

(No Model.)

F. S. DIMON.

CAR COUPLING.

No. 300,312.

Patented June 10, 1884.

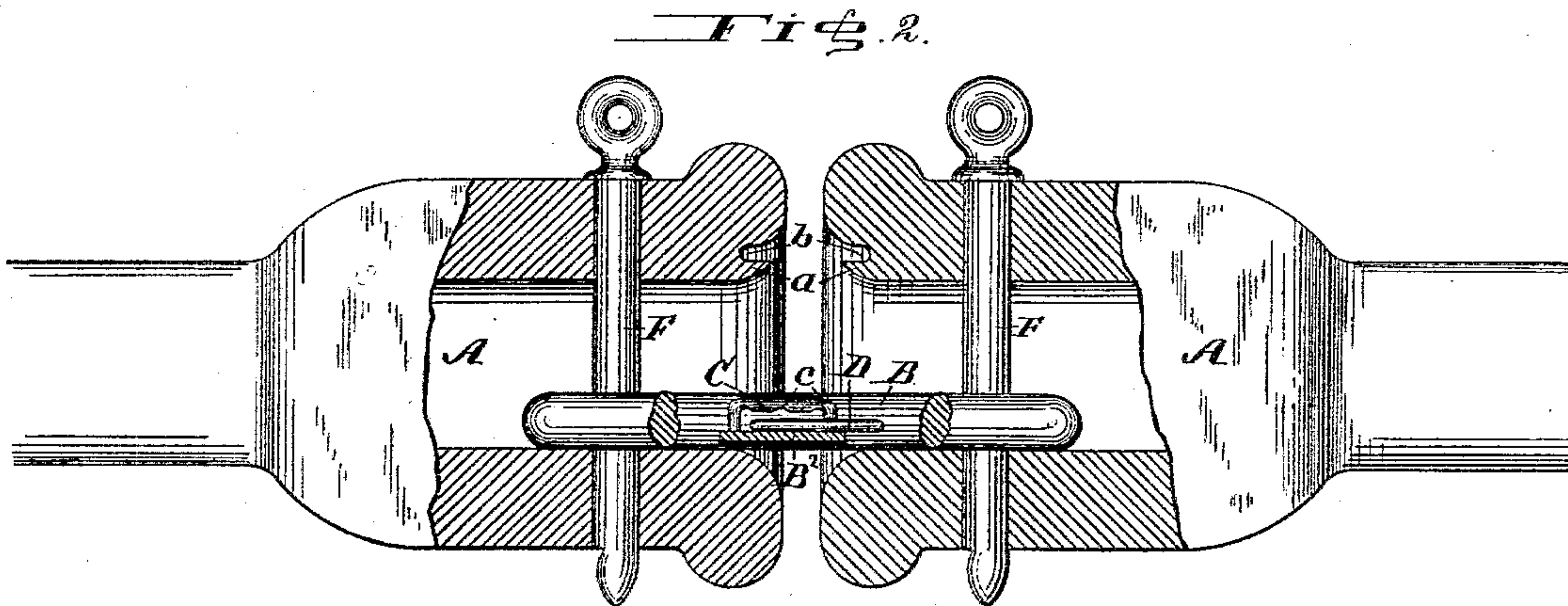
