

(No Model.)

J. B. COMPTON & E. J. LANE.

CAR COUPLING.

No. 300,765.

Patented June 24, 1884.

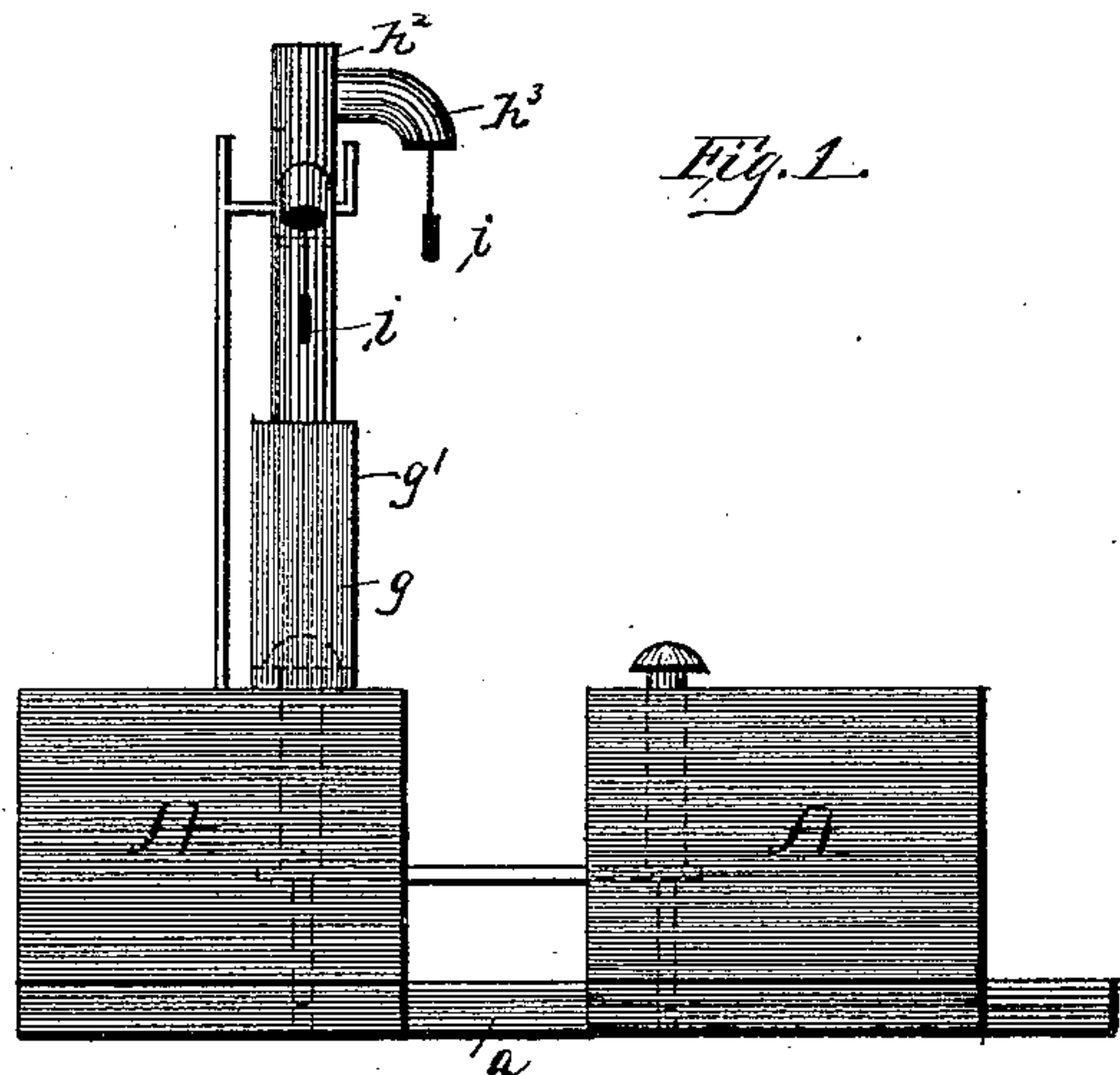


Fig. 1.

