

(No Model.)

G. E. SMITH.
CAR COUPLING.

No. 565,934.

Patented Aug. 18, 1896.

Fig. 1.

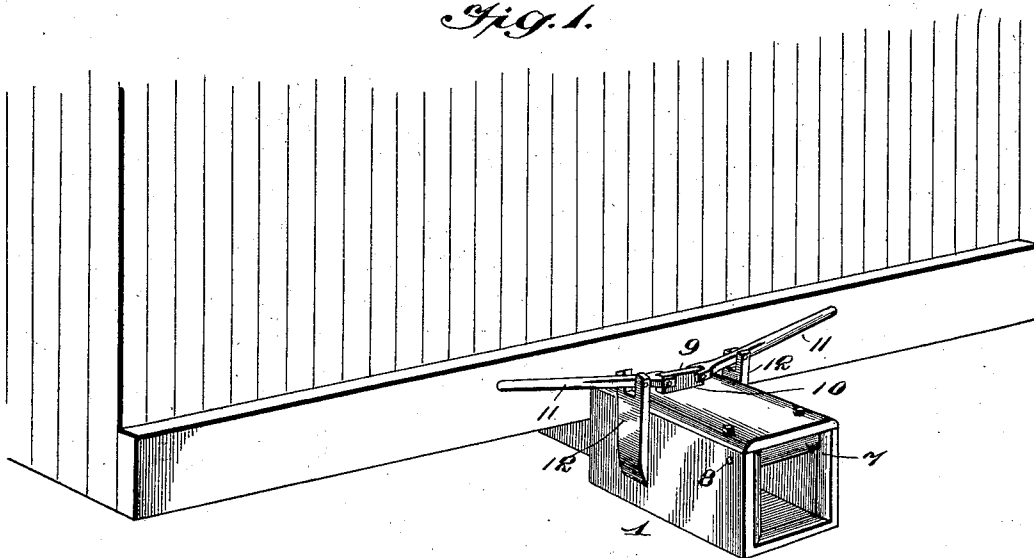


Fig. 2.

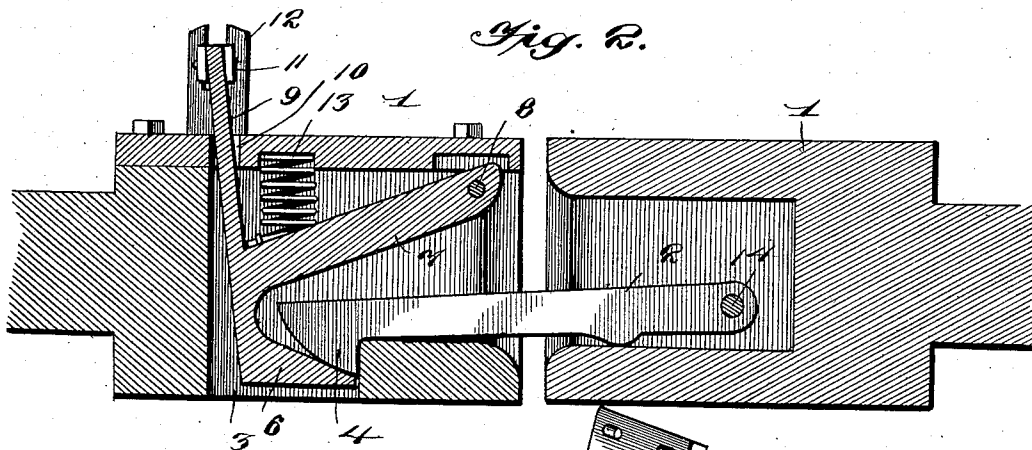
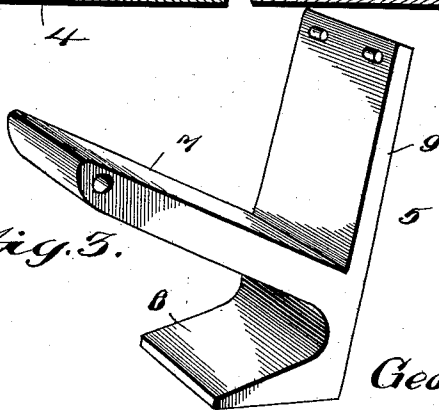


Fig. 3.



