

(No Model.)

J. B. HINCHMAN & A. W. HILLE.
CAR COUPLING.

No. 493,268.

Patented Mar. 14, 1893.

Fig. 1.

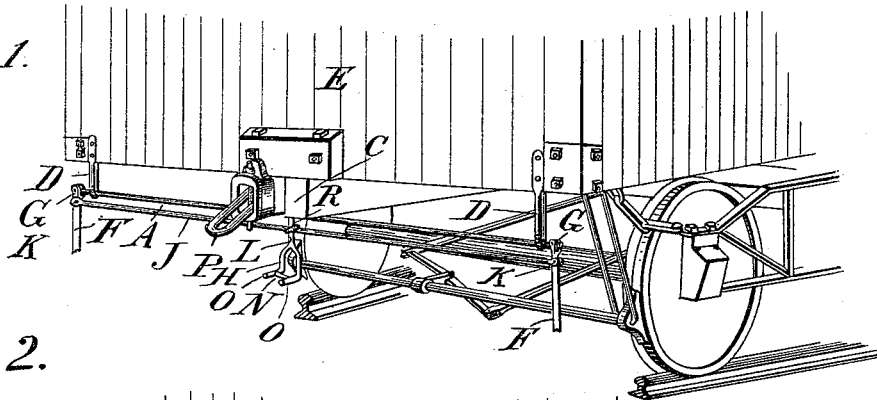


Fig. 2.

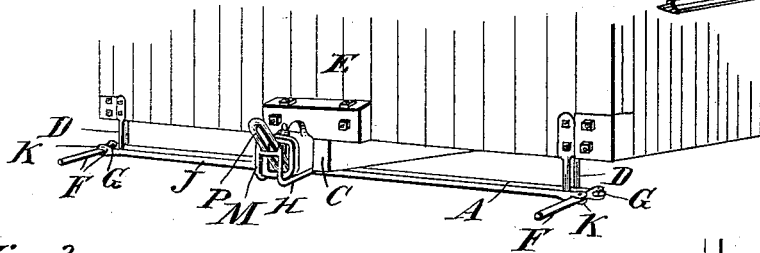


Fig. 3.

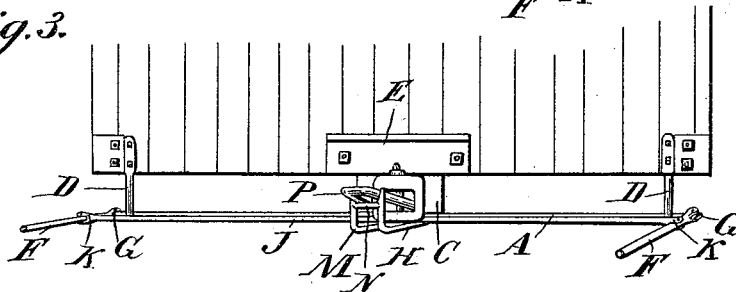
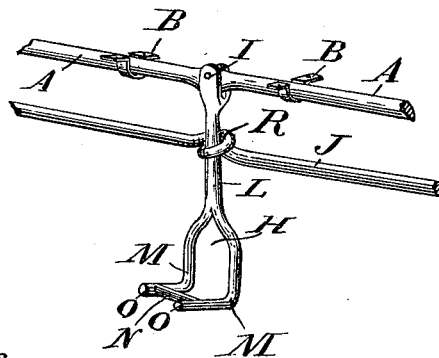


Fig. 4.



Witnesses.

A. W. Hille
J. H. Hille

Inventors.

James B. Hinchman
Adolph W. Hille

UNITED STATES PATENT OFFICE.

JAMES B. HINCHMAN AND ADOLPH W. HILLE, OF DENVER, COLORADO; SAID
HILLE ASSIGNOR TO SAID HINCHMAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 493,268, dated March 14, 1893.

Application filed July 5, 1892. Serial No. 439,024. (No model.)

To all whom it may concern:

Be it known that we, JAMES B. HINCHMAN and ADOLPH W. HILLE, citizens of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Link-Guides for Coupling Cars; and we do 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 the letters of reference marked thereon, which form a part of this specification.

Our invention relates to a mechanical device for coupling cars which invention consists of a link guide or fork, said guide or fork is operated by two horizontal bars fastened to and under each end of car, in conjunction with a handle fastened to each end of said bars at each corner of the car.

