

(No Model.)

J. C. McEWEN.
CAR COUPLING.

No. 491,185.

Patented Feb. 7, 1893.

Fig. 1.

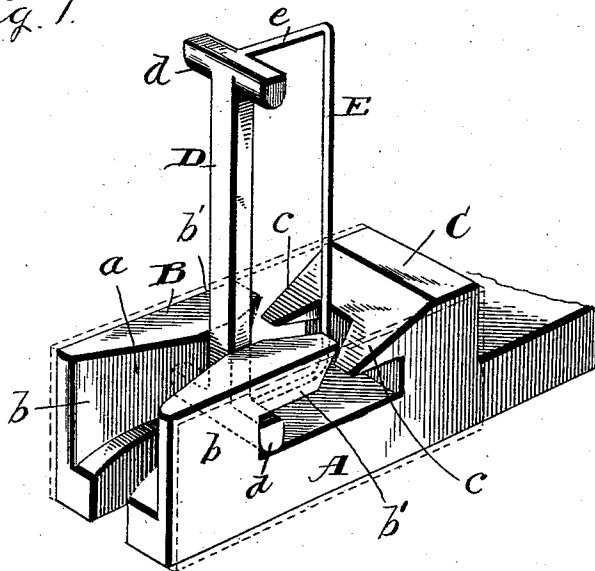


Fig. 2.

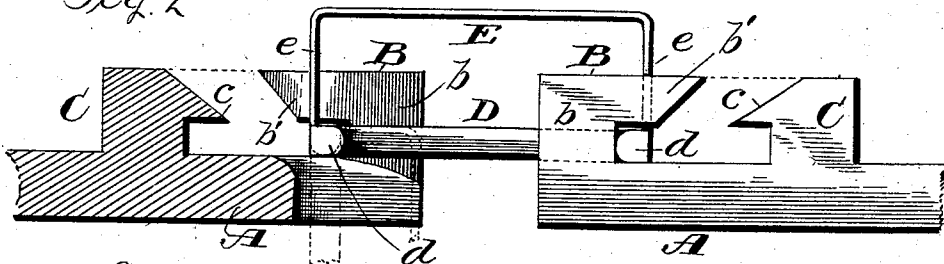


Fig. 3.

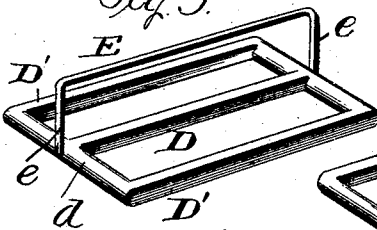


Fig. 5.

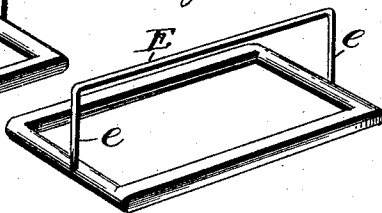


Fig. 4.

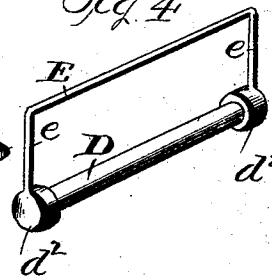
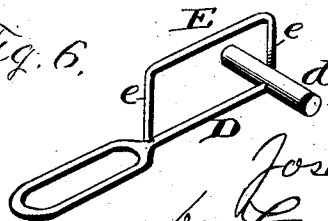


Fig. 6.



Witnesses
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JOSEPH CAMERON McEWEN, OF LOCHLOOSA, FLORIDA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 491,185, dated February 7, 1893.

Application filed November 28, 1892. Serial No. 453,392. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CAMERON McEWEN, a citizen of the United States, residing at Lochloosa, in the county of Alachua and State of Florida, have invented certain new and useful Improvements in Car-Couplings; and I 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.

This invention relates to certain new and useful improvements in links for car couplings, and the invention consists in the link, constructed substantially as hereinafter specified and illustrated in the accompanying drawings, in which;

Figure 1 is a perspective view of a draw-head constructed in accordance with my invention, with a link shown in position ready for coupling with a similar draw-head. Fig. 2, is a view showing two heads connected together, one head being shown in side elevation and the other in section. Figs. 3, 4 5 and 6, are perspective views of the three forms of link which may be employed, that in Fig. 6 being the preferable form.

