

J. K. LANDIS.
Car Coupling.

No. 83,715.

Patented Nov. 3, 1868.

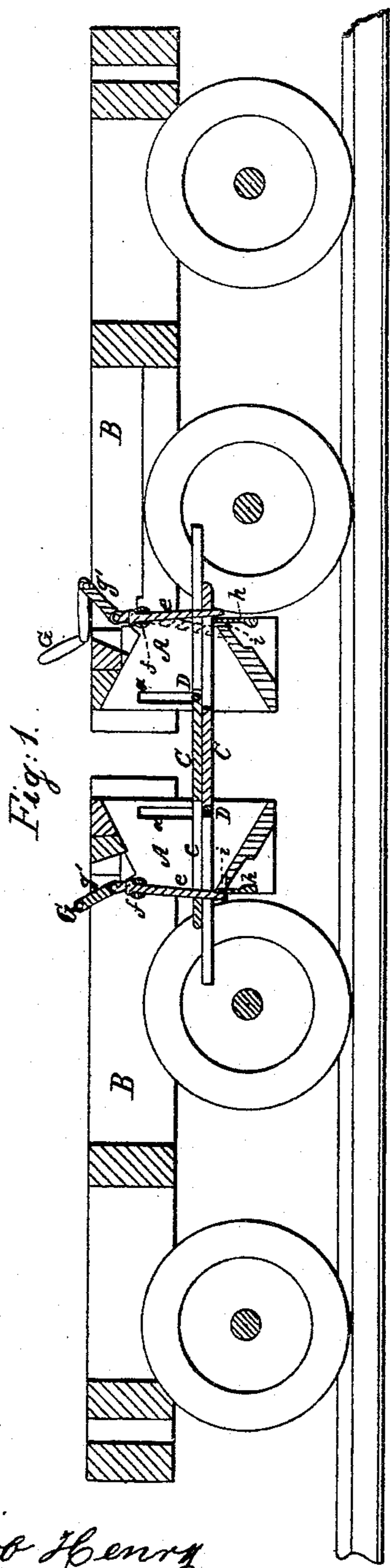


Fig. 1.

