

(No Model.)

P. S. N. PETERSEN.
CAR COUPLING.

No. 450,680.

Patented Apr. 21, 1891.

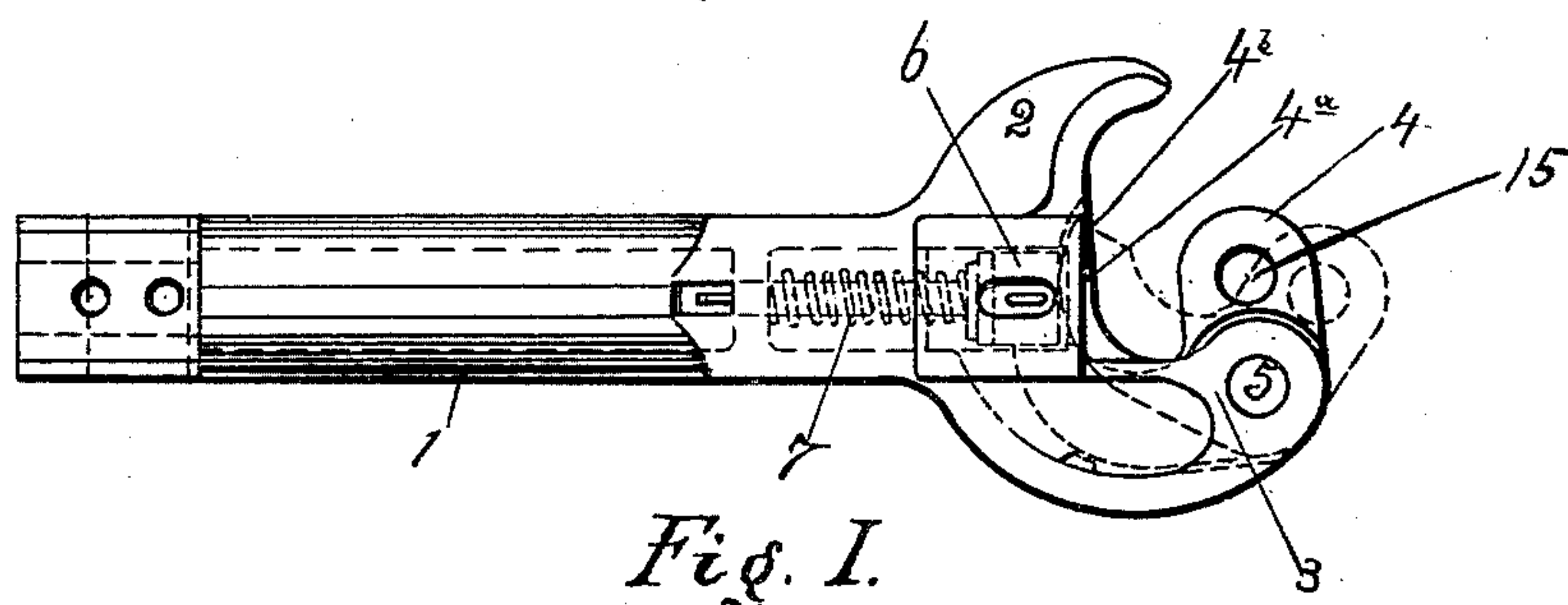


Fig. 1.

