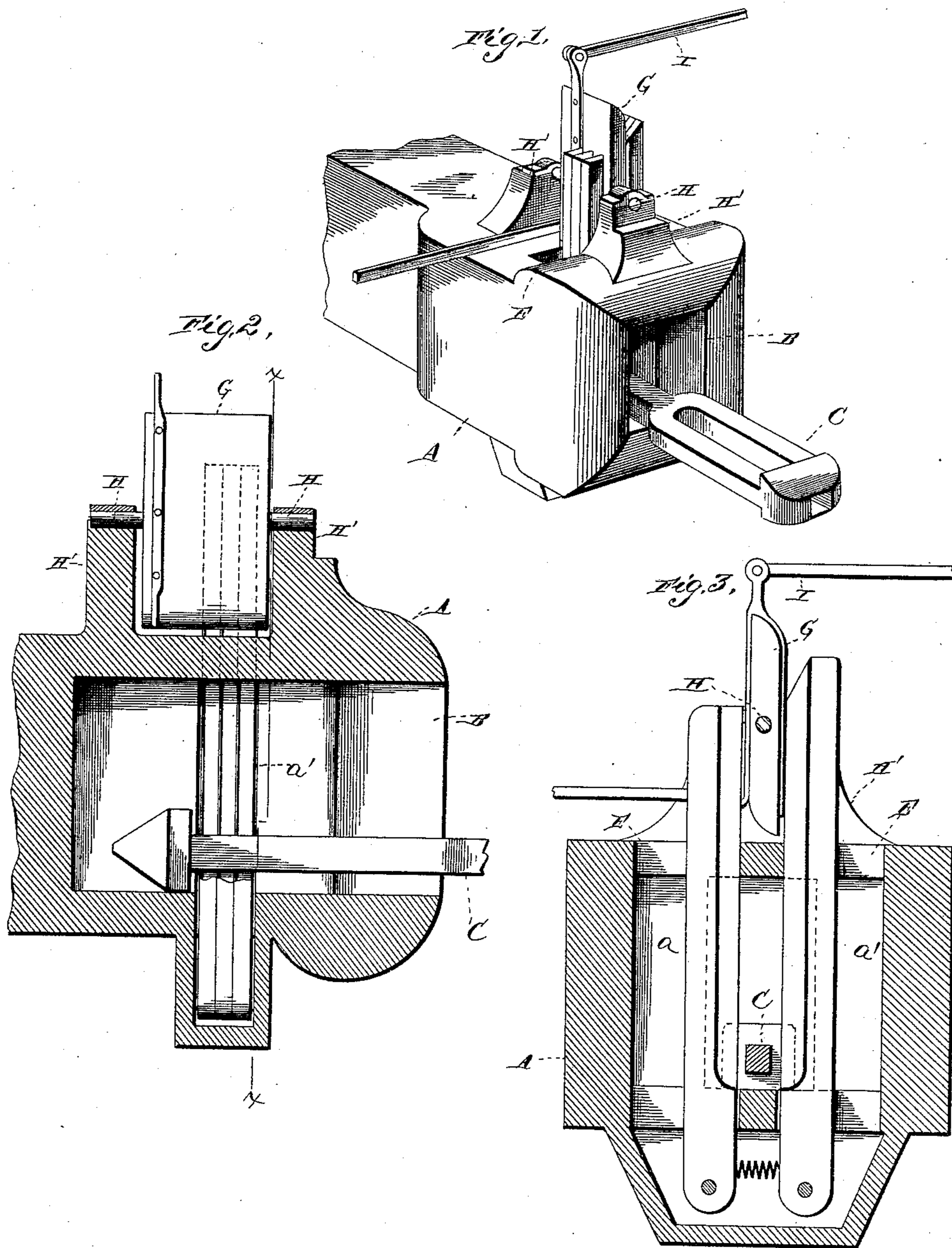


(No Model.)

B. R. HOOKS.  
CAR COUPLING.

No. 437,117.

Patented Sept. 23, 1890.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

BENTLEY ROBERT HOOKS, OF WACO, TEXAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 437,117, dated September 23, 1890.

Application filed July 8, 1890. Serial No. 358,059. (No model.)

