(No Model.)

S. C. CARROLL.

CAR COUPLING.

No. 384,889. Patented June 19, 1888.

Fig. 1.

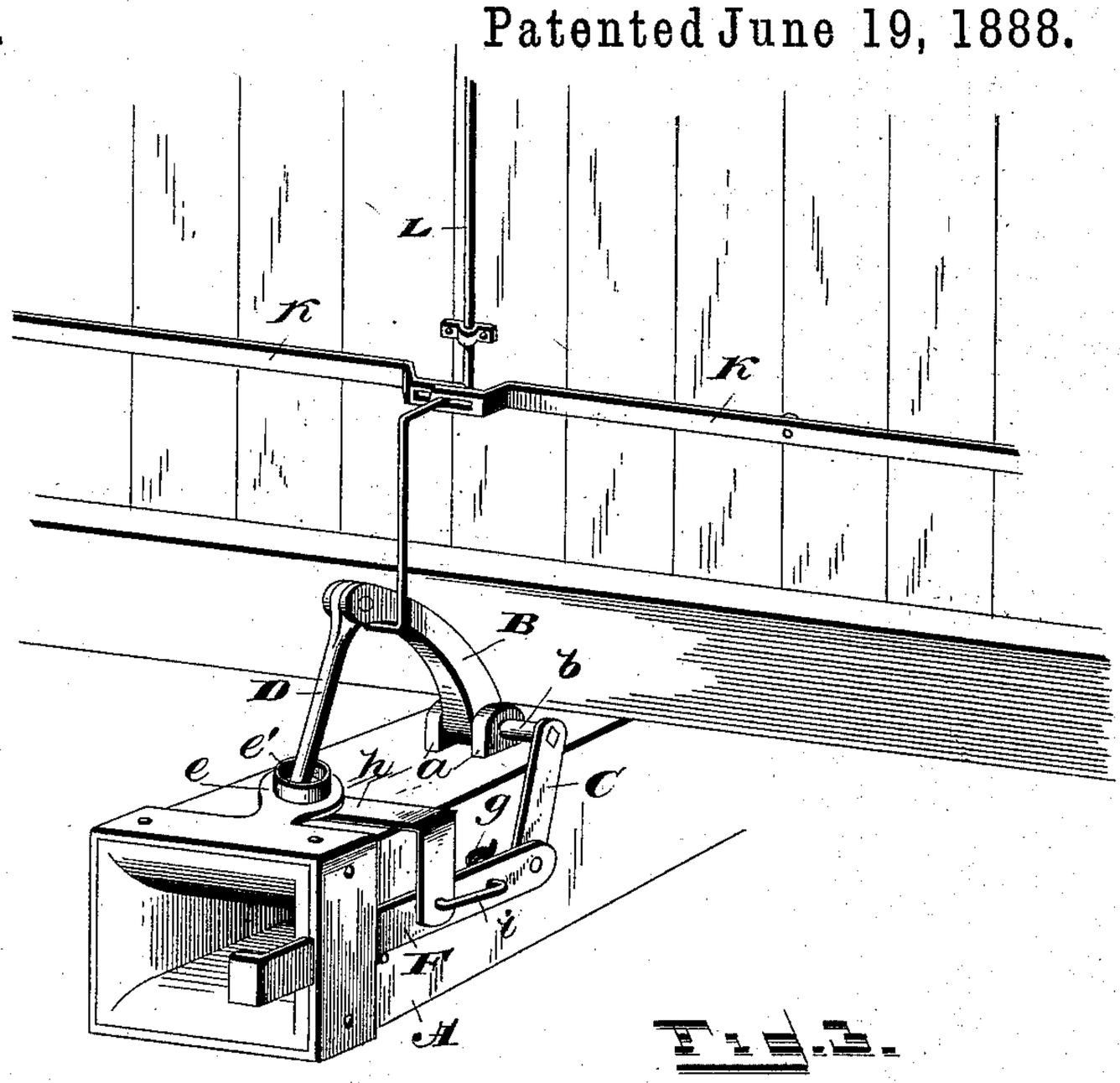


Fig. 2.

