(No Model.)

L. GADDIS.

CAR COUPLING.

No. 452,267. Patented May 12, 1891.

Fig. 1.

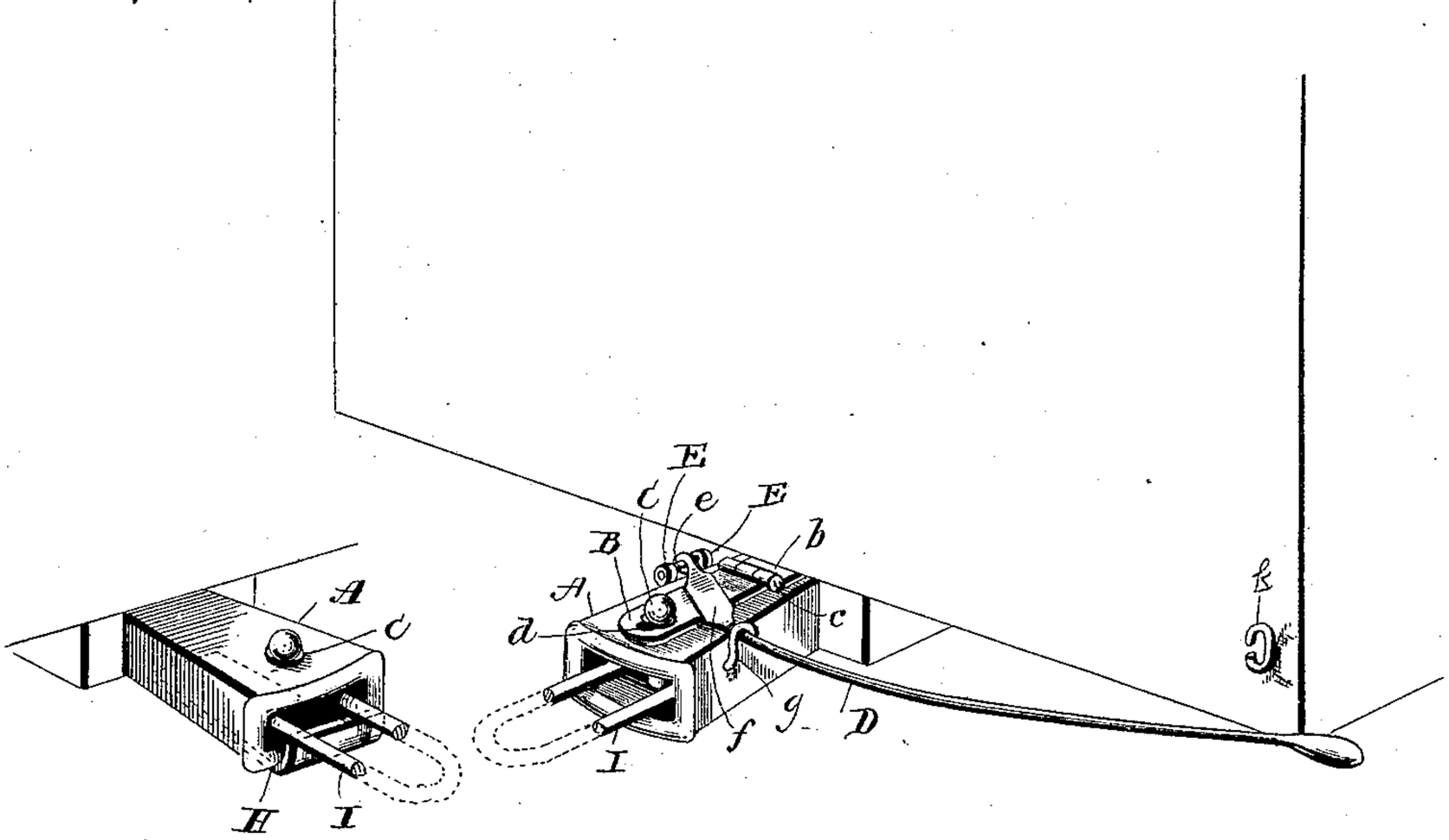
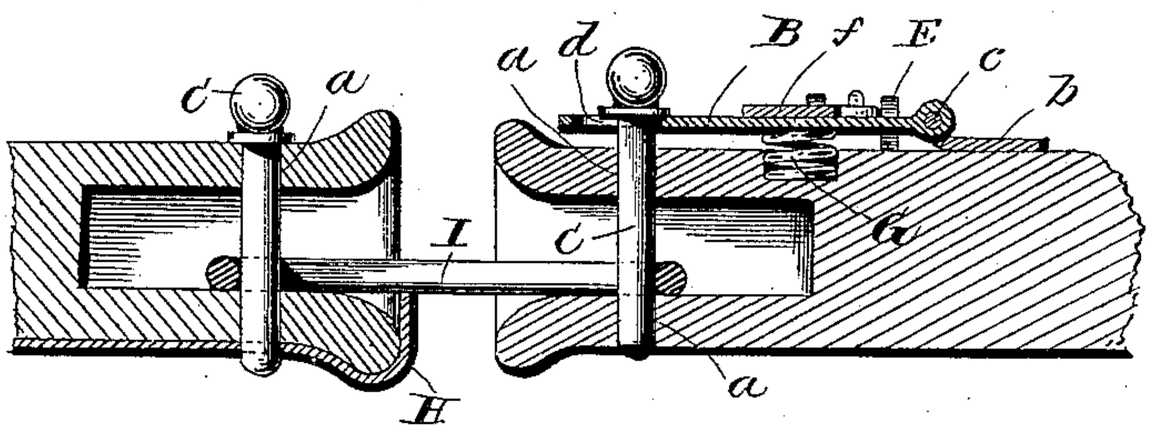


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

LUCY GADDIS, OF GOLD HILL, TERRITORY OF NEW MEXICO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 452,267, dated May 12, 1891.