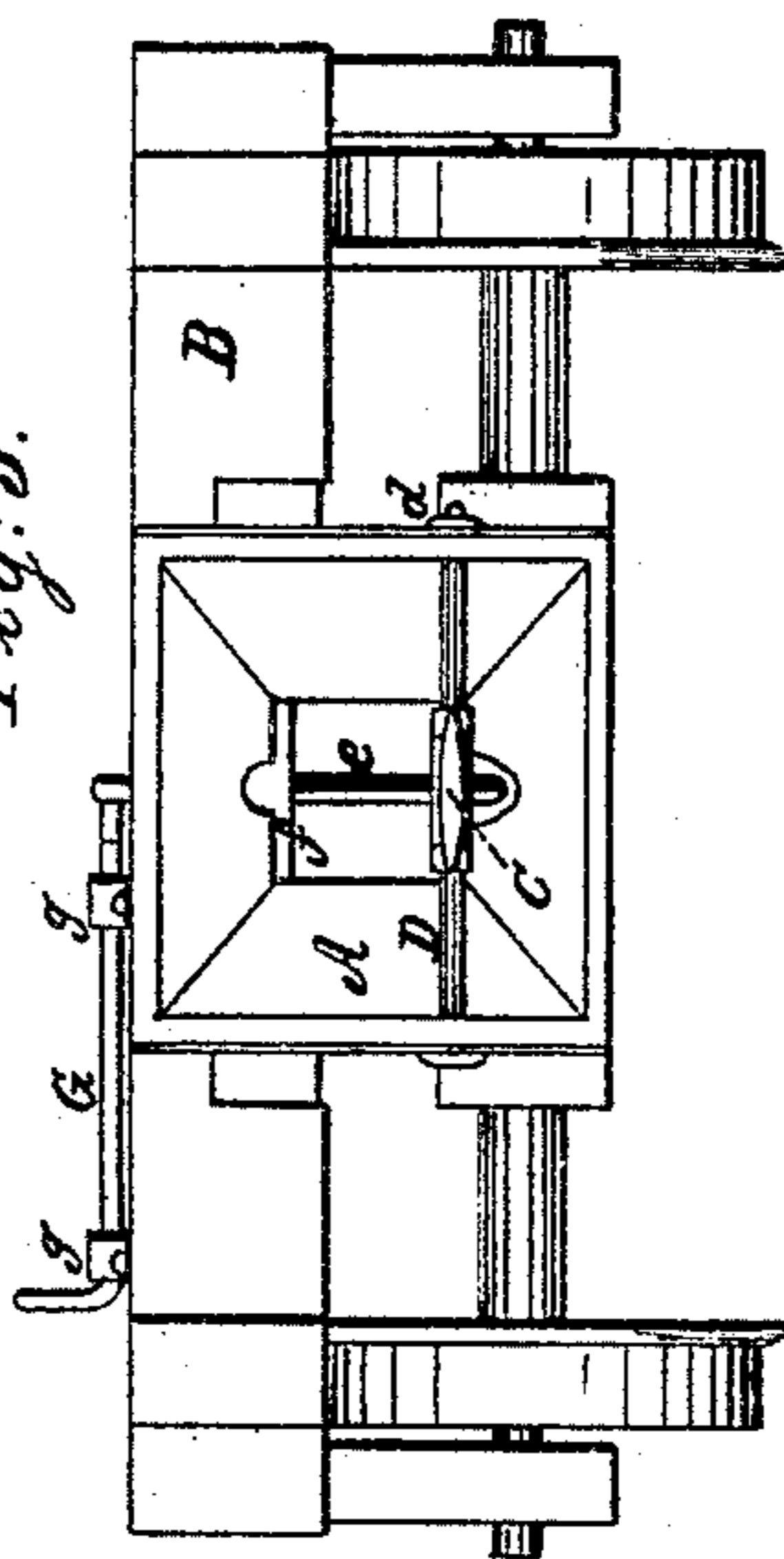


Fig. 2.

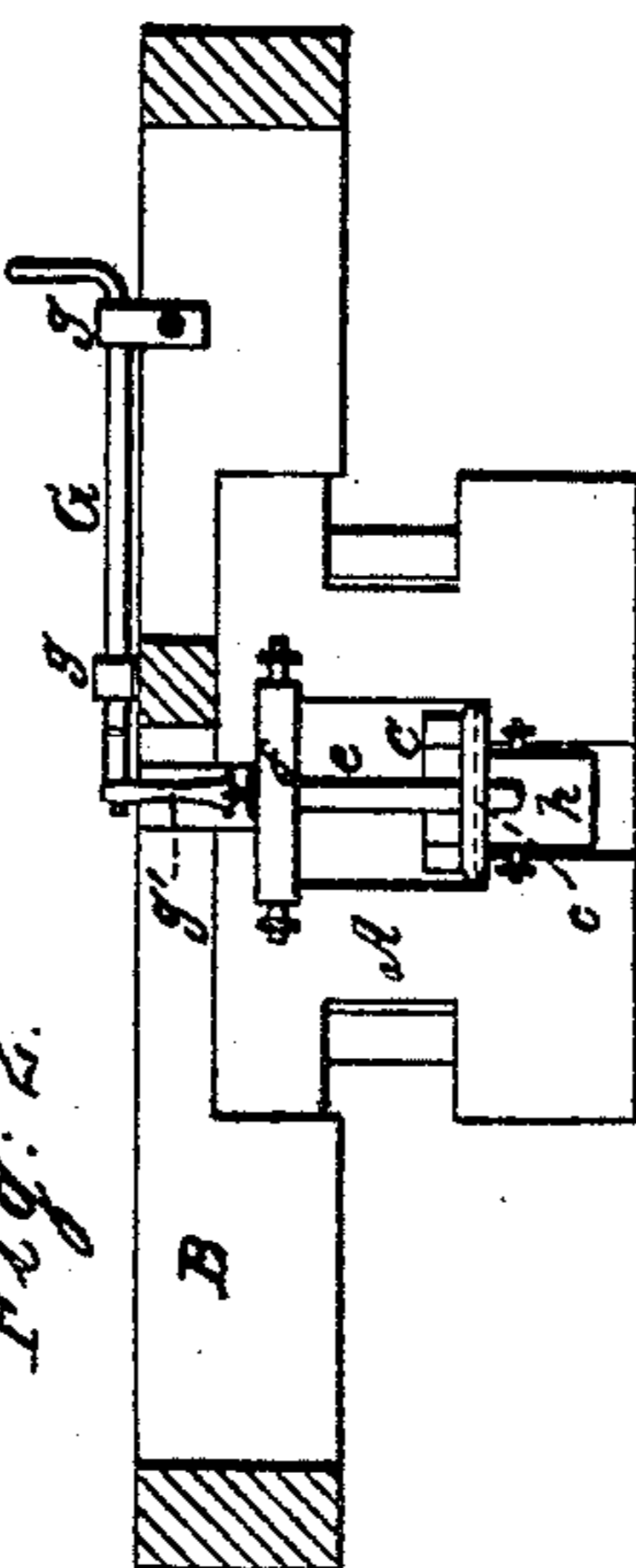
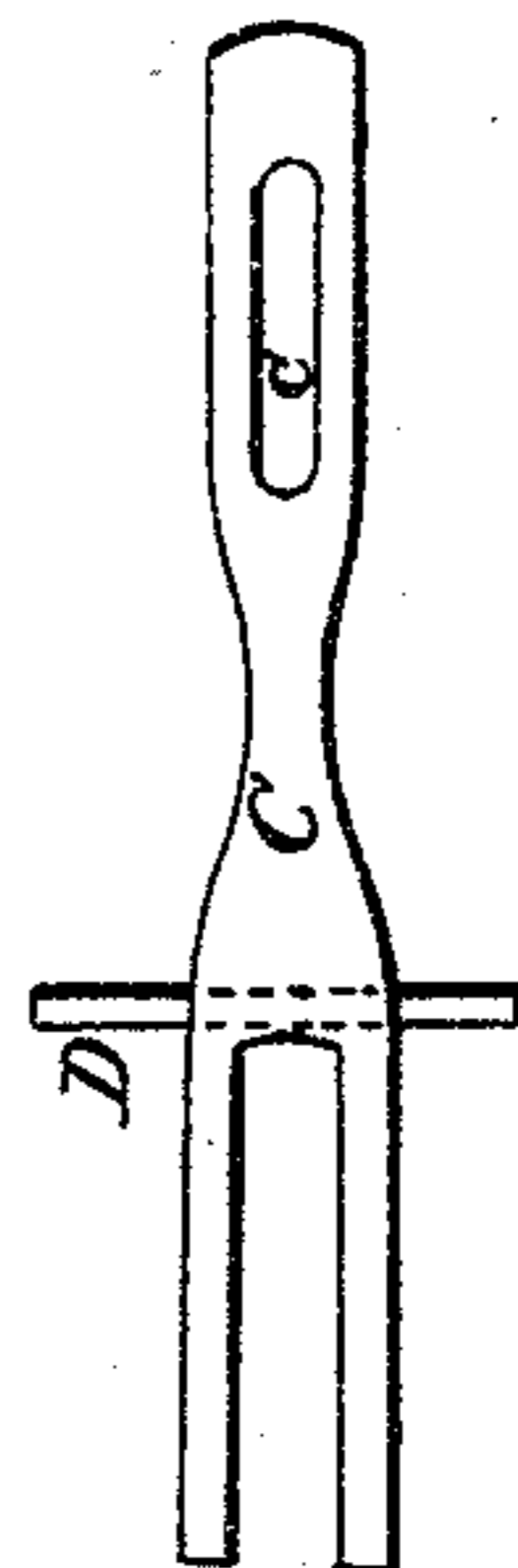


