(No Model.)

L. Z. PRESTON & O. H. WIRSIG.

CAR COUPLING.

No. 474,691. Patented May 10, 1892.

Fig. 1.

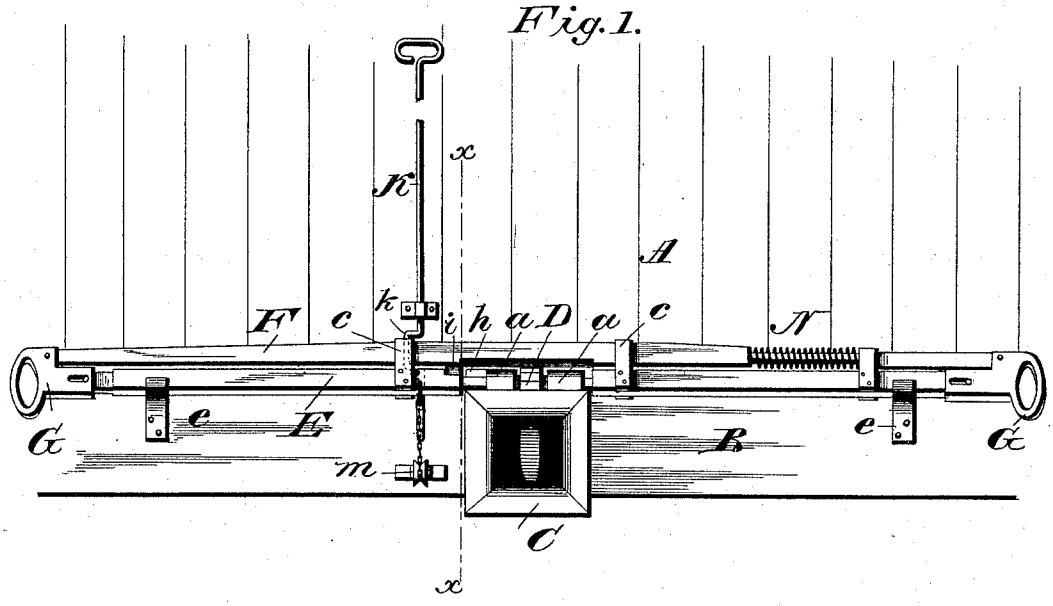


Fig. 2.

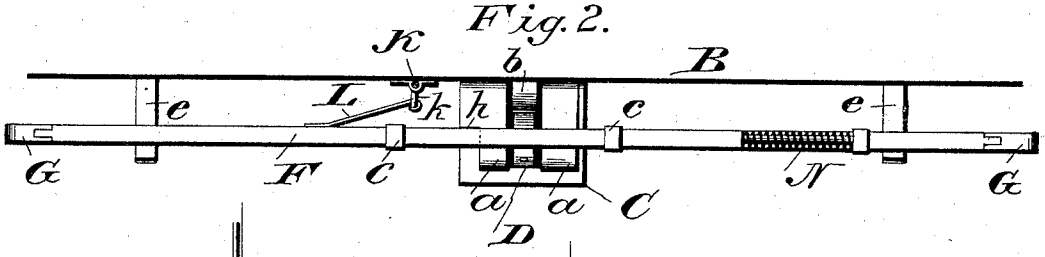


Fig. 3.

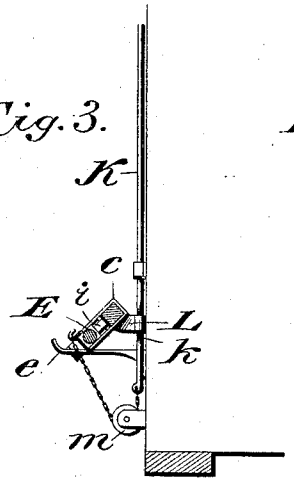


Fig. 4.

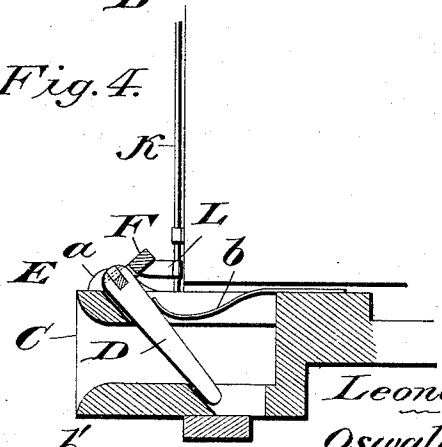
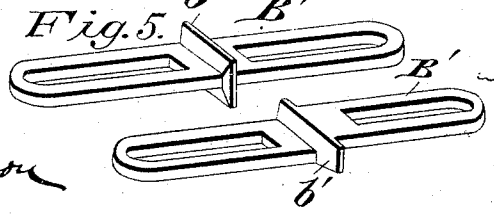


Fig. 5.



Witnesses
J. S. Elliott.
C. M. Johnson

Leonard Z. Preston
and
Oswald H. Wirsig.
Inventors;
by
Attorney

UNITED STATES PATENT OFFICE.

LEONARD Z. PRESTON AND OSWALD H. WIRSIG, OF CHAMPION, NEBRASKA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 474,691, dated May 10, 1892.