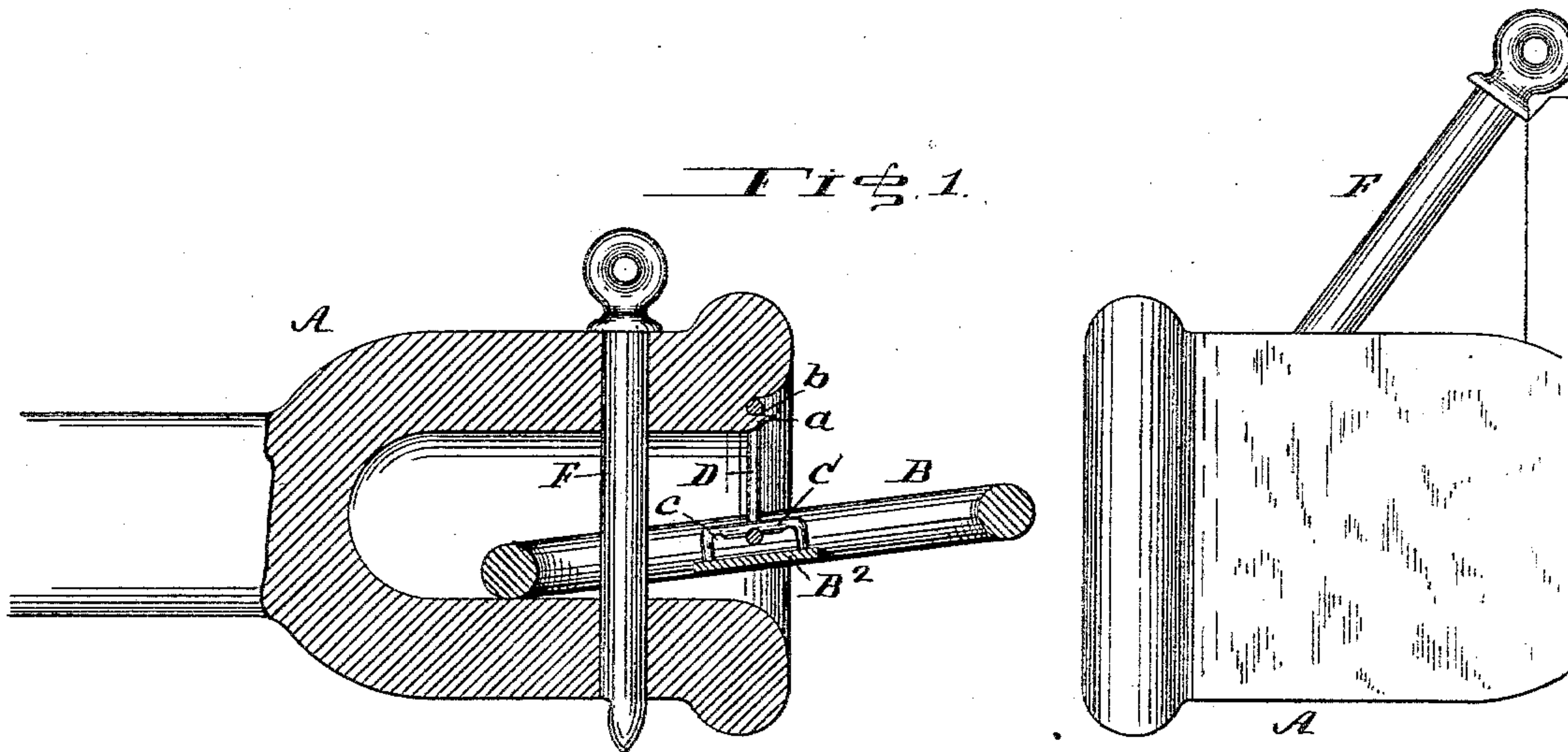
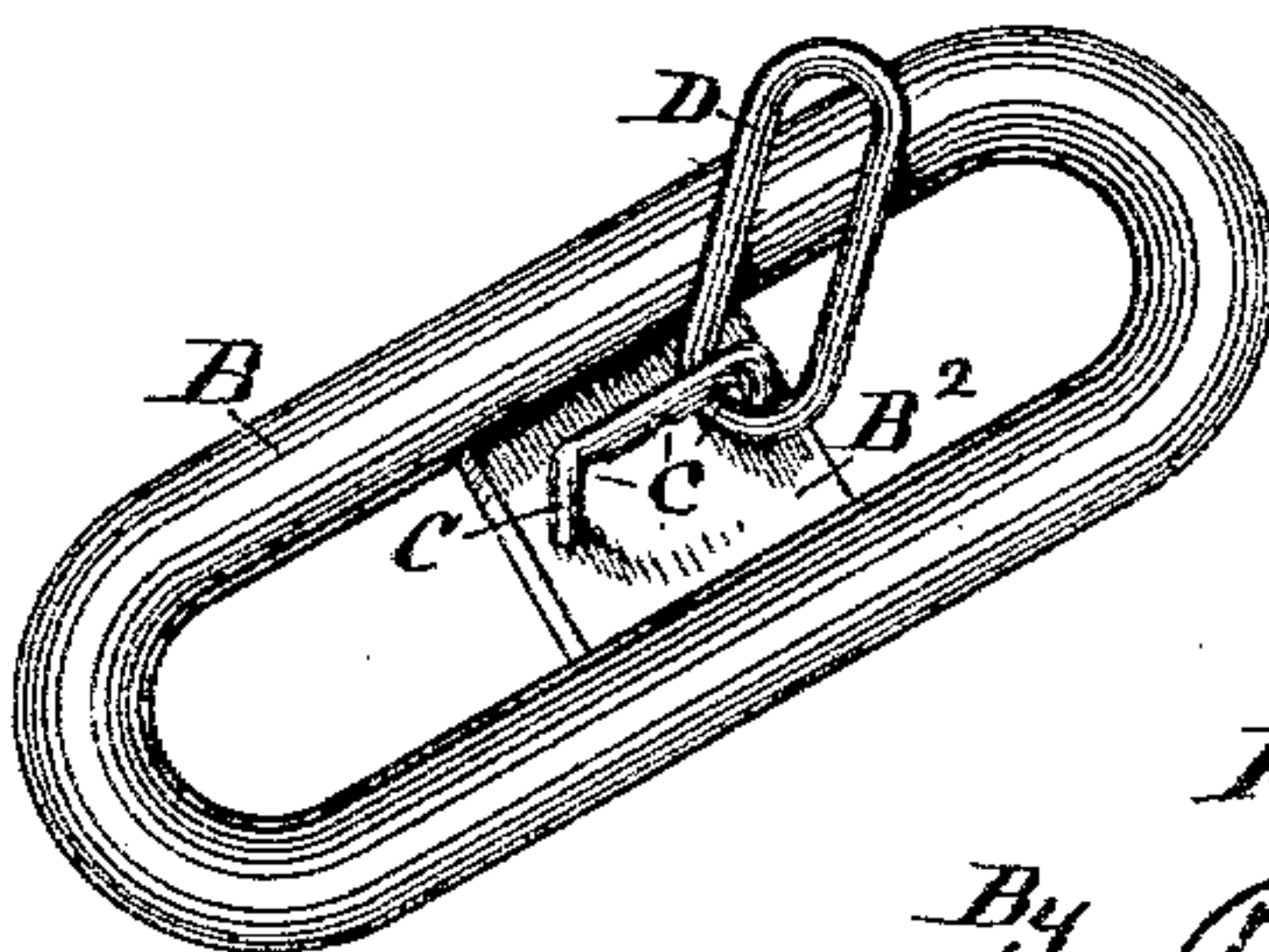