Reference now being had to the details of the drawings by letter, A designates the body portion of the draw-head, from whose front end, on opposite sides rise two projections B, precisely alike, and separated by a groove or space *a*. Each projection is hook-shaped and comprises a vertical part *b* and a rearwardly extending part *b'* at a right angle to the vertical part. In the rear of these hook-shaped projections, another one, C rises from the upper side of the draw-head, whose upper face inclines downward and forward, and, from whose front side project two separated lugs *c, c*, in line with the two hook-shaped projections. The upper faces of said lugs *c, c* are continuations of and incline at the same angle as the upper face of the projection C, and their under faces are horizontal and in the same plane as the under sides of the extensions *b, b*. The rear ends of the latter are inclined at about the same angle as the top faces of the projection C and its lugs *c, c*, so

that there is formed an inclined passage down into the space between the top side of the draw-head and the lugs *c, c*, and the extensions *b, b*.

The link I employ consists essentially of a straight bar D having at its ends lateral extensions *d*, at right angles to the bar D, and it is provided with a handle E consisting of a main portion running parallel with the bar D and united thereto by right angled extensions *e* at its ends. The bar D is designed to pass down between the projections B on the draw-head, and the lateral extensions to engage the vertical members *b, b*, thereof beneath the rearward extensions *b'*, as shown in Fig. 2. The lugs *c, c* operate to prevent the link from rising out of place should it, in its longitudinal play, occasioned by the motion of the cars, get from beneath said extensions *b'*. The inclined rear ends of the latter are also of value in this connection, as there is thus no vertical opening out, through which the link can rise at any point of the longitudinal motion of which it is capable.

The coupling together of two cars equipped with my invention, is automatically effected as follows; The link is arranged on the coupler of the stationary car, as shown in Fig. 1, with the lateral extensions *d* in engagement with the projections B, and the bar D in a vertical position between said projections. The link is held in this position by the handle E, whose main portion is placed between the lugs *c, c*, and rests against the front side of the projection C, while the part *e* lies upon the top of the draw-head. The link being thus arranged, the car to be coupled is moved until its draw-head strikes the draw-head of the other, whereupon, by reason of the impact, the link will fall forward from its vertical position and its free end will drop onto the inclined face of the projection C, and, if not by its own weight, it will, as soon as the cars pull apart, pass through the inclined passage leading to the space below the portions *b'* of the hooks B, and engage with the latter. The inner faces of the hooks B, are beveled or flared outwardly at their rear ends, to facilitate the passage of the coupling link, and also at their front ends to provide for lateral swing or play, as the coupled cars sway in turning curves. The top face of the draw-head, be-

tween the hooks B, is inclined downwardly, to facilitate the coupling of the cars of different heights; for which latter use my form of coupling is admirably adapted.

- 5 As shown in Fig. 3, the ends of the lateral extensions d of the link, can be connected by bars D D, parallel with the bar D, or, as shown in Fig. 4, a link may be employed consisting of a round bar D², having rounded heads d^2
10 to engage the projections B, and, again, a simple loop in the form of a rectangle, as shown in Fig. 5 may be used. In Fig. 6, I show a link provided with a loop, for use with cars having the common pin and link coupler, to
15 enable the same to be coupled to cars having my coupler.

- To prevent injury to the links from sudden contact between the cars, I slot the draw-head vertically between the projections B, B, at its
20 front end, so that the link can hang downward from the draw-head by the extensions d with the bar D passing through the slot.

As shown by dotted lines in Fig. 1, I propose to place side pieces upon the draw-head, both to strengthen the same, and to cover the
25 cavities between the projections B, B and C. With this construction, of course, the type of link shown in Figs. 3 and 5 cannot be used.

Having thus described my invention, what I claim to be new and desire to secure by Letters Patent, is;—
30

A link for a car-coupling, the same comprising a loop at one end and a cross-bar at the other, and a loop connecting said loop and the cross-bar and arranged at right angles to
35 the first mentioned loop, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH CAMERON McEWEN.

Witnesses:

E. H. JENKINS,
W. A. PERRY.