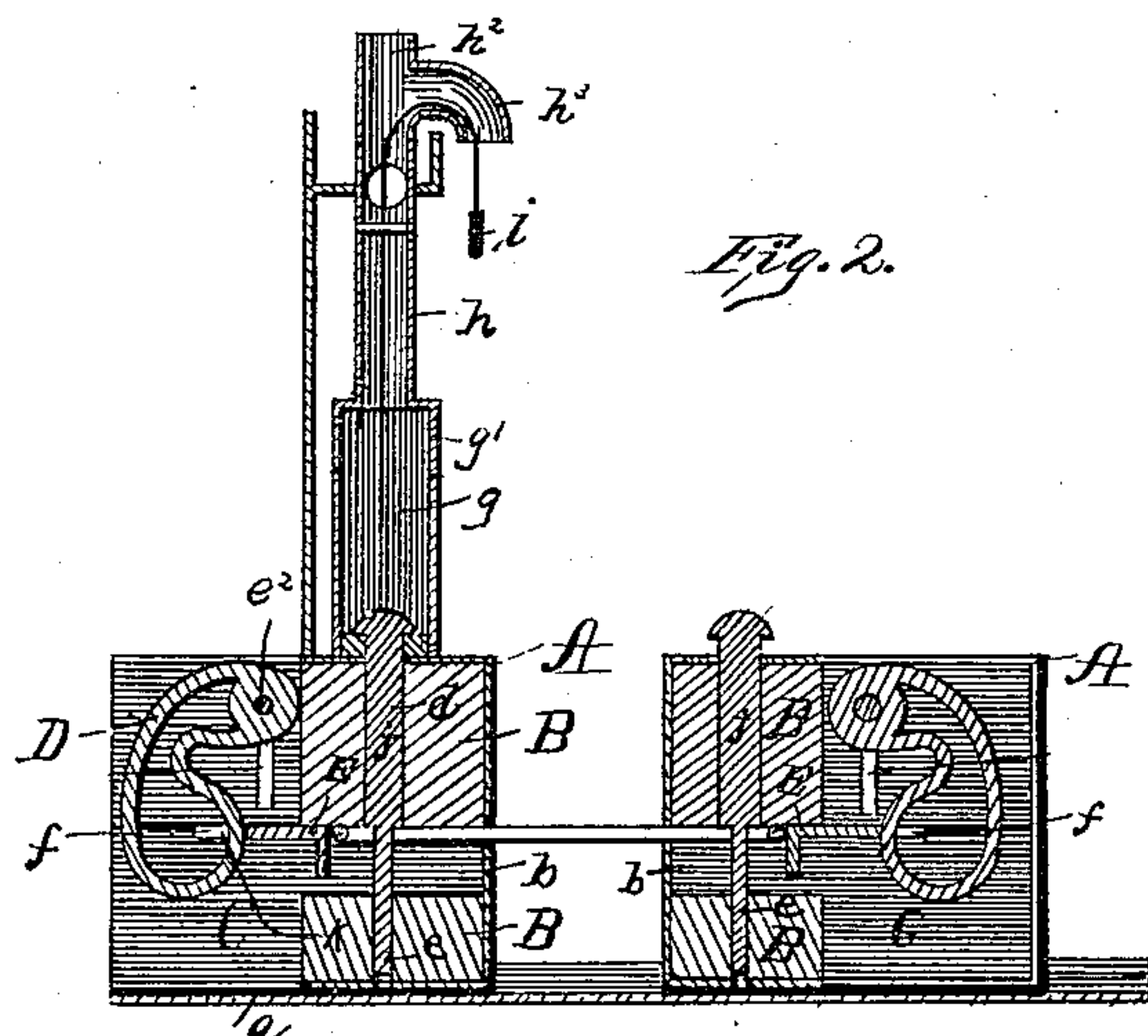


Fig. 2.

