J. H. JOHNSON.

Car-Coupling.

No. 168,399. Patented Oct. 5, 1875.

Fig: 1.

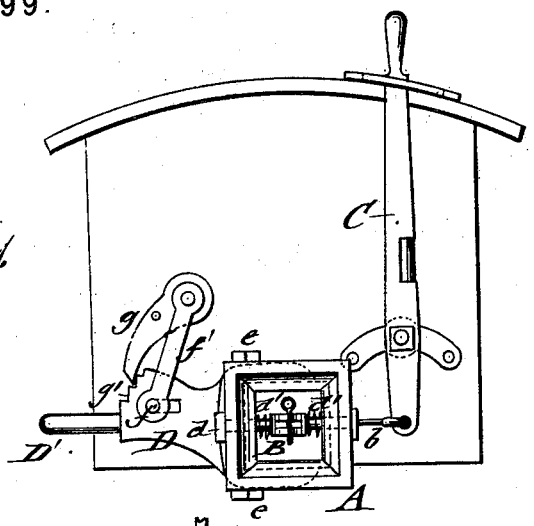


Fig: 2.

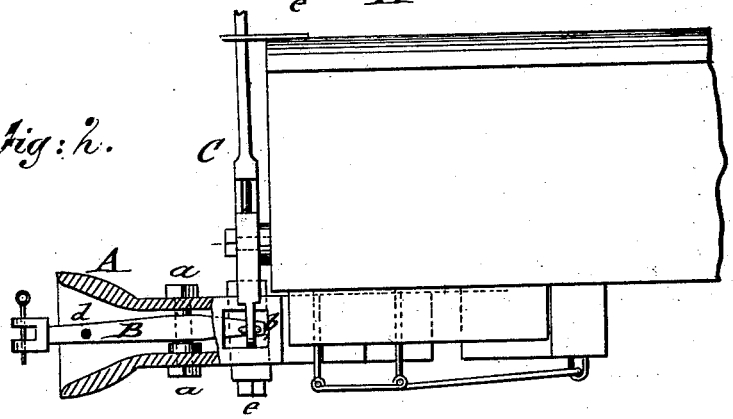
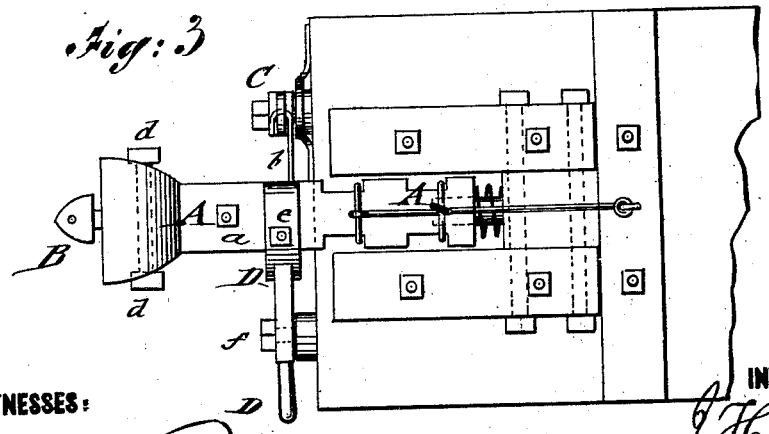


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE

JOHN H. JOHNSON, OF BROOKLYN, MICHIGAN.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **168,399**, dated October 5, 1875; application filed August 28, 1875.

To all whom it may concern:

Be it known that I, JOHN H. JOHNSON, of Brooklyn, in the county of Jackson and State of Michigan, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of my improved car-coupling; Fig. 2, a side view, and Fig. 3 a bottom view, of the same.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with drawing, and then pointed out in the claim.

In the drawing, A represents a draw-head with tapering mouth, applied by cushioning spring and supporting devices to the bottom of the car-frame. A coupling-link, B, passes in longitudinal direction through the draw-head, and projects with its arrow-shaped head to the outside of the same. The link B is fulcrumed to a vertical adjustable bolt, *a*, and connected at the rear end to a lever, rod, or hook, *b*, that is attached to a vertical lever-handle, C. The lever C is fulcrumed and guided in suitable manner at the car, to be operated from the top, side, or platform of the same, for swinging the front end of the link B to either side, for the purpose of uncoupling the same from the similarly-shaped and interlocking link of the connecting draw-head. The link rests on an inside shoulder of the fulcrum-bolt *a*, and may be raised or lowered thereon for throwing the arrow-head into lower or higher position. A lateral rod, *d*, passes through the mouth of the draw-head, and through the link back of the arrow-head, for the purpose of steadying the same and guiding it when carried to either side by the uncoupling-lever mechanism C. Spiral springs *d'* of rod *d* act on each side of the link to carry it back to a central position in the draw-head after uncoupling, ready for coupling. The arrow-head of the link B is recessed and perforated to couple with cars having the common pin-and-link coupling. A forked lever, D, is connected to the rear part of the draw-head A' by a vertical bolt, *e*, and fulcrumed to a pivot-pin, *f*, of the car. The pivot-pin *f* is strengthened by a connecting link, *f'*, that extends to the pivot of a weighted pawl, *g*, arranged above the fulcrum *f* of the lever. The pawl *g* locks into stops or notches *g'* of the lever, to retain the same rigidly in position. A sidewise-extending handle, D', of lever D serves to carry the draw-head into higher or lower position on releasing the pawl.

The draw-head and coupling-link may thus be set to the exact height of the draw-head and link of the car to be coupled with, and thereby not only the automatic coupling of the draw-heads produced, but also the reliable interlocking of the arrow-shaped links secured. The mouths of the draw-heads bear on the interlocking link-head in any position of the same, and prevent the escape or detaching of the links.

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

The combination, with the vertically-swinging draw-head, of a fulcrumed side lever attached thereto, and locked by a weighted pawl, for being set and retained at any height for coupling, substantially as shown and specified.

JOHN H. JOHNSON.

Witnesses:
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