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Henry R. Robbins.

Car-Coupling.

No. 119,409.

Patented Sep. 26, 1871.

Fig. 1.

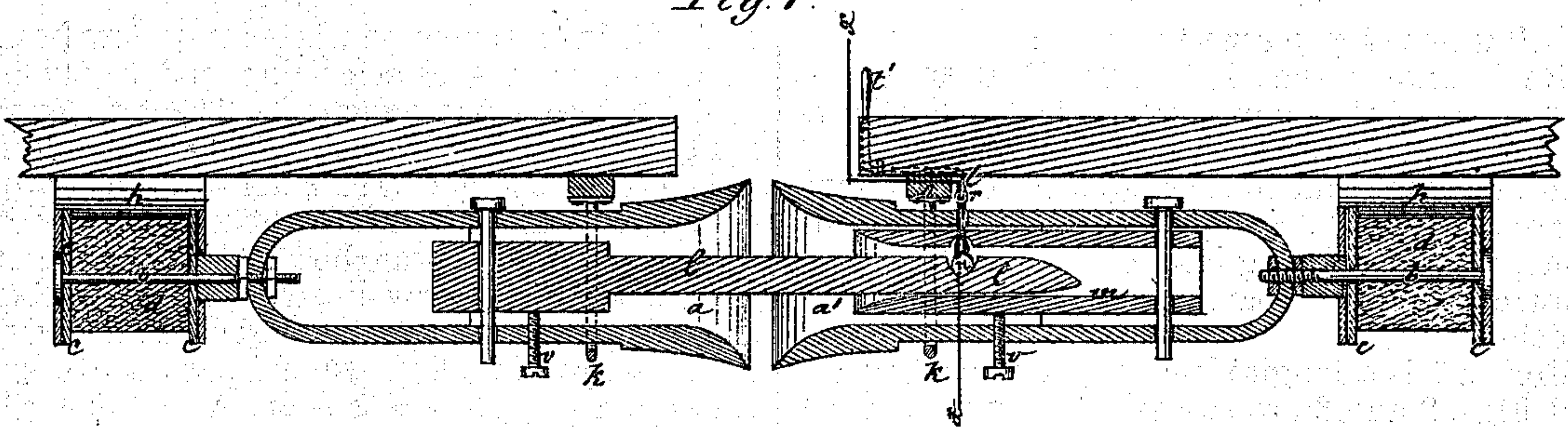


Fig. 2.