Fig. 3.



Witnesses.

Jacob Henry
R. W. Knight

Inventor.
J. K. Landis.
by Giedensheim
Atty



J. K. LANDIS, OF PALMYRA, PENNSYLVANIA.

Letters Patent No. 83,715, dated November 3, 1868.

IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, J. K. LANDIS, of Palmyra, in the county of Lebanon, and State of Pennsylvania, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which the invention appertains, to fully understand and use the same, reference being had to the accompanying drawings, which are made a part of this specification, and of which—

Figure 1 is a longitudinal section of two adjacent car-trucks, coupled by my improved device.

Figure 2 is a transverse section, presenting a rear view of one of the draw-heads and its appurtenances.

Figure 3 is a front view of one of the coupling-appliances pertaining thereto.

Figure 4 is a plan view of one of the coupling-links or shackles.

Similar letters of reference indicate corresponding parts in the several figures.

The subject of this invention is a novel and simple device, which is self-operating in the act of coupling the cars together, and which enables the uncoupling to be effected with great facility, the link requiring to be elevated to but a very slight extent, in order to liberate the coupling-link.

A A may represent draw-heads, secured to their respective trucks, B B, in any suitable manner. To each of the draw-heads a link or shackle, C, is permanently attached by means of the screw-bolts D, and nuts d. The bolts D occupy slots, a a, in the opposite vertical sides of the draw-heads A A, and the links C C are thereby permitted to adjust themselves vertically, in order to conform to the draw-heads when the latter assume different vertical positions. Each link being held by the rod or bolt D of one car, is caught and held at its opposite end by the coupling-pin e of the adjacent car. This pin, e, is supported by a short rock-shaft, f, having its bearings near the upper and rear part of the draw-head A, as shown in figs. 1 and 2. The pin e occupies an opening in the rock-shaft f,

and is adapted to slide vertically therein. The rock-shaft f also serves as an axis upon which the coupling-pin e may vibrate in a vertical plane. g' is a link or rod, jointed at its respective ends to the coupling-pin e, and to the lever G, which lever, being confined upon the truck by suitable socket-plates; g g, may be turned by foot or hand, so as to slightly raise the pin e. When the cars are coupled, the effect of this upward movement of the pin is to cause the lower end of the latter to clear the top of the pivoted or swinging plate h, whereupon the said pin becomes free, so that it may vibrate forward, as represented in fig. 1, and thus release the link C, and permit the cars to uncouple. When the cars are brought together to be coupled, the link c pushes back the pin e, till the latter passes the swinging plate h, and falls into the oblong slot c of the link. The pin e then catches against the upper end of the plate h, which cannot vibrate in a forward direction farther than the vertical position in which it is represented in fig. 1, in consequence of being opposed in that direction by the abutment i. The link C may be counterbalanced, so as to maintain its proper horizontal position. Owing to the slight movement required to remove the link C from its support h, the uncoupling of the cars may be effected with great expedition and facility.

Having described my invention,

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

1. The pin e, and the rock-shaft f, in combination with the swinging plate h, all being applied to operate substantially in the manner and for the purpose set forth.

2. The link C, constructed as shown, and secured to the draw-head by a screw-bolt, D, occupying slots a in the draw-head, as and for the purpose set forth.

To the above I have signed my name, this 27th day of July, 1868.

J. K. LANDIS.

Witnesses:

I. H. BLANCH,

DANL. B. HOLSBERG.