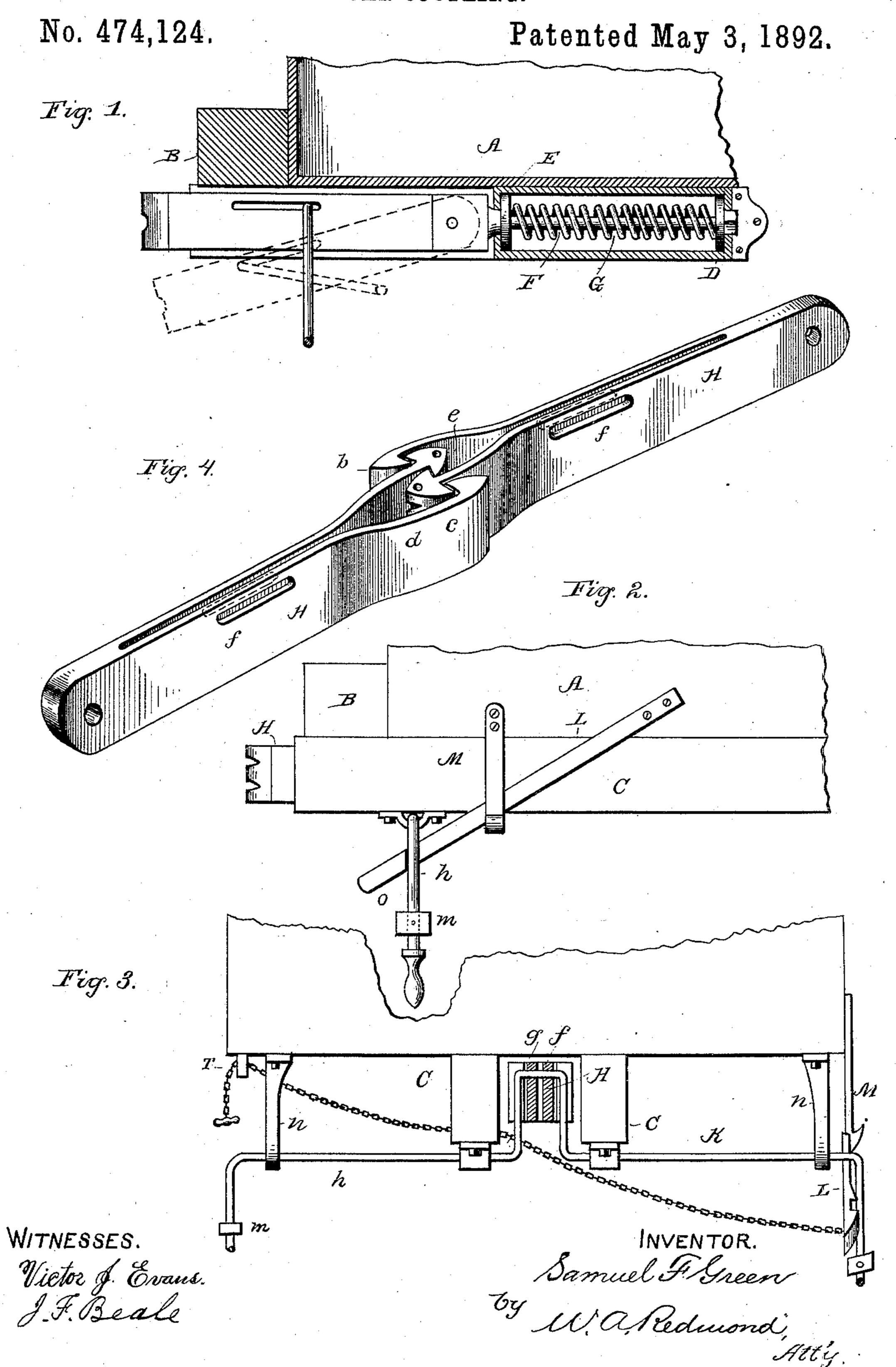
S. F. GREEN.
CAR COUPLING.



## UNITED STATES PATENT OFFICE.

SAMUEL FREAMAN GREEN, OF SALAMANCA, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 474,124, dated May 3, 1892.