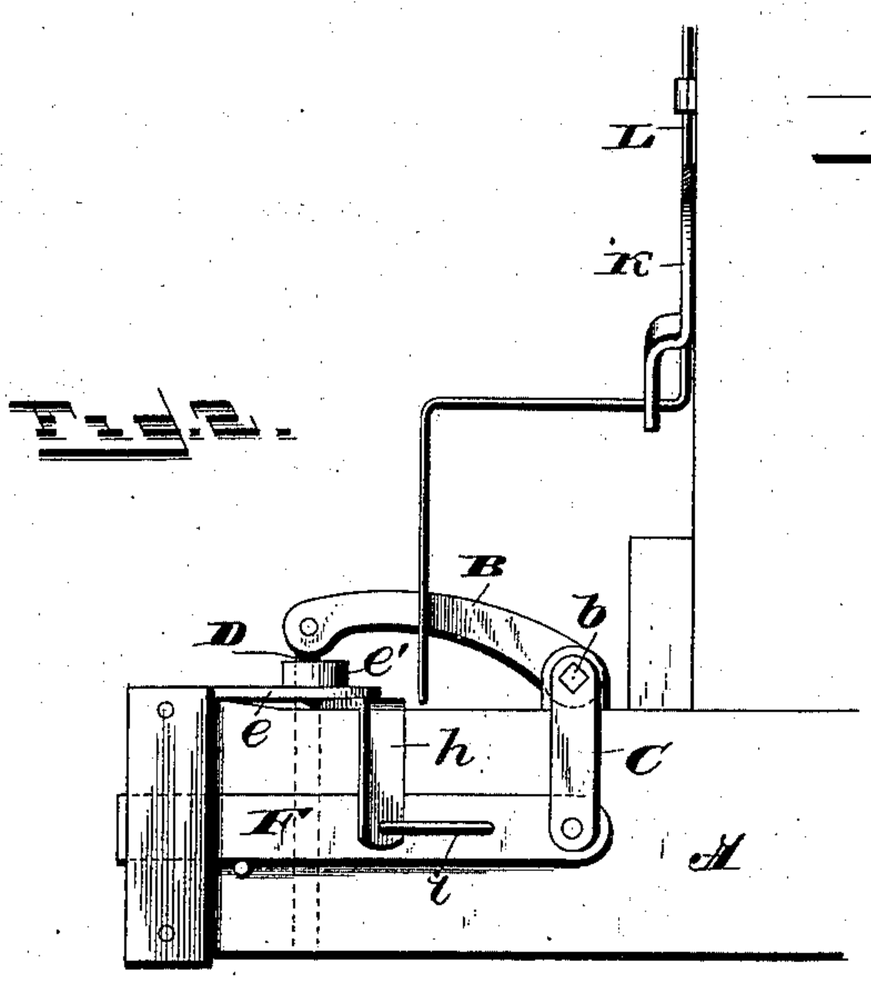
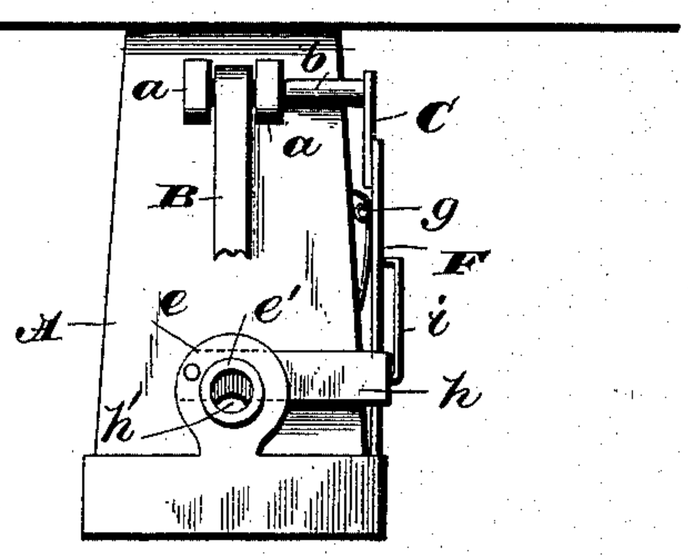


Fig. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

SAMUEL C. CARROLL, OF ADAMSVILLE, TENNESSEE, ASSIGNOR OF ONE-HALF TO W. R. HASTING AND G. W. THACKER, BOTH OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 384,889, dated June 19, 1888.