FIG. 3.



WITNESSES

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 300,312, dated June 10, 1884.

Application filed March 24, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANK S. DIMON, a citizen of the United States, residing at Fort Scott, in the county of Bourbon and State of Kansas, have invented certain new and useful Improvements in Car-Couplings; 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.

This invention relates to that class of car-coupling devices which are provided with means for holding the coupling-link in position for proper presentation to the draw-head of a car with which the connection is to be made.

Many means have heretofore been devised for holding the link of a car-coupling at the proper angle or position for effecting the coupling of two adjoining cars without the necessity of holding the link in position by the hands of the operator or trainman; but such devices have never proved entirely satisfactory, as they generally increase the cost of the parts, are liable to get out of order, and are otherwise objectionable.

The object of my invention is to provide a car-coupling link with a simple and effective device for temporarily suspending it from the draw-head and holding it at different angles or degrees of inclination, so that it will be properly presented and guided into the draw-head of an adjoining car, said suspension device being so contrived that the concussion of the draw-heads or cars will cause its liberation from the holding device on the draw-head and bring it in position between the coupling-link, where it will be out of the way of the coupling-pin and draw-head.

The invention will first be fully described, and then specifically pointed out in the claims.

In the drawings, Figure 1 is a vertical sectional view of a draw-head, showing the coupling-link suspended from a hook or projection thereon for properly presenting it to an adjoining draw-head. Fig. 2 is a similar view

showing the coupling-link and the suspension device lying between the same, so as to be out of the way of the draw-head and coupling-pin; and Fig. 3 is a perspective view of a coupling-link having my improved suspension device.

The letter A designates the draw-head of a railroad-car, which is of the customary construction, except that it is provided in the roof portion of its mouth with a horizontal hook or forwardly-projecting lip, *a*, and with a small recess or seat, *b*. This hook or lip may be formed in the process of casting or forging the draw-head, so as to be integral therewith; or a small plate may be secured to the draw-head by screws or other means, so as to form the aforesaid hook or lip, and said projection, hook, or lip may be covered with rubber or be made of rubber. The coupling-link B, preferably employed, is of the open pattern, and is provided at or about its middle portion with a transverse plate, *B*², that bridges the space between the lateral arms of the link, and is attached thereto by fitting the sleeve-shaped ends of the plate around said lateral arms; or the bridge-plate may be cast or formed in one solid piece with the link. A staple or keeper, *C*, projects from the top of the bridge-plate and receives and holds a small link, *D*, that constitutes the suspension device proper. This staple is of an elongated form, and has one or more notches, *c*, on the under side of its longitudinal portion, into which notch or notches the suspension link or ring is received when the parts are in the position for effecting the coupling operation.

It is evident from the drawings that the function of the link *D* is to suspend the coupling-link from the draw-head and hold it in such position that it will easily and properly enter the draw-head of an adjoining or approaching car without the assistance of the operator or trainman, and it is thus manifest that the latter is not exposed to injury, and that the danger of loss of life or limb is not incurred. The hook on the draw-head is of such a size or shape that it will properly hold the suspension link or ring of the coupling-link until the concussion of two opposing draw-heads or

cars takes place, when the suspension-ring will be liberated from said hook and caused to drop down into a horizontal position upon the bridge-plate of the coupling-link. When in this position it is out of the way of the coupling-link and draw-head, and is protected from injury.

The coupling-pin F herein illustrated is of the loose or detachable pattern, and has a shoulder at its lower end which engages with the guide-opening in the draw-head, and serves to hold the pin in an inclined and elevated position until the concussion of two draw-heads or cars causes the pin to drop through the coupling-link for completing the coupling operation.

It is evident that the suspension link or ring on the coupling-link is shiftable on its keeper or staple, and that it can be held at various points thereon, so as to give different degrees of inclination to the coupling-link for adapting the latter to enter draw-heads located on different levels. The notches or depressions in the keeper serve to receive the suspension-ring, and the weight of the link holds the suspension-link in the position in which it may be placed until the concussion of the draw-heads in the performance of the coupling operation throws the suspension-ring off from the hook or lip on the draw-head, as has already been explained.

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

1. A car-coupling link having a longitudinally-shiftable suspension link or ring adapted to assume vertical and horizontal positions in relation to said link, and a draw-head provided with suitable projection or hook for receiving said suspension-link, substantially as herein set forth.

2. A car-coupling link having a transverse bridge-plate and a longitudinal keeper or staple arranged on the top of said plate, in combination with a suspension ring or device fitted on said staple, and a draw-head provided with a suitable projection adapted to receive the suspension device of the coupling-link, substantially as herein set forth.

3. The car-coupling link having the longitudinal keeper or staple provided with depressions or notches, and the suspension-ring fitted on said keeper, in combination with a draw-head provided with a suitable projection for receiving the suspension-ring, substantially as herein set forth.

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

FRANK S. DIMON.

Witnesses:

JAMES M. LEE,
E. M. LEE.