The objects of our invention are, first, to provide a safe, reliable and quick way to couple cars from outside of track; second, to provide a means for coupling cars, whereby the lives of the trainmen are not endangered, and at the same time to retain the standard or ordinary drawhead with the loose link and pin; third, to provide a means for guiding the link in any direction sidewise or up or down so that any two cars to be coupled, where the draw heads meet on an even line, or where the drawheads to be coupled to, are to one side or higher or lower than the drawhead containing the link, can be coupled without entering between the cars. We obtain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of guide-fork, showing guide-fork hanging under the end of the car when not in use. Fig. 2 is a view showing the link raised up by the guide-fork ready to enter a drawhead that is higher than the drawhead containing the link. Fig. 3 is a view showing the link turned to one side by the use of the guide-fork ready to enter a drawhead which is located to one side from the drawhead containing the link. Fig. 4 is a detailed view of the guide-fork showing the link rest.

Similar letters refer to similar parts throughout the several views.

The upper iron bar is designated by letter A which is fastened by iron plates B B shown in Fig. 4, to the bottom of drawhead beams C C shown in Fig. 1, bar A being secured at each corner of car E, with long arm brackets D D. Bar A must be sufficiently loose in brackets D D and iron plates B B to permit it to turn readily. Bar A is connected at each end to handles F F with loose rivets G G and in the center to guide-fork handle L with rivet I. The lower iron bar J in center at R is linked around guide-fork handle L and connected at each end to handles F F, with loose rivets K K about four inches from end where bar A is fastened to handles F F leaving about four inches space between bars A and J.

The link guide or guide-fork H as shown in Fig. 4 is made of bar iron and bent in center so as to make it into a horseshoe or fork shape, with a space between the tines M M from four to five inches; both sides or tines M M are then bent forward so as to form a right angle, leaving same space of four to five inches between at ends of tines M M, between these tines M M there is fastened an iron bar forming link rest N, the ends of forks or tines M M extending from one half ($\frac{1}{2}$) to one (1) inch above link rest N, said one half to one inch projection of tines M M above link rest N forming lugs O O, which serve to keep the link from sliding off from link rest N while being guided in the different directions to enter a drawhead. Lugs O O, are beveled from link rest outward, which serves to readily catch the link; the link rest N is from four to five inches wide, which is sufficient space to permit any link to lie flat on the link rest N, in the position necessary to enter a drawhead. Guide-fork handle L is attached to tines M M, thence passed through link R in iron bar J, the other end of handle L is fastened to iron bar A with loose rivet I, as heretofore set forth.

It will be seen and readily understood from the above description and drawings that the link guide or guide-fork H can be easily operated by the trainmen.

Having first placed the pin in the drawhead

of the car to be coupled to in the ordinary slanting way, as it is usually placed by trainmen, all that is necessary to be done is for the trainman to take hold of handle F, at 5 whichever side of car he happens to be on, and by lifting of handle F, in the direction away from end of car, the link guide or guide-fork H is brought into a horizontal position and catches the link P, as shown in Figs. 2 10 and 3, then by a few short motions of handle F the end of link P is pointed in the direction necessary to permit the link to enter the drawhead in which the pin has previously been set; the connection is thus made, the 15 cars come together, and the coupling is completed, without the person making the coupling having entered between the cars; the handle F is dropped, and the guide-fork H instantly drops into its regular position as shown 20 in Fig. 1.

We are aware that prior to our invention mechanical devices have been made and employed for raising and lowering pins in drawheads and it makes no difference in the use 25 of the guide-fork whether the pin in the drawhead to receive the link is set in the usual slanting manner employed by trainmen as heretofore set out or whether the pin in any such drawhead is manipulated by any me- 30 chanical device.

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

1. The link guide or guide-fork H, in combination with handle L secured to iron bar A 35 with rivet I, substantially as set forth.

2. The link guide or guide-fork H, in combination with handle L secured to iron bar A with rivet I, and bar A secured to handles F F 40 with rivets G G, substantially as set forth.

3. The link guide or guide-fork H, in combination with handle L secured to iron bar A with rivet I, handle L passing through link R in iron bar J, with bar J secured to handles 45 F F with loose rivets K K, substantially as set forth.

4. The link guide or guide-fork H with link rest N, with beveled lugs O O, in combination with handle L secured to iron bar A with rivet I; handle L passing through link R in 50 iron bar J, with bar J secured to handle F F with loose rivets K K substantially as set forth.

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

JAMES B. HINCHMAN.
ADOLPH W. HILLE.

Witnesses:

R. L. HINCHMAN,
ORLANDO C. MARSH.