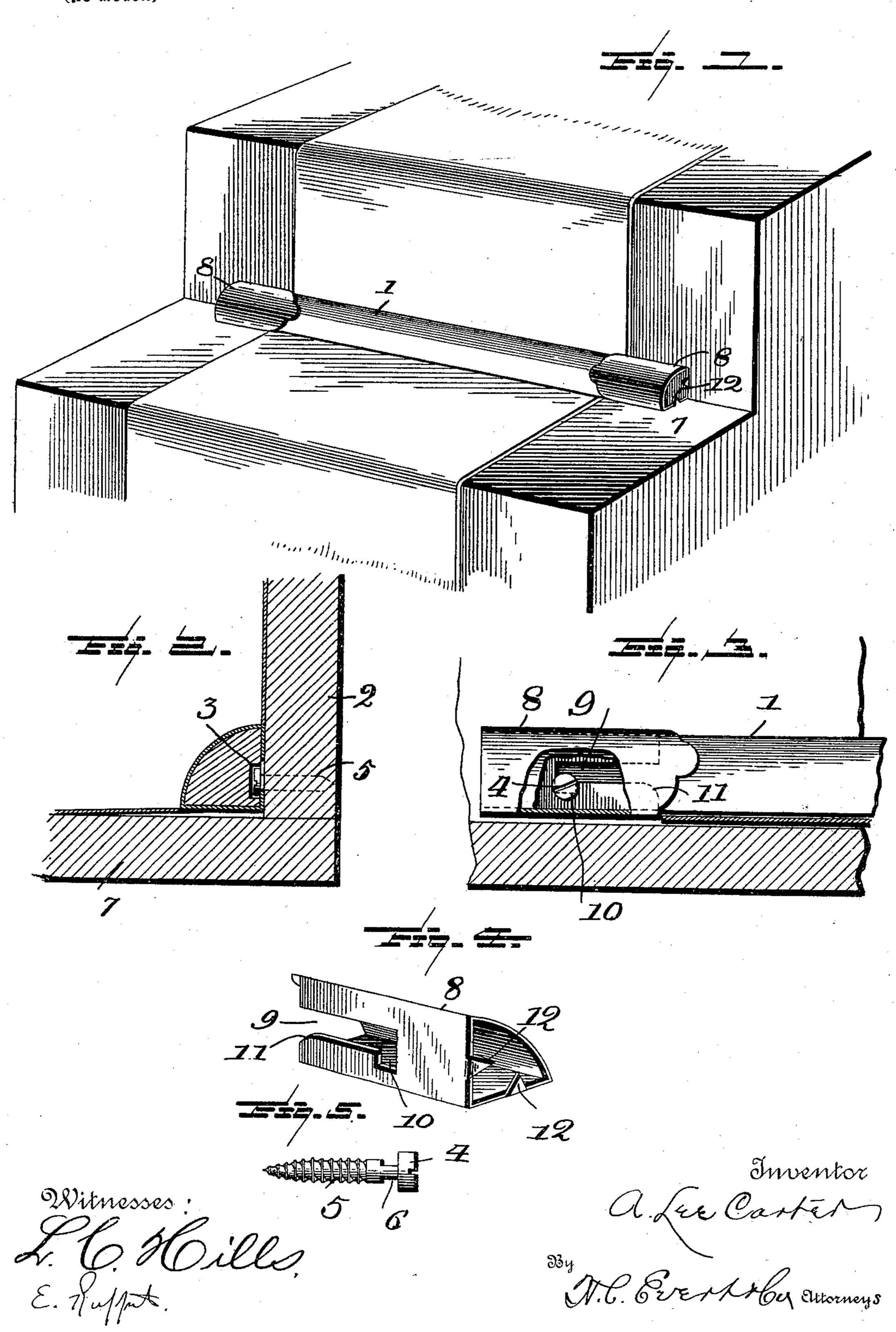
## A. L. CARTER. STAIR ROD SECURER. (Application filed July 6, 1899.)

(No Model.)



## United States Patent Office.

ALBERT LEE CARTER, OF ALTOONA, PENNSYLVANIA.

## STAIR-ROD SECURER.

SPECIFICATION forming part of Letters Patent No. 640,092, dated December 26, 1899.

Application filed July 6, 1899. Serial No. 722, 930. (No model.)

To all whom it may concern:

Be it known that I, Albert Lee Carter, a citizen of the United States of America, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Stair-Rod Holders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in stair-rod holders, and has for its object to construct a device of this character that can be quickly and easily attached in position on the stairs and as quickly and easily detached therefrom when it is de-

sired to remove the stair-carpet.

A further object of my invention is to construct a stair-rod holder adaptable for use with the ordinary quarter-round, which construction of rod has been found most preferable by reason of its firmly engaging the carpet at the point of intersection of the riserboard and step of the stairs and preventing the same from becoming slack.

A further object of the invention is to provide a holder that will be extremely simple in its construction, strong, durable, effectual in its operation, and comparatively inexpensive to manufacture, at the same time presenting a neat and ornamental appearance

when in position.

