

(No Model.)

S. SHATTUCK.
CAR COUPLING.

No. 489,393.

Patented Jan. 3, 1893.

FIG. 1.

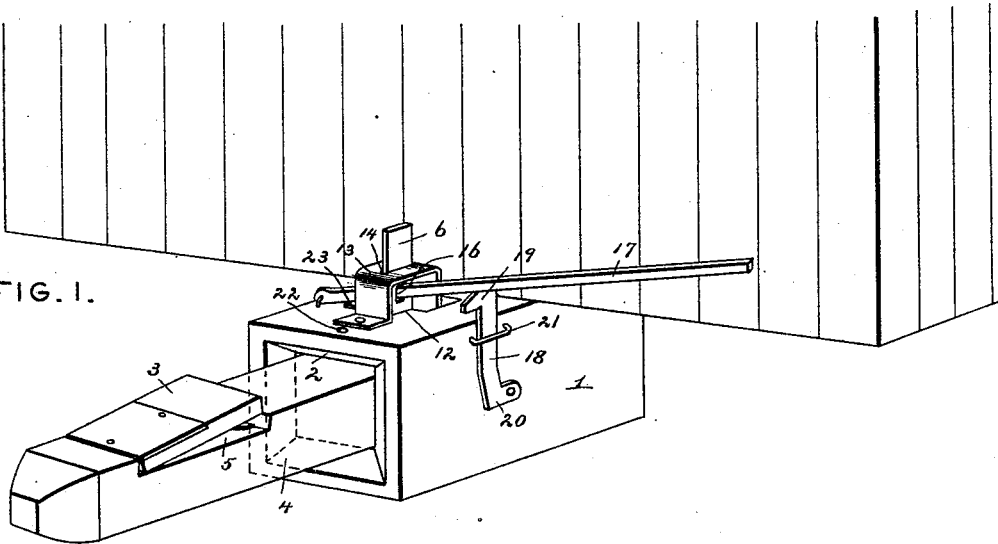


FIG. 2.

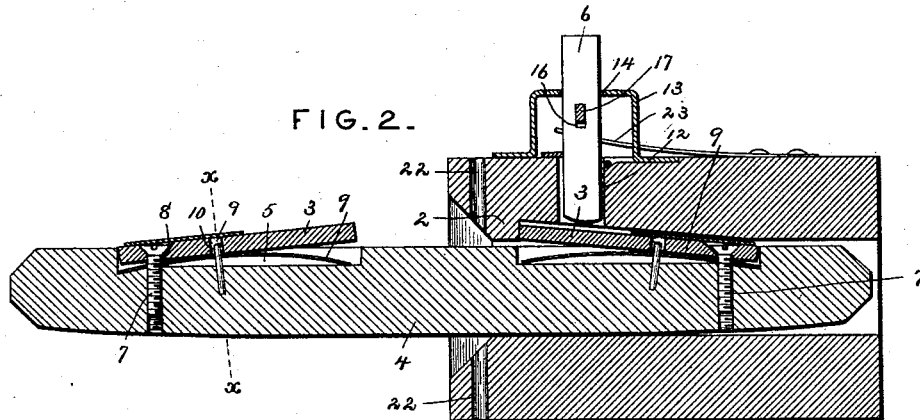
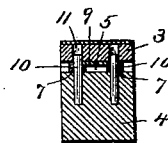


FIG. 3.



Witnesses

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

SAMUEL SHATTUCK, OF KEITH'S, ASSIGNOR OF ONE-HALF TO AARON GROVES
AND JOHN SHATTUCK, OF MORGAN COUNTY, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 489,393, dated January 3, 1893.

Application filed August 25, 1892. Serial No. 444,073. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL SHATTUCK, a citizen of the United States, residing at Keith's, in the county of Noble and State of Ohio, have
5 invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car couplings.

The object of the present invention is to
10 provide a simple and inexpensive car coupling adapted to couple automatically, and capable of being readily uncoupled to avoid the necessity of a train hand going between cars.