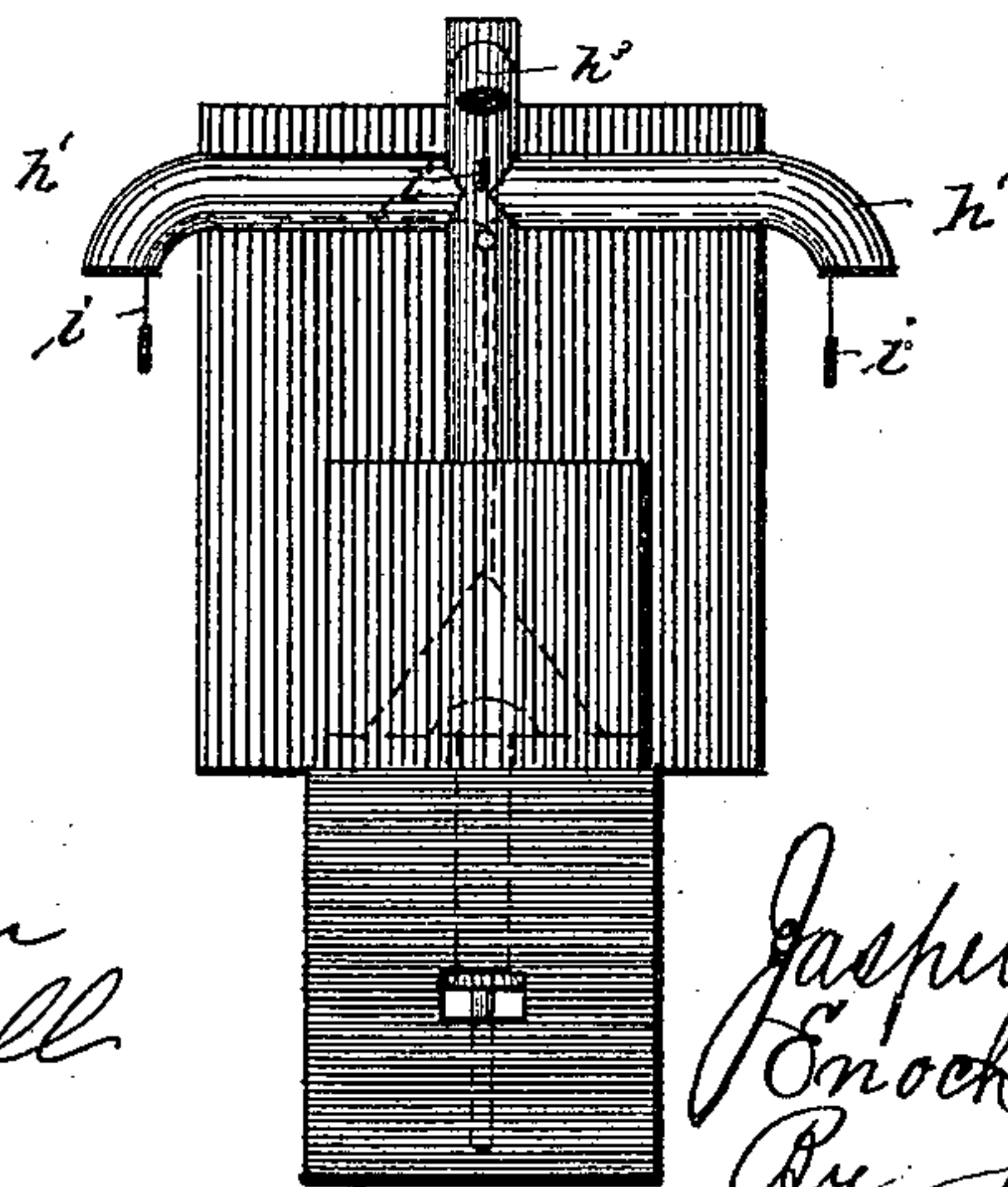


Fig. 3.

WITNESSES

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JASPER B. COMPTON AND ENOCH J. LANE, OF WILLIAMS, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 300,765, dated June 24, 1884.

Application filed April 17, 1884. (No model.)

To all whom it may concern:

Be it known that we, JASPER B. COMPTON and ENOCH J. LANE, citizens of the United States of America, residing at Williams, in the county of Colusa and State of California, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to improvements in car-couplings, having specially for its object to retain the coupling-pin elevated and ready for engagement with the entering link, and to effect the automatic coupling of the cars and the holding of the link horizontally in alignment with the opening in the draw-head, while enabling the ready uncoupling of the cars from the top or from either side thereof, and at the same time protecting the coupling-pin and its operating cords or chains from the weather.