Witnesses

W. J. Keeth.
R. M. Smith.

By *his* Attorneys,

Inventor
George E. Smith,
Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

GEORGE EDWARD SMITH, OF SHILOH, LOUISIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 565,934, dated August 18, 1896.

Application filed June 30, 1896. Serial No. 597,602. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EDWARD SMITH, a citizen of the United States, residing at Shiloh, in the parish of Union and State of Louisiana, have invented a new and useful Car-Coupler, of which the following is a specification.

This invention relates to car-couplers, and the object in view is to provide a simplified and improved construction of car-coupler, the same being adapted to operate automatically during the coupling of the cars and to be uncoupled from either side of the car by an attendant standing in a place of safety.

With the above object in view the invention consists in a car-coupler embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a railway-car having the improved coupler applied thereto. Fig. 2 is a longitudinal section through the draw-head, showing the link engaged therein. Fig. 3 is a detail perspective view of the pivoted link-lifter.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 designates a draw-head provided with sides, top, and bottom, and having a central longitudinal cavity in which the end of a link 2 may be received. The draw-head may be cast in one piece or may be made up of plates bolted or otherwise secured together. The mouth of the draw-head is splayed or bell-shaped to facilitate the entrance of the head 40 of the link, and an opening 3 is formed in the bottom of the draw-head into which the arrow-shaped head 4 of the link 2 is received, the front edge of said opening forming a shoulder against which the head of the link 45 engages.

5 designates the link-lifter, which is of the trifurcated form shown, comprising a lower lip portion 6, which works in the opening 3 in the bottom of the draw-head and underlies the head of the link, whereby in the upward movement of said lip the head of the link is lifted out of engagement with the draw-

head, thus permitting its withdrawal therefrom. The link-lifter also comprises a central pivoted arm 7, which extends from the lip 6 upward and toward the mouth of the draw-head, where it is fulcrumed on a transverse pin or bolt 8. The forward end of the arm 7 is beveled off or splayed to conform to the bell-mouth of the draw-head and assists in the proper entrance of the link. The remaining arm 9 of the lifter extends upward through an opening 10 in the top of the draw-head, where it is connected pivotally to the inner ends of a pair of levers 11, fulcrumed intermediate their ends in slotted ears or standards 12, formed on or secured to the draw-head at its upper opposite corners. The levers 11 extend laterally a sufficient distance to be readily grasped by an attendant, who by vibrating the same may rock the lifter for the purpose above stated.

The link-lifter 5 is held downward by means of a spring 13, interposed between the arm 7 of the lifter and the upper wall of the draw-head. This spring acts through the arm 7 to force the head of the link into engagement with the opening in the draw-head and to preserve such engagement until the tension of the spring is overcome by one of the levers 11. The opposing draw-heads may be similarly constructed and a double-headed link employed in connection therewith, or it may be desirable in some cases to provide a simple draw-head having a longitudinal cavity and to use a link which is provided at one end only with a narrow head, the opposite end being arranged in the cavity of the draw-head and fulcrumed therein on a cross-pin or bolt 14.

From the foregoing description it will be seen that the coupler is automatic in action in the operation of coupling the cars, rendering it unnecessary for the attendant to go between the cars; also that the cars may be uncoupled from either side by the arrangement of levers described.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

In a car-coupler, a draw-head having a

longitudinal cavity and provided with an opening in its bottom, in combination with a trifurcated link-lifter comprising a lip working in said opening in the draw-head, an intermediate arm inclining upward and forward and fulcrumed adjacent to the mouth of the draw-head, and an arm extending upward through an opening in the top of the draw-head, a spring for holding the link-lifter normally depressed, and levers fulcrumed at each side of the draw-head and having pivotal

connection with the upwardly-extending arm of the lifter, all arranged for joint operation, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE EDWARD SMITH.

Witnesses:

ISAAC SHUSTER,
G. W. LOWREY.