Application filed December 13, 1890. Serial No. 374,565. (No model.)

To all whom it may concern:

Be it known that I, LUCY GADDIS, a citizen of the United States, residing at Gold Hill, in the county of Grant and Territory of New Mexico, have invented certain new and useful Improvements in Car-Couplers; 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 car-couplings; and it has for its objects, among others, to provide a simple, cheap, and efficient coupling readily applied to any style of car, and by the use of which the necessity of the brakeman going between the cars to couple or uncouple is avoided, thus tending greatly to reduce the number of casualties resulting from coupling and uncoupling cars.

A further object is to prevent dropping down of the link, and also to keep the pin in engagement with the link until it becomes necessary to uncouple, when all that is necessary to do is to manipulate a lever accessible from outside the car. I provide a hinged spring-actuated arm which holds the pin down into engagement with the link and a lever pressing across or upon the said arm. I provide a bar or support upon the under side of one or it may be both draw-heads to support the link and keep it horizontal and prevent its dropping down.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The novelty in the present instance resides in the peculiarities of construction and the combinations, arrangement, and adaptation of parts, all as more fully hereinafter set forth, and then particularly pointed out in the claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of portions of two cars coupled together in accordance with my invention. Fig. 2 is a longitudinal vertical section through the draw-heads coupled together.

Like letters of reference indicate like parts in both views.

Referring now to the details of the drawings by letter, A designates the draw-heads of two adjacent cars, which may be of any of the known or approved constructions. The mouths of the draw-heads may be of any of the approved forms, and vertically therethrough are the holes *a* for the pins. They are adapted to couple with the ordinary link and pin, as will be readily seen from the drawings. To the upper face of one of the draw-heads is hinged in any suitable manner an arm B, which is preferably hinged at its rear or back end to a plate *b*, which is secured at one end to the upper face of the draw-head with its forward end free, the union or connection between the two (the plate and arm) being preferably a transverse pin *c*, which is held in ears or lugs formed on the adjacent ends of the two parts B and *b*, as seen in Fig. 1. The free or forward end of the arm B is provided with a hole *d*, through which the pin C passes, there being preferably some suitable provision for connecting the pin to the said arm, so that it will move therewith. The hole in the arm should be in vertical line with the hole in the draw-head.

D is a lever hinged at one end to one side of the draw-head in any suitable manner, being shown as hinged on a pin or rod *e* extending lengthwise of the draw-head and held in the ears formed at the upper ends of the arms E on the side of the draw-head. This lever is formed with a flat head or enlargement *f* near its hinge and designed to rest upon the arm B to hold the same and the pin down. This lever is designed to extend across the draw-head and over the arm B, its free end reaching outside the car, where it can be easily manipulated by the brakeman. It is designed to be engaged with a hook or other analogous contrivance *g* on the opposite side of the draw-head, to which the said lever is hinged, as shown. The lever may extend straight across the arm or it may be arranged diagonally. I prefer the latter, as it gives a longer bearing and serves to more effectually hold the arm B down. Arranged beneath the said arm B and between the same and the upper face of the

draw-head is a spring G, which tends to keep the said arm raised when it is not pressed down by the lever. Secured to the under side of the opposite draw-head is a plate H, the rear end of which only is secured to the draw-head, the forward end being free and turned up at right angles to its length and terminating opposite the mouth of the draw-head, where it serves to receive and support the link I, which is secured in the said draw-head, the other end of the link being designed to couple with the pin on the other draw-head. This plate keeps the link level, so that it will approach the other car in proper position to receive the pin thereof.

Various modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

A hook *k* upon the end of the car serves to receive the lever D when the same is raised, and thus lock the lever securely in position, and at the same time limiting the upward throw of the plate B.

What I claim as new is—

1. The combination, with the draw-head and the hinged plate thereon carrying the coupling-pin, of the pivoted lever arranged to extend across the plate and bear thereon, substantially as and for the purpose specified.

2. The combination, with the draw-head and the spring-actuated hinged plate upon the upper face thereof, of the lever pivoted to the draw-head and arranged to extend across the plate and bear thereon, substantially as specified.

3. The combination, with the draw-head and the spring-actuated hinged plate upon the upper face thereof, of the lever hinged to the draw-head and extended across the plate and means for detachably engaging the said lever, as set forth.

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

LUCY GADDIS.

Witnesses:

Mrs. LANE JONES,

R. B. JONES.