*To all whom it may concern:*

Be it known that I, BENTLEY ROBERT HOOKS, a citizen of the United States, and a resident of Waco, in the county of McLennan and State of Texas, 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 letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of my device in perspective. Fig. 2 is a vertical longitudinal section, and Fig. 3 is a transverse vertical section.

My invention relates to improvements in car-couplers; and it consists in the novel construction and combination of parts hereinafter fully described, specifically claimed, and clearly illustrated in the accompanying drawings.

In the drawings, A represents the draw-head of the car, provided with the opening or recess B in its outer end to receive the coupling rod or link C. The mouth of the said recess is beveled, as shown, to form a guide for the coupling rod or link in entering. This recess is provided with the shoulders *a a'*, forming an enlargement of the said recess. In such enlarged portion of the recess and on opposite sides thereof are pivoted at their lower ends a series of three vertical jaws, each of the said jaws being pivoted independently of the others, and each jaw being connected with its corresponding opposite jaw by means of a coiled spring *c*, the tension of which will draw the jaws toward each other and hold them in a vertical or locking position. These jaws are each beveled on their outer faces to allow them to more readily yield when brought in contact with the coupling rod or link and to form a guide for the same in entering. The jaws extend upwardly through the recess or opening E in the top or upper portion of the draw-head, projecting through the said opening a sufficient distance to allow the placing of the releasing or uncoupling mechanism or lever between their ends. This lever consists of the block G, of

the form as shown, provided at each end with the journal H, the said journals having a bearing in the blocks H', mounted on the draw-head at each end of the recess E, the said block or lever when in normal position occupying a vertical position centrally between the upper ends of the vertical jaws. This block is provided with the lever handle or rod I, which is connected thereto and passes to a position where it may be operated from the platform of the car or from the side, as may be desired. The block G is beveled at its opposite edges in opposite directions to facilitate its operation in forcing open the jaws, as hereinafter described.

The operation is as follows: The coupling rod or link, which is designed to be of the arrow-head form, entering the recess in the draw-head and striking the outermost jaws, will force them apart, the rod or link then striking the next jaw on each side, forcing them apart, and so continuing until the head of the rod or link has passed the entire series, when the coiled springs connecting the opposite jaws, as hereinbefore described, will cause them to resume their vertical position, securely holding the rod or link in place and effecting a safe and firm coupling, the several jaws in the series and their independent pivotal movement giving the coupling pin or rod the advantage of making a curve in the operation of coupling, another advantage of this construction and arrangement of the jaws being that their pivotal movement in the draw-head will allow them to yield to accommodate the changes in the position of the coupling rod or link when passing around curves. When it is desired to release the rod or link and uncouple the cars, the block or lever G is turned so as to bring it into a horizontal position between the upper ends of the jaws, its increasing width as it is brought to occupy this position forcing the jaws apart and releasing the head of the link or rod. The recess B of the draw-head is of a sufficient height to provide for the coupling of cars of a different height. It will be seen that the action of coupling is entirely automatic, both with itself or with any other draw-head, and the arrangement of the uncoupling-lever and handle is such that it may be operated from

the platform or side of the car, thus rendering it entirely unnecessary to enter between the cars either in coupling or uncoupling.

5 A car provided with this form of draw-head may be coupled automatically to a car having the old link-and-pin form by laying the new style of link or rod flat, so that it will enter between the jaws and be locked in position.

10 Having thus described my invention, what I claim as new therein, and that for which I desire to secure Letters Patent, is—

15 1. In a car-coupler, a draw-head provided with a recess having an enlargement at its central portion, a series of vertical jaws on each side of said enlarged portion of the recess pivotally mounted at their lower end in the draw-head, springs connecting each jaw with its corresponding jaw in the opposite series, and means for opening the jaws, substantially as described.

2. In a car-coupler, a draw-head provided with a recess having an enlargement at its central portion, a series of vertical jaws pivotally mounted in each side of said enlarged 25 portion, each jaw being pivoted independently and having a movement independent of the other jaws, coiled springs connecting the lower portions of each jaw with its corresponding opposite jaw, and a lever pivotally 30 mounted on said draw-head between the upper ends of said jaws for opening the same, and a handle or rod connected to said lever and passing to a point where it may be operated from the platform or side of the car, substantially as described. 35

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

BENTLEY ROBERT HOOKS.

Witnesses:

M. D. HERRING,  
SAM. SANGER.