Application filed July 2, 1891. Serial No. 398,251. (No model.)

To all whom it may concern:

Be it known that we, LEONARD Z. PRESTON and OSWALD H. WIRSIG, citizens of the United States of America, residing at Champion, in the county of Chase and State of Nebraska, have invented certain new and useful Improvements in Car-Couplings; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in car-couplings; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation. Fig. 2 is a plan view. Fig. 3 is a sectional view taken through the line *x x* of Fig. 1. Fig. 4 is a vertical sectional view through the draw-head. Fig. 5 shows detail views of the coupling-link.

A designates the car-body, and B the sill-beam, to which the draw-head C is secured in the usual manner. The draw-head is provided with a swinging pin D, which normally hangs in an inclined position; but I prefer to assist its downward swinging movement by the employment of the spring *b*, which bears against the upper side thereof.

The coupling-links B′ have central stops *b′*, which will abut against the wall surrounding the mouth of the draw-head and limit the entrance of the link. By providing these stops the shock or jar will come upon the draw-head, which is provided with the usual buffers.

The swinging pin D is rigidly attached to a bar E, which passes through ears or lugs *a a*, formed on the upper side of the draw-head, said bar being provided at suitable points with loops or bails *c c*, which serve to connect a sliding bar F thereto. The bar E rests upon outwardly-extended arms or brackets *e e*, attached to the sill-piece B. To the outer ends of the bar E are attached handles G, which have a limited sliding movement thereon, and to said handles is rigidly attached the sliding bar F. On one of the lugs *a*, through which the reduced and rounded portion of the bar E passes, is a catch *h*, with which a lug or projection *i*, formed on the bar F, is adapted to engage to hold the swinging pin elevated, so that the cars can come together without coupling. This operation can also be accomplished from the top of the car by drawing upon the rod K and then turning it to draw upon the sliding bar F and cause it to engage the catch. The rod K operates the bar E by a chain which passes beneath a pulley *m*, attached to the sill-piece, and connects with said bar E at the front thereof, and by drawing upon said chain the said bar is rocked in its bearings to elevate the swinging pin. The rod K is operated to slide the bar F by means of a bar L, which is connected to the crank *k* on said rod and to the sliding bar. The lug on the sliding bar is held out of engagement with the catch *h* by means of a spring N.

By means of the device hereinbefore described the pin can be placed in a position for coupling either from the top or side of the car and the sliding bar F adjusted to hold the pin elevated and prevent the cars coupling when they come together.

When the parts are organized or in a position shown in the figures of the drawings, the device is ready for coupling, and when it is desired to raise the pin D it can be done either from the top or side of the car. It is done from the side of the car by drawing upon one of the handles G, which movement will cause the bar E, as well as the sliding bar F, to be moved to one side, so that the cut-away portion of these bars will be over the lug or projection *i*, when the handle can be turned or partially rotated to raise the pin D to a horizontal position. The edges of the cut-away portions of the bars E and F, engaging with the lug, will hold the swinging pin in the position it has been placed. Now should it be desired to accomplish this from the top of the car the rod K is turned so that the crank portion *k*, through its connection with the flat bar L, will move the bars E and F to one side, so that the cut-away portions will assume the same position as though one of the handles was drawn upon. When this is done, the bar K is pushed down, which movement turns the bar F downwardly, so that the shoulder adjacent to the recess will engage with the lug or

projection *i*. Ordinarily the cars will couple automatically; but when it is desired to uncouple the cars or hold the coupling-pin D elevated the operation just described is performed.

Having thus described our invention, we do not wish to limit ourselves to the precise construction shown and described, but reserve the right to modify the same within the scope of the claim.

We claim—

1. In combination with a draw-head having a swinging coupling-pin, a bar E, supported in a horizontal position and adapted to turn upon the draw-head, said bar carrying a sliding bar F, having a lug *i*, which is adapted to engage with a catch *h*, carried by the draw-head, substantially as set forth.

2. The combination, in a car-coupling having a swinging pin, of a rock-bar E, sustained in a horizontal position above the draw-head and provided at its outer ends with movable end-grasping handles, and a bar F, sustained above the same and held in engagement therewith, said bar having a lug for engagement with a catch on the draw-head, substantially as set forth.

3. In combination with a car-coupling having a swinging pin, a rock-bar maintained in a horizontal position above the same, a sliding bar F, attached to the rock-bar, a vertical rod K, having a crank *k*, a bar engaging said crank and sliding bar, and a flexible connection attached to said rod and to the rock-bar for rocking said bar, substantially as set forth.

4. In combination with a draw-head C, having apertured lugs *a a* and a stop *h*, formed on one of the same, a rock-bar E, having bearing in the lugs and provided with movable handles G, a sliding bar secured to the bar E by bolts or loops, said bar carrying a spring and the ends thereof being rigidly attached to the handles G, a vertical rod extending to the top of the car and provided with a crank *k*, a bar for connecting the crank portion with the sliding bar F, and a flexible connection attached to the end of the bar K and passed therethrough beneath a guide-pulley and attached to the bar E, the parts being organized substantially as set forth.

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

LEONARD Z. PRESTON.
OSWALD H. WIRSIG.

Witnesses:
C. O. MEAD,
J. V. DESELNER.