The invention consists in the construction
15 and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective
20 view of a car coupling constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse section on line *x-x* of Fig. 2.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a draw-head having a longitudinal link opening and provided on the upper wall thereof near its front end with a
30 shoulder 2 adapted to be engaged by a spring actuated plate 3 arranged at each end of a link 4, and located on the upper face thereof. Each plate is arranged in a recess 5 of the link, and is adapted when depressed by a push
35 bar 6 to have its upper face flush with the upper face of the link, and form no projection thereon to disengage it from the shoulder of the draw-head and to allow the link to be withdrawn from the latter. The plate is
40 hinged near its outer end and permitted a limited upward movement by means of bolts or screws 7 passing through perforations 8 of the plate and loosely engaging the same and securing the plate to the link. The inner end
45 of the plate engages the shoulder of the draw-head and it is normally held elevated by a spring 9 arranged on the link in the recess thereof and interposed between the link and the plate. The spring is located between vertical
50 guides 10 projecting from the upper face of the link and arranged in longitudinal open-

ings 11 of the plate to prevent lateral movement either of the plate or the spring.

When it is desired to uncouple the spring actuated plate is depressed and disengaged
55 from the shoulder of the draw-head by the push bar 6 which is vertically disposed in an opening 12 of the draw-head and having its lower end arranged to engage the hinged plate. The upper end of the pushbar is mounted in
60 a guard or keeper 13 which is provided with a slot 14, and it is provided near its rear end with an opening 16 in which is arranged an operating lever 17 which has one end fulcrumed on the draw-head at one side thereof,
65 and which extends across the draw-head and projects laterally sufficiently therefrom so that it may be within convenient reach of the person at one side of the car, without necessitating him going between cars.

The operating lever is held depressed for
70 uncoupling, by a gravity latch consisting of a vertically disposed hook 18 having the head 19 at its upper end, and provided at its lower end with a horizontally disposed arm 20 extending inward and pivoted to the draw-head,
75 whereby the weight of the hook will throw it forward, and cause it to engage the operating lever and remain in engagement with the same. The head of the hook projects sufficiently
80 above the draw-head to engage readily the operating lever, and its shank or body is arranged within a horizontally disposed keeper 21 which limits its swing.

It will be seen that the car coupling is
85 simple and comparatively inexpensive in construction, that it is capable of coupling automatically, and that it may be readily uncoupled without necessitating a person going between cars.

In order to enable the draw-head herein
90 shown and described, to be coupled with one employing the ordinary pin and link coupling, it is provided near its front end with a vertical pin opening 22 adapted for the reception
95 of a coupling pin. The push-bar is normally held elevated by a spring 23 having its rear end secured to the top of the draw-head and its front outer end engaging the lower edge of the lever.

What I claim is—

1. In a car coupling, the combination of a

draw-head having a longitudinal link opening and provided with a shoulder, a link having a hinge plate at each end adapted to engage the shoulder and a vertically disposed push bar mounted on the draw-head and arranged above the link for moving the plate inward to disengage the same from the shoulder, substantially as described.

2. In a car coupling, the combination of a draw-head having a longitudinal opening and provided at the top with a shoulder, a link provided at each end with a spring actuated plate hinged on the upper face of the link and adapted to engage the shoulder, a vertical pushbar mounted in the draw-head and arranged to engage the plate, a lever fulcrumed on the draw-head and connected with the pushbar and adapted to depress the same, and a spring for holding the push-bar normally elevated, substantially as described.

3. In a car coupling, the combination of a draw-head having a longitudinal opening and provided at the top with a shoulder, a link provided at each end with a spring actuated plate arranged to engage the shoulder, a push bar mounted in the draw-head and adapted to engage and depress the plate, a lever fulcrumed on the draw-head and connected with the pushbar, a spring for holding the push-bar normally elevated, and a gravity latch mounted on the draw-head and adapted to engage the lever and consisting of a hook provided at the top with a head and having at its lower end an inwardly extending arm pivoted to the draw-head whereby the weight of

the hook will throw the same forward and a keeper for limiting the movement of the hook, substantially as described.

4. In a car coupling, the combination of a draw-head provided with a longitudinal opening and having a shoulder at the top, a link provided at each end with a spring actuated plate adapted to engage the shoulder, a keeper mounted on top of the draw-head and provided with a slot, a push-bar vertically mounted in the draw-head and arranged in the slot of the keeper and provided with an opening, a lever fulcrumed at one side of the draw-head and passing through the opening of the push-bar, a spring for holding the push-bar normally elevated, and a gravity latch adapted to engage the lever, substantially as described.

5. In a car coupling, the combination of a link provided at each end with a recess, a plate arranged in each of the recesses, screws loosely securing the outer end of each plate to the link and permitting a limited swing parallel guides projecting from the link and arranged in openings of each plate, and a spring interposed between each plate and the link and disposed between the guides, 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.

SAMUEL SHATTUCK.

Witnesses:

JOHN H. SIGGERS,
E. G. SIGGERS.