Application filed April 19, 1888. Serial No. 271,197. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL C. CARROLL, a citizen of the United States of America, residing at Adamsville, in the county of McNairy and State of Tennessee, have invented certain new and useful Improvements in Car-Couplers; and I 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 or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in car-couplings, the object of the same being to provide a means whereby cars can be coupled to each other automatically and uncoupled without the necessity of going between the cars; and my invention consists in the special construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is a perspective view of a car-coupler constructed in accordance with my invention. Fig. 2 is a side view, and Fig. 3 is a plan or top view.

A refers to a draw-head, of ordinary construction, except as to the features hereinafter specified. This draw-head is provided on top with upwardly-projecting lugs *a a*, through which passes a pivot-pin for connecting a forwardly-projecting arm thereto. This pivot-pin *b* projects on one side beyond the side of the draw-head and is key-ended for connecting a bar, C, thereto. The arm B is rigidly secured to the pivot-pin *b*, and to the front end thereof is pivotally secured a coupling-pin, D, adapted to pass through a suitable opening in the draw-head and engage with the coupling-link when the arm is depressed or permitted to fall.

Surrounding the draw-head is a band, E, provided on its upper cross-piece with a projection, *e*, which lies over the perforation in the draw-head and has a corresponding perforation, adjacent to which is a raised flange, *e'*, which forms a cup, within which the lower end of the coupling-pin will lie when raised. One side of the frame E is cut away to provide an opening through which a bar, F, can slide, the outer end of which is bent inwardly, while the rear end is pivotally secured to the lower end of the bar C.

In order to prevent the weight of the arm B operating the parts, a spring, *g*, is placed between the sliding bar F and the draw-head to provide sufficient friction to overcome the independent movement of the parts.

To the rearward projection, *e*, of the band, and at one side of the opening therein, is pivoted an angle-bar, *h*, provided beneath the opening in the projection *e* with a notch, *h'*, and the lower end of the angle-bar which projects over the side of the draw-head is connected to the bar F by a link, *i*.

To the front end of the car-body are pivoted levers K K, the inner ends of which are bifurcated, and through said bifurcations passes the forward projection of a vertical rod, L, which extends upwardly to the top of the car, its lower end projecting downwardly from the projection, being bent to engage with the arm B to operate the same.

When it is desired to operate the arm B to bring the same in a position to automatically couple the cars, either the bar L is drawn upwardly or the levers K depressed. This will elevate the link so that it will rest upon the angle-bar *h*, as shown in Fig. 1. The bar L will then drop automatically, so as to be out of engagement with the arm B. When the cars come together, the adjacent draw-head will contact with the bar F, moving the same rearwardly, which will allow the pin to enter the socket in the draw-head. The rearward movement of the bar F will move the angle-bar upon its pivot, so that a free opening will be provided for the coupling-pin, the arm B at the same time falling, which operation will couple the cars to each other.

Having thus described my invention, I claim—

1. In a car-coupler, the combination, with the draw-head A, having an arm which carries a coupling-pin pivoted thereto, of a sliding bar having one end projecting beyond the draw-head, a pivoted angle-bar connected to the

sliding bar, and a bar, C, for connecting the same to the pivot-pin of the arm B, the parts being organized substantially as shown, and for the purpose set forth.

2. The combination, in a car-coupler, of an arm, B, having a coupling-pin pivoted thereto, a pivot-pin, *b*, mounted in suitable bearings upon the draw-head and provided with a bar, C, an angle-bar, H, having a notch, *h'*, a link for connecting said angle-bar to a sliding bar, F, and spring *g*, interposed between the draw-head and sliding bar, the parts being organized substantially as shown, and for the purpose set forth.

3. The combination, in a car-coupler, of a draw-head provided with upwardly-projecting perforated lugs *a a*, a band encircling the draw-head and provided with a rearward projection, *e*, having a perforation surrounded by an upward flange, an angle-bar, *h*, pivoted to the projection *e*, a sliding bar, F, having inwardly-bent end, a link, *i*, for connecting the angle-bar to the sliding bar, said sliding bar being connected to the pivot-pin of the arm B, and a coupling-pin, D, the parts being organized substantially as shown, and for the purpose set forth.

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

SAMUEL C. CARROLL.

Witnesses:
H. A. PETTIGREW,
W. P. P. WALKER.