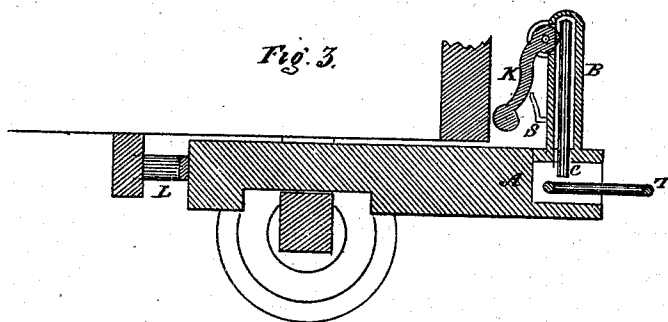
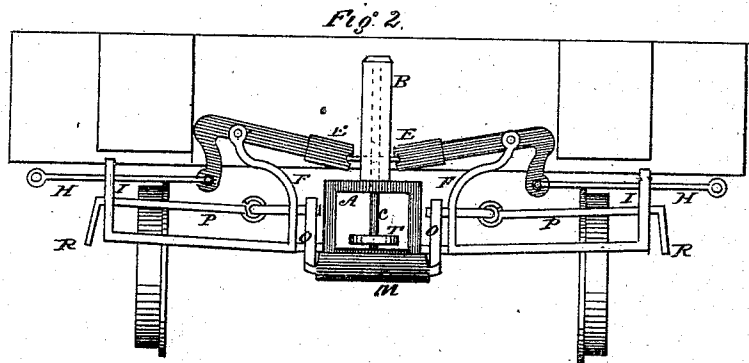
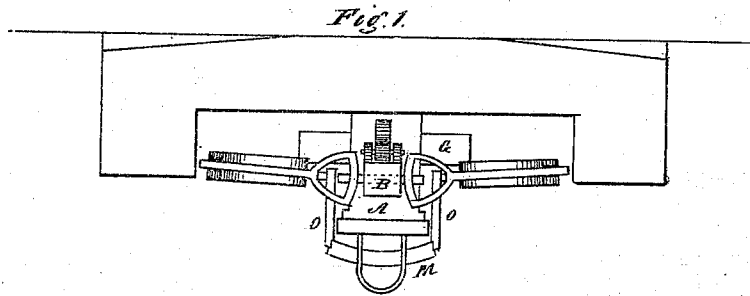


Calvin M. Colby's
Improved Car Coupling.

No. 118,436.

Patented Aug. 29, 1871.



Witnesses:
John. Thornton.
A. Barnes

Inventor.
Calvin M. Colby
By his Atty.
Western Company

UNITED STATES PATENT OFFICE.

CALVIN M. COLBY, OF CORINTH, VERMONT, ASSIGNOR TO HIMSELF, T. A. CHASE, WILLIAM STANDLICK, ALVIN H. LITTLE, A. W. PAINE, O. W. BROWN, RANSOM DARLING, R. H. CHILDS, BENJAMIN WILLIS, E. S. CARPENTER, AND RICHARD ROBIL.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 118,436, dated August 29, 1871.

To all whom it may concern:

Be it known that I, CALVIN M. COLBY, of Corinth, in the county of Orange and State of Vermont, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing forming a part of this specification and to the letters of reference marked thereon.

My invention relates to improvements in the construction of couplers for connecting or coupling railroad and other cars; and has for its object to obviate the necessity for a person to stand between the two cars which are being coupled, which the ordinary method of coupling cars requires to be done, and which, as is well known, is attended with much danger, and has occasioned many fatal accidents. The nature of my invention consists of a coupling-pin, which is located and operates within a slotted upright secured on the upper side of the buffer-head, and is elevated by means of two levers, to which are attached rods extending outside of the car in combination with the said buffer and end of the car and with an eccentric-headed lever which holds the pin in position when elevated until the buffers of the two cars come in contact. The concussion occasioned by the contact of the buffers causes the lower end of the last-mentioned lever to strike against the end of the car, and the pin is thereby released and falls or drops within the coupling-link.

To enable others skilled in the art to make and use my invention, I will proceed more particularly to describe its construction and operation.

Figure 1 represents a plan view of my improved car-coupling. Fig. 2 is a front elevation of the same. Fig. 3 is a detached sectional elevation to show the operation of the eccentric-headed lever.

Letters of like name and kind indicate like parts in each of the figures.

A is the buffer-head, on the upper side of which is rigidly secured a slotted upright, B,

within which the coupling-pin C fits and works. The pin C is provided with two lateral projections, which fit and work within the slotted ends of the bent levers E E, which said levers are pivoted to the uprights F F, the latter being rigidly secured to a plate, G, which is secured to the under side of the buffer by screw-bolts, or in any other suitable and well-known manner. To the outer ends of the levers E E are attached rods H H, each of which passes through a perforation in and is supported by one of the uprights I I, which latter are rigidly secured to the respective ends of the plate G. It will be seen that the ends of these rods extend to the sides of the car, so that the pin C may be elevated while the person operating it stands clear of the cars and out of danger. By pushing inward either one of these rods H H the ends of the levers E E, to which the pin C is attached, as above described, are elevated, and the pin C is raised so as to admit the coupling-link T into the buffer-head, and the said pin is kept in this position by means of the head of the lever K pressing against it, which said lever is pivoted to a projection on the upright B near its upper end, and is actuated by a spring, S, secured to the upright B. The buffer is secured underneath the car in any suitable manner, so as to have a short backward and forward movement, and its inner end is pressed upon by a spring, L, which may be of any suitable form, and secured to the car in any suitable manner. M is a horizontal bar secured to the outer ends of two parallel arms, O O, to the inner ends of which said arms are secured the rods P P, which pass through perforations in and are supported by the uprights F F and I I, and are provided at their outer ends with a crank, R, so that the bar M, which is for the purpose of raising and lowering the end of the coupling-link T, may be raised or lowered so as to guide the end of the link into the buffer-head of the other car.

When the buffer-heads of the two cars strike each other they are forced back by the concussion, and the lower end of the lever K is brought

into contact with the end of the car, thereby releasing the pin C, which immediately drops into the connecting-link.

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

The coupling-pin C, located within the upright B, and operated by means of the levers E

E and rods H H, in combination with the buffer A, lever K, and end of the car, substantially as herein shown and described, and for the purposes set forth.

CALVIN M. COLBY.

Witnesses:

J. BURTON,
F. E. CURRIER.