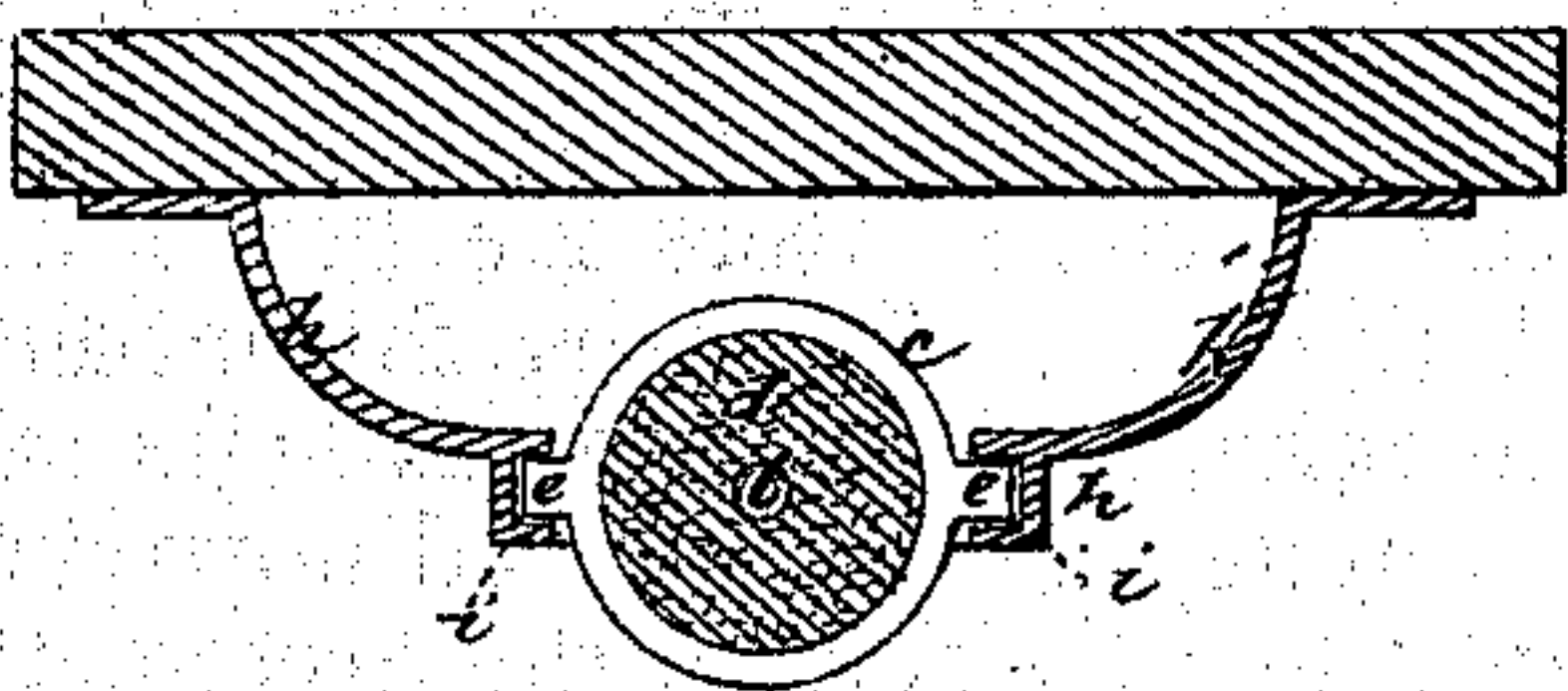
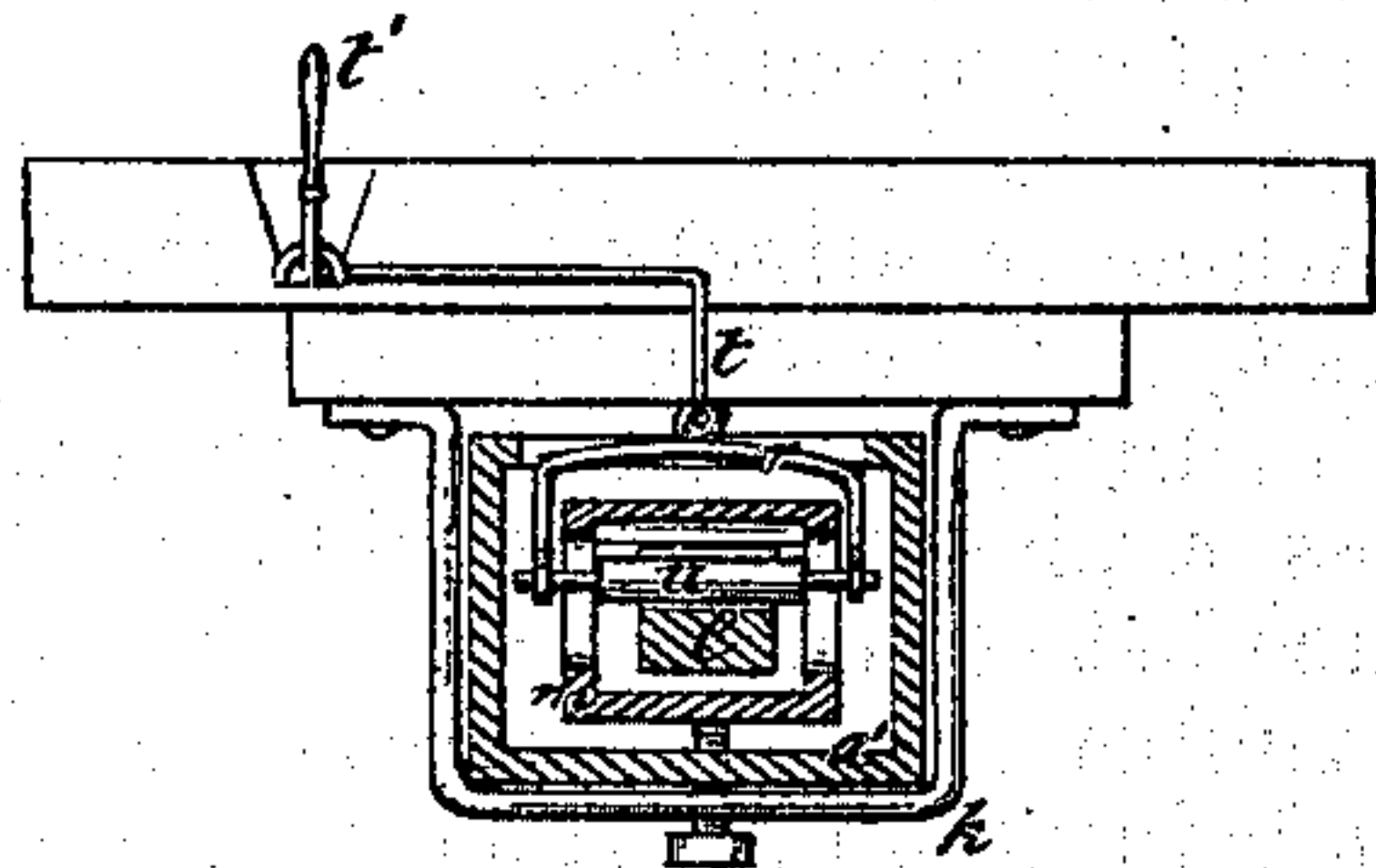