Briefly described, the invention consists in providing two sleeves to receive the ends of the stair-rod, these sleeves being somewhat 35 segment or quadrantshaped in cross-section that is, provided with two flat sides and one convex face, the one flat side being adapted to rest upon the step and the other flat side being adapted to engage against the riser-40 board of the stairs, with the convex face receiving the similar face of the quarter-round stair-rod. The flat face of the sleeves which engage the riser-board of the stairs is provided with a somewhat bayonet-shaped slot 45 which is adapted to receive a fastening-screw secured to the riser-board for holding the stair-rod in position. The sleeves are further provided on their outer ends with barbs or projections which act as shoulders for the 50 ends of the stair-rod to abut against to pre-

vent its longitudinal movement in either di-

rection after having been secured in its po-

sition on the stairs. All of this construction, together with the various other novel features entering into the invention, will be hereinafter more particularly described and then specifically pointed out in the claims, and in describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein 60 like figures of reference will be employed for indicating similar parts throughout the several views, in which—

Figure 1 is a perspective view of a portion of a set of stairs, showing my improved stair-65 rod holder in position. Fig. 2 is a cross-sectional view of the same. Fig. 3 is a longitudinal sectional view of a part of the step, showing a part of the stair-rod with the holder in position and partly broken away. Fig. 4 70 is a perspective view of the holder, and Fig. 5 is a detail view of the fastening-screw which is secured in the riser-board of the stairs.

Referring now to the drawings by reference-numerals, 1 indicates the stair-rod, 75 which, as shown in the illustration, is of the quarter-round form, though it will be observed that various other forms of rods may be adapted to my improved holder, but for the purposes of illustration I have shown this 80 form and will particularly describe the same and the holder in connection with such a form of stair-rod. The flat face of this rod, which engages the riser-board 2 of the stairs, is provided near each end with elongated grooves 85 or recesses 3 of sufficient depth to receive and permit the passage therein of the head 4 of the fastening-screw 5, the latter being secured in the riser-board 2 at a point slightly above the step 7. These screws are each pro- 90 vided on their shank, near or at the intersection thereof with the head, with a square shoulder 6, the purpose of which will be hereinafter more fully explained, two of these screws, as well as two holders, one for each 95 end of the stair-rod, being employed for holding each rod.

The holders for the rods consist of a metallic sleeve which in cross-section is quadrant or segment shaped, as shown in the illustration, or conforming to the style of stair-rod employed. Describing the same specifically, however, I will refer to the form shown and comprising a metallic sleeve 8, the one flat

face of which is provided with a slot 9, somewhat bayonet-shaped in its form and extending from the inner end of the sleeve, about one-half the length thereof, and terminating 5 in the recess 10. The one edge formed by cutting this slot 9 is rounded, as at 11, which serves to guide the shoulder 6 of the screw 5 into the slot when placing the stair-rod in position. At its outer ends this sleeve is formed to with two integral projections or barbs 12 12, which act as stops or shoulders to prevent the stair-rod from protruding through the sleeves at their ends. The inner ends of these sleeves or holders are preferably made ornamental, of 15 such form as shown, or any irregular edge desired, or the convex or outer face of the sleeve or holder may, if desired, be ornamented.

The operation is as follows: The screws 5 having been placed in the riser-board a short 20 distance above the step and a slight distance to each side of the stair-carpet, the stair-rod 1 is placed on the carpet, with its ends equidistant from the edges of the same, and is pressed down against the carpet until the 25 screw-heads 4 fit into the grooves 3 3 of the rod 1. The caps or holders 8 are now placed over the ends of the rod and the head of the screw until the neck or square-shouldered shank 6 of the screw springs into the lock 30 caused by the springing of the carpet—that is, as the square shoulder 6 of the screw passes through the slot 9 until it reaches the end thereof and the pressure on the rod is relieved the springing of the carpet causes the 35 shoulder or neck 6 to engage in the recess 10 | bayonet-slots of the sleeves and are adapted and lock the cap or holder in position. To remove the rods pressure is applied direct to the caps or holders, so as to remove the neck or shoulder 6 from the recess 10 and bring 40 the same into alinement with the slot 9, at which time the cap can be readily withdrawn.

It will be observed, of course, that various changes may be made in the details of construction without departing from the general spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. In combination, a stair-rod which in cross-section is quadrant-shaped and pro- 50 vided on one of its faces near each end with elongated grooves, a pair of caps or sleeves quadrant-shaped in cross-section to conform to the stair-rod and provided in one of their flat faces with a bayonet-shaped slot register- 55 ing with the grooves in the stair-rods, securing-screws having a squared shoulder adapted to enter said bayonet-shaped slot with their heads engaging in the elongated grooves of the stair-rods, and a pair of barbs formed integral 60 with the outer ends of the caps or sleeves to prevent the longitudinal movement of the stair-rod therein, substantially as shown and described.

2. A holder for stair-carpets comprising in 65 its construction a pair of caps or sleeves which are quadrant-shaped in cross-section and each provided in one of its flat faces with a bayonet-shaped slot one wall of which is inclined at its outer end, combined with the 70 stair-rod which is quadrant-shaped in crosssection to conform to the sleeves, a pair of fastening-screws having a squared shank adapted to engage in the bayonet-slot of each sleeve, said stair-rod being provided on one 75 of its flat faces near each end thereof with elongated grooves which register with the to receive the heads of said fastening-screws, substantially as shown and described.

In testimony whereof I affix my signature

in the presence of two witnesses.

A. LEE CARTER.

Witnesses:

CRAWFORD M. BOWLES, KATE M. BROWN.