The invention consists of the detailed construction and combination of parts, substantially as hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of our improved car-coupling. Fig. 2 is a longitudinal section, and Fig. 3 is an end elevation.

In carrying out our invention we preferably employ a draw-head, A, made of a casting of box shape with a rear extension, *a*, which is fastened under the car-platform. Within the box portion of the casting or draw-head are arranged two other castings or blocks, B, one disposed upon the other, the forward portion of the lower one of which blocks is provided or cast in its forward end with the greater part of a flared recess, *b*, the slight remaining part being cast in the lower edge of the same end of the upper block, while extending inwardly a suitable distance from said recess in the lower block, with the upper block forming the top thereof, is the link passage or chamber C. Directly above this passage or chamber, extending through the upper block, is the pin-aperture *d*. In the rear or other half of the lower block or casting is a narrow slot, *e*, extending through the entire length and depth of said rear portion, and in the same longitudinal plane with the link-passage. Immediately

above said slot is made in the upper block a similar slot, *e'*, within which is hung upon a transverse pin, *e''*, a gravity lever or arm, D, so suspended upon its pin or pivot as to swing inwardly and downwardly toward the forward end of the draw-head within the slots *e e'*.

E is a follower, which consists of a right-angled plate with its horizontal portion adapted to slide within shallow grooves or recesses *f f*, indenting the upper corner-edges of the link-passage C and of the slot *e*, to permit said follower to have the requisite movement, for the purpose presently disclosed, while its vertical portion extends downwardly into the link-passage and serves in twofold capacity, acting in one to receive the end of the entering-link, and in the other to limit the movement of the follower, which will be more fully explained hereinafter.

Upon the upper side of the box portion of the casting or draw-head is an upper open-ended inclosure, *g*, and upon this inclosure is placed a box-cover, *g'*, with a vertical pipe or hollow cylindric extension, *h*, from the sides of which, at its upper end, extend tubular arms *h' h'*, supported upon brackets secured to the end of the car, the extreme upper end of said extension or pipe *h* being fitted with a cap, *h''*, having a short hollow arm or pipe, *h'''*. From beyond these tubular arms extend suitable distances three cords or chains, *i i i'*, connected at their inner ends with the coupling-pin *j*, and having their outer ends disposed so as to permit the lifting or elevation of said pin or the uncoupling of the cars from the top of the car or from either side thereof upon the ground, said inclosures serving to protect the pin and the operating cords or chains from the weather.

In operation, it will be seen that normally the follower, upon lifting or elevating the coupling-pin as the link of a separating car is withdrawn from the draw-head, will be caused to move directly under the pin-aperture by the aforesaid action of the lever or arm D, and thus support the pin when released from the hand grasping its elevating cord or chain. By this movement of the follower its vertical or pendent portion will be presented to receive the action of the entering link upon

coupling the cars, whereby the pin will be tripped and be allowed to fall into the link, and thus effect the coupling operation, the rear end of the horizontal part of the follower, which is recessed, as at *k*, to receive the front edge of the lever or arm D, at the same time moving said arm back and upward, and thus supporting it when the cars are coupled. With the lever thus elevated and supported by the follower, it of course follows that upon the withdrawal of the pin and link the follower will be again moved forward in position to again support the pin and receive the action of the entering link. It is also obvious that the link of the opposite car will be held by the forward vertical end of the follower, held under the action of the lever, and by the pin, in a horizontal position, in alignment with the approaching draw-head to effect its ready entrance thereinto.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a car-coupling, the draw-head having the box-casting, with its upper end provided

with a box-shaped open-ended inclosure having a tubular vertical extension provided with horizontal tubular arms, and at its extreme upper end with a short tubular arm, in combination with the pin and its operating cords or chains, substantially as and for the purpose set forth.

2. In a car-coupling, the two-part draw-head casting, with the lower part provided with the link-passage, and in alignment with said passage with a narrow slot, the upper part of said casting having a slot in the same vertical plane with said slot, in combination with the right-angled follower sliding in recesses or grooves in the upper corner-edges of the link-passage and its coincident slot, and the lever or arm resting upon said follower, substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JASPER B. COMPTON.
ENOCH J. LANE.

Witnesses:

P. H. GRAHAM,
H. M. COOPER.