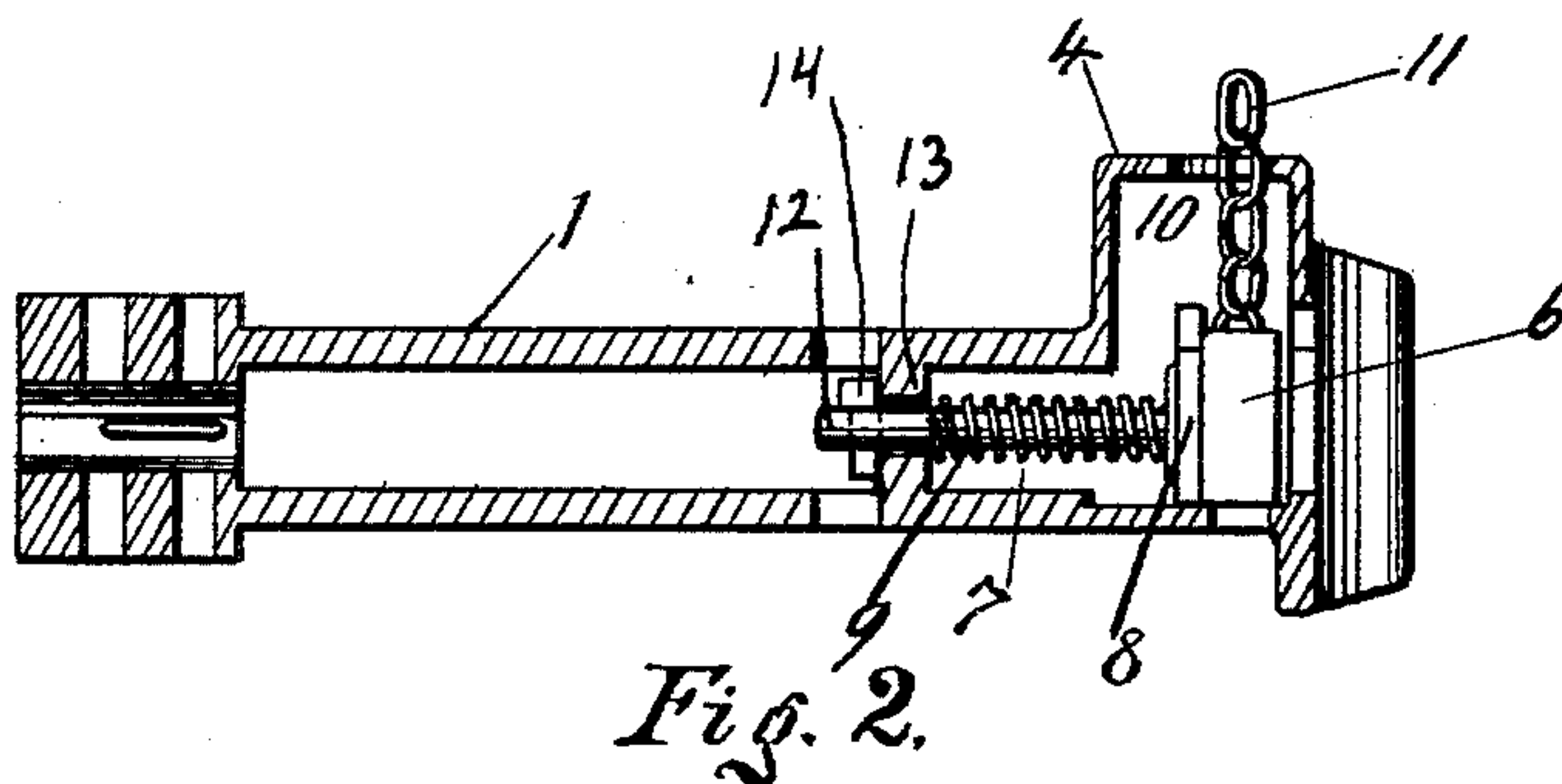


Fig. 2.

WITNESSES:

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 450,680, dated April 21, 1891.

Application filed January 21, 1891. Serial No. 378,615. (No model.)

To all whom it may concern:

Be it known that I, PAUL S. N. PETERSEN, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 the figures of reference marked thereon, which form part of this specification.

My invention relates to an improvement in car-couplers.

In the drawings which accompany and form a part of this specification, and in which similar numerals of reference refer to corresponding parts in both the figures, Figure 1 shows a top view of my improved car-coupler. Fig. 2 shows a vertical central longitudinal section of the same.

Referring more specifically to the reference-numerals marked on the drawings, 1 indicates the car-coupler head, which is attached to the car in the usual manner and is provided with rigid projecting forks 2 and 3. In fork 3 is pivoted at 5 coupling-hook 4, which hook 4 is provided on its back with a cam-face 4^a, adapted to engage against movable block 6 and also with a shoulder 4^b, adapted to become engaged against the side of movable block 6 and secure the coupling-hook 4. Block 6 is contained within a slot or recess 7 in the head and is free to move backward and forward in the slot, but is held to the front by follower 8 and spring 9, acting on the follower. In the upper portion of the head is provided an enlargement 10, adapted to receive and contain the block 6 when raised into uncoupled position. Follower 8 is mounted on a follower-arm 12, and the spring 9 is coiled about the arm and retained between the follower and the cross-wall 13 in the head. The forward movement of the follower is limited by key 14 coming in contact with the cross-wall 13.

11 indicates a chain attached to the block 6 and passing out of the opening in the top of the enlarged portion 10, and to the outer end of chain 11 may be connected any further

suitable connection devices for operating the coupler.

15 indicates an opening in the end of the coupling-hook 4, adapted to receive an ordinary coupling-pin when it is desired to use this car-coupler in connection with an ordinary link.

The operation of the device is substantially as follows: The hook being in the open position shown in dotted lines in Fig. 1 or a little farther open, in which it is held by the action of the spring 9 through the follower and block 6 on the back of the cam-face 4^a of the coupling-hook, when the two heads come together the coupling-hooks are forced from the position shown in dotted lines to that shown in full lines, the block 6 and follower 8 being forced back against the tension of spring 9 until the shoulder 4^b passes by the edge of the block 6, when the block is forced forward by the spring and secures the coupling-hook in coupled position. When it is desired to uncouple the coupler, it is done by drawing the block 6 up by means of chain 11 until the block is above the shoulder 4^b of the hook 4, when the hook is free to swing outward into its open position.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupler, the combination of the coupler-head having projecting forks 2 and 3, the coupling-hook 4, pivoted in the arm 3, the vertical and horizontally-movable block 6, adapted to engage the coupling-hook, and the spring-backing for the block, substantially as set forth.

2. The combination, in a car-coupler, of the head having forked projections 2 and 3, the coupling-hook 4, pivoted in the projection 3 and having a cam-faced surface 4^a and a shoulder 4^b, the vertical and horizontally-movable block 6, adapted to engage the coupling-hook, the follower, and the spring for actuating the follower, substantially as set forth.

3. The combination, in a car-coupler, of the coupler-head having forked projections 2 and 3 and recesses 7 and 10 in the head, the coupling-hook pivoted in arm 3 and having a cam-faced back and a securing-shoulder, and the

securing-block horizontally movable in recess 7 and capable of movement into the recess 10, the follower for forcing the block toward the coupling-hook and the connection with the block for raising it into the upper portion of the head, substantially as set forth.

4. In a car-coupler, the combination of the head having projections 2 and 3, the coupling-hook pivoted in one of the projections, 10 and the securing-block adapted to engage the coupling-hook, the following device for fore-

ing the block toward the coupling-hook, the securing-block being capable of removal from its position between the follower and coupling-hook in uncoupling the device, substantially as set forth.

In witness whereof I have affixed my signature in presence of two witnesses.

PAUL S. N. PETERSEN.

Witnesses:

JOSIAH PERRY,

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