Fig. 3.



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HENRY R. ROBBINS, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 119,409, dated September 26, 1871.

To all whom it may concern:

Be it known that I, HENRY R. ROBBINS, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and Improved Car-Coupling; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a longitudinal sectional elevation, and Figs. 2 and 3 are transverse sectional elevations.

This invention relates to improvement in the class of car-couplings known as automatic; and consists in the arrangement of certain parts, which are hereinafter described, in connection with others which I prefer to use to form a complete coupling apparatus.

Referring to the drawing, *a a'* are the draw-heads, which are attached to their respective cars by bolts *b*, each of which passes through the rear end of its draw-head, and through a pair of metal plates, *c*, placed at a suitable interval apart, the space between each pair of plates being filled with a rubber block, *d*, that incloses the bolt, the plates *c* being each provided with a pair of ears, *e*, which extend from opposite sides of the plates into box-ways *i* formed in parallel castings *h*, which extend downward from the bottom of each car, one at each side of each pair of plates *c*. As an additional attachment a hanger, *k*, extends downward from the bottom of each car and passes under the draw-head at a point near its front end. The front one of each pair of plates *c* will slide backward and the rear one forward when a shock in either direction is communicated to the draw-head. The rubber block causes the return of each plate to its place after the cessation of the strain. This arrangement prevents the transmission to the cars of the jerks and blows received by the draw-heads. In the draw-head *a* a tongue, *l*, is pivoted on a vertical pin, which tongue extends forward far enough to enter the corresponding draw-head and discharge its functions therein. The tongue *l* is grooved transversely of its upper side, near its front end, by which groove a head is formed, which is, for greater convenience, made pointed. Lengthwise of the draw-head *a'*,

and within the same, is placed a hollow box, *m*, with open ends, said box being sufficiently large to freely admit the tongue *l*. Through orifices made in the sides of the draw-head *a'* and box *m* is passed a pin, *n*, the ends of which are received in slots formed near the lower extremities of a yoke, *r*, the branches of which extend to each side of the draw-head *a'*, the yoke being suspended at its top to the end of an arm, *t*, that extends from a shaft which passes crosswise through the front cross-beam *A* of the car-bottom. To the front end of this shaft, on the opposite side of the beam *A*, is attached a handle, *t'*, extending parallel to the arm *t* and beam, and in the opposite direction from the former. A spring bearing against the under side of the handle *t'* tends to raise it, and to depress the arm *t* and yoke *r* till the latter bears upon the pin *n*, which of course rests, when not disturbed, upon the bottoms of the slots wherein it lies. But when the tongue *l* enters the box *m* and passes beneath the pin *n*, it raises the latter, together with the yoke, until the pin *n* falls into the groove of the tongue, and is followed downward by the yoke and thereby held in the groove, thus effecting the connection of the tongue with the draw-head *a'*. To disconnect them it is only necessary to depress the handle *t'* far enough to raise the pin *n*, by means of the yoke, out of the groove of the tongue. A set-screw, *v*, passed upward through the bottom of each draw-head *a*, and bearing against the under side of the box *m* and tongue *l*, enables the point of the latter to be raised or lowered, as may be necessary, to cause it to enter the draw-head *a'* when the latter, by reason of a load on one or the other car, is at a different height from the ground from the draw-head *a*.

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

The pivoted box *m*, the pin *n* suspended in yoke *r*, and the spring-lever *t t'*, arranged as herein shown and described, in connection with the draw-head *u'*.

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