig. 1. The entrance of the connecting-link D to the draw-head forces the trip-plate H back from under the couplingpin and permits it to drop of its own weight 55 down into the draw-head and through the connecting-link, thus automatically effecting the coupling of the cars. The springs f in this instance act upon the trip-plate H through the medium of the bar J, bolted to 60 the trip-plate and passed through the drawhead back of the plates E, and held in slots e e at its ends, so that the bar J is adapted to have a sliding movement in the slots e sufficient to cause the plate H to support and also 65 to trip the coupling-pin. The springs f are lodged in recesses f', made in the draw-head, and they constantly press against the bar J, and tend to force it outward, so that in uncoupling the cars the instant the coupling- 70 pin is lifted above the trip-plate H the springs will act to force the bar J and the plate H forward to support the pin in elevated position, ready for automatically coupling again.

The bar J is held between the guards K K, 75 formed at or secured in the back of the drawhead, which guards prevent the connecting-link from entering the draw-head too far, and they also protect the bar J from becoming bent or battered from contact of the connect-so ing-link, so there will be no failure in the proper action of the bar J and trip-plate H at the time of coupling and uncoupling.

Constructed as described, it will be seen that the coupler is not only perfectly auto- 85 matic in its action, but is adapted for cars of different heights, and is durable, cheap, and practical in all respects.

Having thus described my invention, what I claim as new, and desire to secure by Letters 9c Patent, is—

1. The draw-head A, provided with the plates E, placed loosely upon rods and held in position by springs placed upon the rods, substantially as described.

2. The draw-head provided with the horizontal apertured plates E, held by rods and interposed springs, and formed with the ver-

in combination with the movable vertical bar J, springs f, plate H, and support G for the coupling-pin, substantially as described.

3. The draw-head formed at the back of the link-cavity with the vertical parallel WILLIAM STAREY, guard-ribs K K, between which the vertible DE WITT ROOSA. 5 3. The draw-head formed at the back of

tical parallel stop-guards K back of the plates, | cal trip-bars J and operating-springs f are placed, substantially as and for the purposes described.

WILLIAM HENRY KALTENBECK.