Application filed January 29, 1892. Serial No. 419,664. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL FREAMAN GREEN, a citizen of the United States, residing at Salamanca, in the county of Cattaraugus 5 and State of New York, 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 10 the art to which it appertains to make and use the same.

This invention relates to car-couplers of that class which automatically couple with each other when brought together; and it has 15 for its object to provide a durable, simple, and effective coupler which may be readily uncoupled from the side of the car; and it consists of the parts and combinations of parts hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a longitudinal section through a portion of a car, showing my improved coupler in operative position; Fig. 2, a side elevation of a portion 25 of a car; Fig. 3, a front view of the same, showing the draw-bar in section; and Fig. 4, a perspective view of the draw-bars coupled.

Similar letters refer to similar parts through-

out all the views.

A represents the body of a car, B the end sill, and C the draft-beams thereof. The draft-plates D are bolted to the beams C, as usual, and between them the follower-plates E are supported and work in the ordinary 35 manner, the spring F being mounted on a stem G between said follower-plates. At its forward end the stem G is formed to receive the rear end of the draw-bar H, said drawbar being pivotally secured by a pin a thereto, 40 as clearly shown in Fig. 1.

As best shown in Fig. 4, the draw-bar is formed of a single piece of spring metal which is divided or slotted from its front or head end toward its rear end, the latter being en-45 larged, as shown in said figure and having the perforation for pin a formed therein. The slot extends nearly the entire length of the bar, and the front ends of the same are formed with the heads b and c, one of which, 50 head b, being formed hook-shaped and the other c being heart-shaped and having the recesses d formed therein, and a perforation |

e intersecting the same to permit of a linkand-pin coupling being used therewith should it be necessary. At about the center of 55 length of the draw-bar, at a point near its upper edge, is formed a longitudinal elongated slot or opening f, through which is inserted the uncoupling-lever K, said lever being bent at its center to form a loop g, the 60 cross-bar of which rests in the opening f and the ends of said lever being bent at right angles to form handles or cranks h, on each of which is secured an adjustable weight m. The lever extends to both sides of the car 65 and is supported therefrom by hangers n and also from the draft-beams.

From the above description it will be obvious that upon raising the handles of the lever the loop formed in the center of the 70 same will be turned downwardly and be caused to assume a horizontal position, carrying with it the draw-bar, which is turned on a pin a in the stem G, the elongated opening f being of such length as to permit the loop to 75 be turned fully down before it comes in contact with the front end of the opening.

L represents a spring-bar secured to the side of the car in an inclined position and having a recessed or hooked end o to engage 80 the lever and hold the same against accidental displacement, and the weights m, while assisting in holding the levers against displacement also tend to return the draw-bar to a position for coupling with a mating 35 coupler after it has been uncoupled and released from the bar M.

M represents a spring-metal bar secured to the side of the car in rear of the lever and having teeth or hooks p formed thereon, 90 which engage the lever and hold the same up when the draw-bar is in its uncoupled position, as indicated in dotted lines, Fig. 1.

A chain or rope P is secured at one end to the spring-metal bar L and is carried to the 95 opposite side of the car and passed through a staple r for the purpose of permitting the said bar to be disengaged from the lever from the side of the car opposite which the bar L is secured.

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

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1. The combination, in a car-coupler, of a

draw-bar pivotally secured at its rear end and having a slot formed longitudinally therein, and a lever having a central loop inserted in

said slot, substantially as described.

of 2. The combination, in a car-coupler, of a draw-bar pivotally secured at its rear end to its stem and having a longitudinal slot formed therein, a weighted lever having a central loop engaging said slot, and notched or hooked bars for retaining said lever in its set position, substantially as described.

3. The combination, in a car-coupler, of a draw-bar pivotally mounted at one end and formed of a single piece of spring metal di-

vided for a portion of its length and formed 15 with a longitudinal slot, a lever having a loop adapted to engage said slot, adjustable weights secured to said lever, spring-bars having hooked ends adapted to engage said lever, and a rope or chain connected at one end 20 to one of said bars and led to the opposite side of the car, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

SAMUEL FREAMAN GREEN.

Witnesses:

JOHN A. STEVENS, WILLIAM H. STEBBINS.